



# CHAI

## 2022 | 超尔切削工具

2022 CHAI CUTTING TOOLS

# TOOLS



综合刀具供应商  
让你的机器更高效



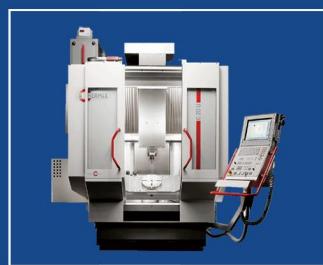
2022  
CHAI CUTTING TOOLS

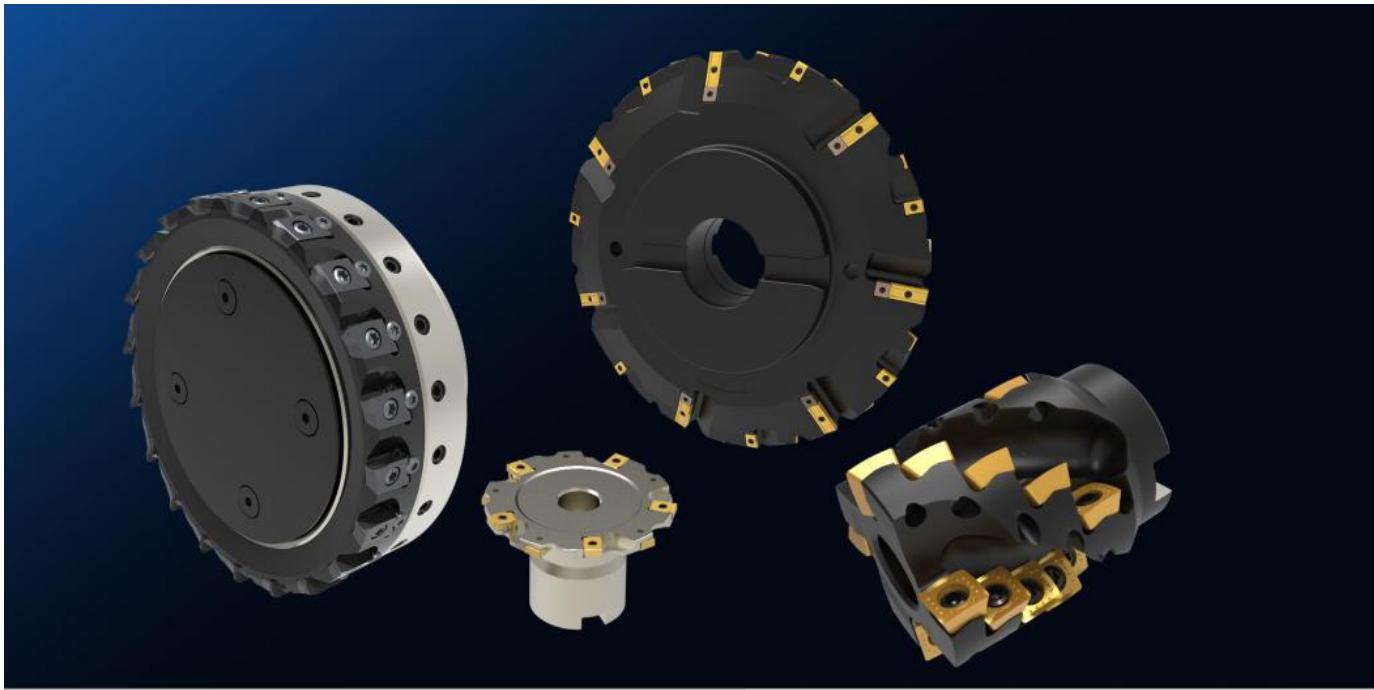
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Chai Tools

# 公司简介

ABOUT US





Hangzhou Chai Cutting tools Co.,Ltd, established in 2012, is a professional manufacturer engaged in the research and development, production, sale and service of various cutting tools.

We are located in Hangzhou city with a convenient transportation, where is near by the Hangzhou Xiaoshan International Airport and also very close to Shanghai and Ningbo port. Our main products include CNC turning tools, milling tools, drilling tools, boring tools and many kinds of toolholders, inserts, which apply to a wide range of areas, including mold manufacturing, vehicles, wind power and nuclear power, railway and aviation industry.

Chaitools pay more attention to investment of technology. In recent years, our company has introduced a series of advanced equipment from Germany, including Hermle five-axis machining center, HAWEMA 3000 CNC tool and cutter grinder, ZOLLER tool setting gauge, which guarantee a high precision and performance for products. In addition, we have a powerful technical team that is capable of designing new product independently and creating new ways of processing to improve the production efficiency. Chaitools has gained the ISO9001 quality management system certification and established a complete quality control procedure. After several years' hard working, the performances and indexes of our products is close to or exceeds the cutter of domestic and foreign first-level mainstream brands, and has the well applicability and economy.

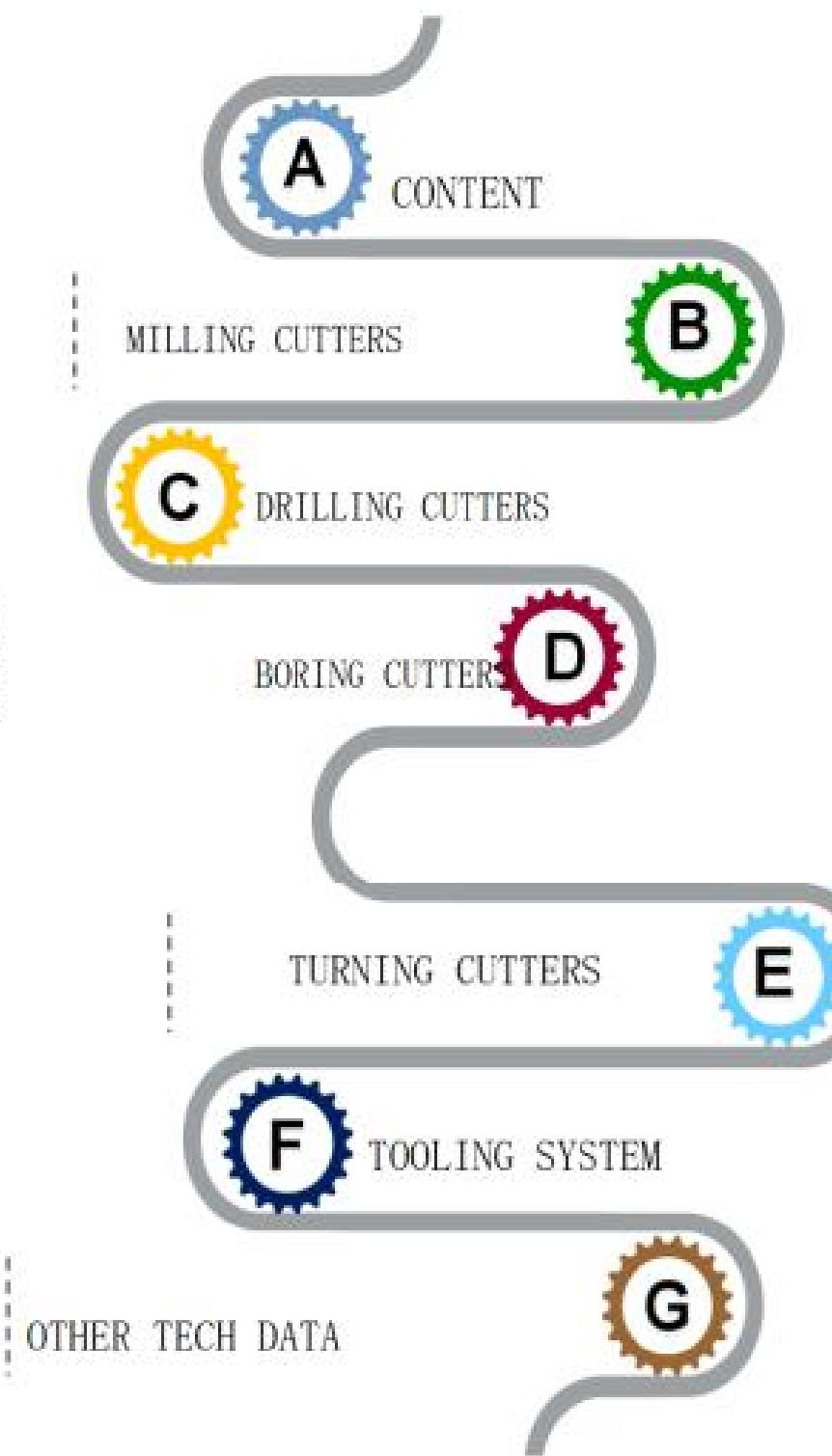
Now we try hard to expand the domestic and international market, and win the trust and support of the majority of users with more, better, more excellent products, more perfect quality assurance and service.





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## MILLING CUTTER



### MANULE

ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
FACE MILL CUTTER	CFM420N 	ON 0504 P. B31	Kr=42° ap (max)=3mm P. B31	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 125</math>mm</li> <li>The blade is double-sided 16-edge type, economical good, large rake design of the insert, cutting fast</li> </ul>
	CFM430N  <small>new!</small>	ON 0706 P. B32	Kr=43° ap (max)=3mm P. B32	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 63 \sim \phi 160</math>mm</li> <li>The blade is double-sided 16-edge type, economical good, large rake design of the insert, cutting fast</li> </ul>
	CFM440N 	ON 0905 P. B33	Kr=44° ap (max)=6mm P. B33	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 63 \sim \phi 315</math>mm</li> <li>The blade is double-sided 16-edge type, economical good, large rake design of the insert, cutting fast</li> </ul>
	CFM45QN 	QN 0705 P. B34	Kr=45° ap (max)=4. 0mm P. B34	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 40 \sim \phi 250</math>mm</li> <li>The blade is double-sided 14-edge type, which is economical</li> <li>Suitable for steel, stainless steel, cast iron etc.</li> </ul>
	CFM45QN-S 	QN 0705 P. B35	Kr=45° ap (max)=4. 0mm P. B36	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 40 \sim \phi 160</math>mm</li> <li>The blade is double-sided 14-edge type, which is economical</li> <li>Suitable for steel, stainless steel, cast iron etc.</li> </ul>
	CFM45QN  <small>new!</small>	QN 0906 P. B37	Kr=45° ap (max)=5. 5mm P. B37	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 63 \sim \phi 250</math>mm</li> <li>The blade is double-sided 14-edge type, which is economical</li> <li>Suitable for steel, stainless steel, cast iron etc.</li> </ul>

## MILLING CUTTER



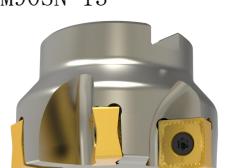
MANULE

ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
FACE MILL CUTTER	CFM45XNW  B38	 QN 0906 B38	Kr=45° ap(max)=5.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 80 \sim \phi 315\text{mm}</math></li> <li>The blade is double-sided 14-edge type, which is economical</li> <li>Suitable for processing steel, stainless steel, cast iron and other materials</li> </ul>
	TFM45SN-12  B39	 SN 1206 B41	Kr=45° ap(max)=5.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 315\text{mm}</math></li> <li>The blade is double-sided and eight-edged type, which is economical, and the blade is designed with a large rake angle for fast cutting.</li> <li>With the wiper blade to improve surface quality of workpiece.</li> </ul>
	CFM45SN-17  B42	 SN 1707 B42	Kr=45° ap(max)=7.8mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 63 \sim \phi 250\text{mm}</math></li> <li>The blade is double-sided and eight-edged type, which is economical, and the blade is designed with a large rake angle for fast cutting.</li> <li>With the wiper blade to improve surface quality.</li> </ul>
	CFM45SE  B43	 SE 12T3 B44	Kr=45° ap(max)=6.0mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 250\text{mm}</math></li> <li>Positive large rake angle inserts for faster cutting and wiper inserts to improve the surface quality of the workpiece</li> </ul>
	TFM45HNS  B45	 HN 1006 B47	Kr=45° ap(max)=6.1mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 63 \sim \phi 250\text{mm}</math></li> <li>The insert is a double-sided slotting insert with 12 cutting edges, which is economical</li> </ul>
	TFM55AHNS  B46	 HN 0504 B47	Kr=55° ap(max)=5.0mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 160\text{mm}</math></li> <li>The insert is a double-sided slotting insert with 12 cutting edges, which is economical</li> </ul>

## MILL CUTTER

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ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
FACE MILL CUTTER	TFM75SN-12 	 SN 1206 B491	Kr=75° ap(max)=9.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 315</math>mm</li> <li>The blade is double-sided and eight-edged type, which is economical. The large rake angle of the blade is designed for fast cutting.</li> <li>Design of sparse, dense and super dense teeth</li> </ul>
	CFM88SN-13 	 SN 1306 B521	Kr=88° ap(max)=10.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 200</math>mm</li> <li>The blade is double-sided and eight-edged type, which is economical. The large rake angle of the blade is designed for FAST cutting.</li> <li>Divided into M and ML models.</li> </ul>
	CFM90SN-13 	 SN 1306 B521	Kr=90° ap(max)=10.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 125</math>mm</li> <li>The blade is double-sided and eight-edged type, which is economical. The large rake angle of the blade is designed for FAST cutting.</li> <li>Divided into M and ML models.</li> </ul>
	CFM90SN-12 	 SN 1205 B53	Kr=90° ap(max)=10.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 160</math>mm</li> <li>Insert double sided eight edge, very economical. large positive clearance angle for fast cutting.</li> <li>Inserts integral wiper design, more suitable for bottom surface finishing</li> <li>steel, ss steel, cast iron etc.</li> </ul>
	CFM90XN 	 XN 0604/0905 B54	Kr=90° ap(max)=9.2mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 40 \sim \phi 250</math>mm</li> <li>Inserts double side 6 edges.</li> <li>insert large clearance angle, cutting fast</li> <li>Wiper inserts for better surface processing</li> </ul>
	CFM90WN 	 WN 0403/0806 B57	Kr=90° ap(max)=7.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 40 \sim \phi 160</math>mm</li> <li>Inserts double side 6 edges.</li> <li>Wiper inserts for better surface processing</li> </ul>

## MILL CUTTER



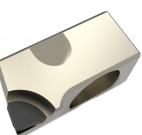
MANULE

ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
FACE MILL CUTTER	TFM90AP 	 AP 1705 B591	Kr=90° ap (max)=13mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 200</math>mm</li> <li>90 degree cutting edge angle, can be used for shoulder milling, ramping milling</li> <li>Cutting edge length up to 16mm</li> </ul>
	CFM90SD 	 SD 1404 B60	Kr=90° ap (max)=10.0mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 160</math>mm</li> <li>Positive 4 edges 0° inserts for fast cutting</li> <li>AP max cutting depth 5.5–10.0mm</li> <li>The cutting edge of the blade is in the shape of a large arc.</li> </ul>
	CFM490LN 	 LN 0904/1206/1608 B61	Kr=90° ap (max)=16.2mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 50 \sim \phi 200</math>mm</li> <li>4 right hand 90° inserts</li> <li>Design combination of helical cutting edge and large positive rake angle makes cutting easier</li> <li>P/M/K/S materials with very high metal removal rates</li> </ul>
	CFM90AN 	 AN 1204/17T6 B63	Kr=90° ap (max)=16.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 40 \sim \phi 160</math>mm</li> <li>Flat-mount clamping with 4 cutting edges, large positive rake angle helical cutting edge design, for fast cutting;</li> <li>For roughing to finishing of steel, stainless steel, superalloy and cast iron.</li> </ul>
	CFM88LN 	 LN 1005/1504 B66	Kr=88°	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 80 \sim \phi 250</math>mm</li> <li>with micro-adjust unit for better adjust, suitable for fine finishing</li> <li>workpiece excellent surface finish</li> </ul>
	CZH 	 tool holders B67	Kr=90°	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 125 \sim \phi 500</math>mm</li> <li>Changable tool holder with various main declination angles and various shapes of blades can be used.</li> <li>Equipped with a micro-adjust unit, easy to adjust, suitable for fine finishing.</li> </ul>

## MILL CUTTER

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ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
ALUM CUTTER	CFM90PCD-L  B69	 PCD CLAMP	Kr=90° ap (max)=4mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi</math> 63~<math>\phi</math> 400mm</li> <li>Aluminum cutter head, dynamic balance treatment, high-speed machining applications</li> <li>Equipped with a fine-tuning mechanism, easy to adjust, suitable for finishing</li> </ul>
	CFM90AE  B70	 AE 15	Kr=90° ap (max)=11mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi</math> 40~<math>\phi</math> 63mm</li> <li>Aluminum cutter head, dynamic balance treatment, high-speed machining applications</li> <li>Equipped with a fine-tuning mechanism, easy to adjust, suitable for finishing</li> </ul>
	CFM90AE  B70	 AE 15	Kr=90° ap (max)=11mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi</math> 80~<math>\phi</math> 250mm</li> <li>Steel cutter ring and aluminum alloy back cutter body, cutter head is dynamically balanced, suitable for high-speed machining applications</li> </ul>
HIGH FEED MILL CUTTER	TFMBL  B72	 BL 0603/0904/1105	ap (max)=1.5mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi</math> 32~<math>\phi</math> 125mm</li> <li>Inserts are double-sided slotting inserts</li> <li>Effectively decompose the radial cutting force to realize high feed cutting</li> </ul>
	CFMSX-13  B76	 SX 1306	ap (max)=2mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi</math> 50~<math>\phi</math> 100mm</li> <li>Effectively decompose radial cutting force to achieve high feed cutting</li> <li>Used for machine tools with long overhang and low power, used for roughing molds and removing allowances</li> </ul>
	CFM19PD  B77	 PD 0905	ap (max)=2mm	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi</math> 42~<math>\phi</math> 100mm</li> <li>Effectively decompose radial cutting force to achieve high feed cutting</li> <li>Used for machine tools with long overhang and low power, used for roughing molds and removing allowances</li> </ul>

## MILL CUTTER

MANULE

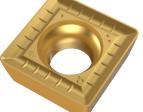


ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
HIGH FEED MILL CUTTER	TEBL  B78	 BL 0603/0904/1105 B79	ap (max)=2.0mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 16 \sim \phi 40\text{mm}</math></li> <li>• Inserts are double-sided slotting inserts</li> <li>• Effectively decompose the radial cutting force to achieve large feed cutting</li> <li>• cavity milling face milling</li> </ul>
	TEBL  B79P.	 BL 1105 B82P.	ap (max)=2.0mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 30 \sim \phi 42\text{mm}</math></li> <li>• Inserts are double-sided slotting inserts</li> <li>• Effectively decompose the radial cutting force to achieve large feed cutting</li> <li>• cavity milling face milling</li> </ul>
END MILL SHANK	CE90AP  B83P.	 AP 1705 B84P.	Kr=90° ap (max)=13mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 25 \sim \phi 40\text{mm}</math></li> <li>• 90 degree for clearance angle, for shoulder milling, ramp milling</li> </ul>
	CE90WN  B85P.	 WN 0403 B85P.	Kr=90° ap (max)=4.0mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 20 \sim \phi 32\text{mm}</math></li> <li>• Common inserts for face milling and vertical milling</li> </ul>
	CE90WN  B86P.	 WN 0403 B85P.	Kr=90° ap (max)=4.0mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 20 \sim \phi 32\text{mm}</math></li> <li>• threaded connection</li> </ul>
	CE490LN  B87P.	 LN 0904/1206 B89P.	Kr=90° ap (max)=13mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 20 \sim \phi 40\text{mm}</math></li> <li>• Vertical 4-edged blade</li> <li>• Common inserts for face milling, vertical milling and corn milling</li> </ul>

## MILL CUTTER



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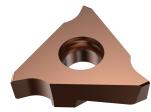
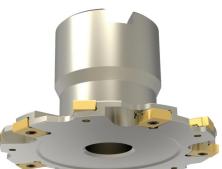
ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
END MILL SHANK	CE90AN-M  B90P.	 AN 1204/17T6 B93P.	Kr=90° ap (max)=16.5mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 20 \sim \phi 40\text{mm}</math></li> <li>• Flat-mount clamping with 4 cutting edges, large positive rake angle helical cutting edge design, light cutting;</li> <li>• For roughing to finishing of steel, stainless steel, high temperature alloy and cast iron</li> </ul>
	CE90AN  B91P.	 AN 1204/17T6 B93P.	Kr=90° ap (max)=16.5mm	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 20 \sim \phi 40\text{mm}</math></li> <li>• Flat-mount clamping with 4 cutting edges, large positive rake angle helical cutting edge design, light cutting;</li> <li>• For roughing to finishing of steel, stainless steel, high temperature alloy and cast iron</li> </ul>
	CE90SD-Z  B94P.	 SD 1404 B94P.	Kr=90° ap (max)=10.0mm	<ul style="list-style-type: none"> <li>• SHANK DIA <math>\phi 40 \sim \phi 63\text{mm}</math></li> <li>• Positive 4-flute 90° insert, cutting lightly AP maximum cutting depth 5.5-10.0mm</li> <li>The cutting edge of the blade is in a large arc shape to avoid the occurrence of tool marks in the layered milling of square shoulder</li> </ul>
Chamfering Mill Holder	CCF-SP  B95P.	 SP 1204 B95P.	Kr=30° Kr=45° Kr=60°	<ul style="list-style-type: none"> <li>• Applicable to all kinds of holes, edge chamfering</li> </ul>
	CCF-TC  B96P.	 TC 16T3 B96P.	Kr=45°	<ul style="list-style-type: none"> <li>• Blade turning diameter <math>\phi 23\text{mm}</math></li> <li>• Suitable for small hole chamfering</li> <li>• Machining holes larger than D6 diameter</li> </ul>
	CCF-XC  B97P.	 XC 3104 B97P.	Kr=30° Kr=45° Kr=60°	<ul style="list-style-type: none"> <li>• Chamfering knife with long edge</li> <li>• Minimum machining hole diameter <math>\phi 5\text{mm}</math></li> <li>• Suitable for all kinds of holes and edge chamfering</li> </ul>

## MILL CUTTER



MANULE

ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
CORN MILL CUTTER	CCM90AP  B98P.	 AP 1705 B98P.	Kr=90° ap (max)=44mm	<ul style="list-style-type: none"> <li>Corn milling cutter HOLDER</li> <li>Blade turning diameter <math>\phi</math> 32 ~ <math>\phi</math> 40mm</li> </ul>
	CCM490LN  B99P.	 LN 0904 B99P.	Kr=90°	<ul style="list-style-type: none"> <li>Blade turning diameter <math>\phi</math> 25 ~ <math>\phi</math> 40mm</li> <li>Has four right-hand 90° cutting edges</li> <li>The design combination of helical cutting edge and large positive rake angle makes cutting easier and faster</li> <li>can be used to process P/M/K/S type material</li> </ul>
	CCM90SV  B100P.	 SV 09T3/1104 B100P.	Kr=90° ap (max)=76mm	<ul style="list-style-type: none"> <li>Corn milling cutter HOLDER</li> <li>Blade turning diameter <math>\phi</math> 25 ~ <math>\phi</math> 50mm</li> </ul>
	CCM90AP  B101P.	 AP 1705 B101P.	Kr=90° ap (max)=88mm	<ul style="list-style-type: none"> <li>Corn milling cutter HOLDER</li> <li>Blade turning diameter <math>\phi</math> 50 ~ <math>\phi</math> 100mm</li> </ul>
	CCM490LN  B102P.	 LN 1206/1608 B102P.	Kr=90°	<ul style="list-style-type: none"> <li>Blade turning diameter <math>\phi</math> 50 ~ <math>\phi</math> 100mm</li> <li>The insert has 4 right-hand 90° cutting edges, a combination of helical cutting edges and a large positive rake angle, making cutting easier.</li> </ul>
	CCM90SV  B103P.	 SV 1145 B103P.	Kr=90°	<ul style="list-style-type: none"> <li>Blade turning diameter <math>\phi</math> 40 ~ <math>\phi</math> 80mm</li> <li>The insert has 4 right-hand 90° cutting edges, a combination of helical cutting edges and a large positive rake angle, making cutting easier.</li> </ul>

ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEATURES
CORN MILL CUTTER	CCM90EN-H  B104P.	 EN 0904/1206 B104P.	Kr=90°	<ul style="list-style-type: none"> <li>Stacked corn mill CUTTER</li> <li>Blade turning diameter <math>\phi 50 \sim \phi 100\text{mm}</math></li> <li>The interchangeable head structure is economical</li> </ul>
Three-sided mill cutter	CE3CGF  B106P.	 3CGF16~22 B108P.	<ul style="list-style-type: none"> <li>Cut width: 1.1~4.8mm</li> <li>Maximum depth of cut: 5.0mm</li> </ul>	<ul style="list-style-type: none"> <li>Shallow groove milling cutter shank</li> <li>Blade turning diameter <math>\phi 25 \sim \phi 44\text{mm}</math></li> <li>Wide range of blade widths, suitable for all kinds of shallow grooves and spring grooves</li> </ul>
	CSM3CGF  B107P.	 3CGF16~22 B108P.	<ul style="list-style-type: none"> <li>Cut width: 1.1~4.8mm</li> <li>Maximum depth of cut: 5.0mm</li> </ul>	<ul style="list-style-type: none"> <li>Shallow groove milling cutter</li> <li>Cutter DIA <math>\phi 63 \sim \phi 125\text{mm}</math></li> <li>Wide range of blade widths, suitable for all kinds of shallow grooves and spring grooves</li> </ul>
Three-sided mill cutter	CSMZNR  B109P.	 ZN 023~073 B112P.	<ul style="list-style-type: none"> <li>Cut width: 4~14mm</li> <li>Maximum depth of cut: 42mm</li> </ul>	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 80 \sim \phi 160\text{mm}</math></li> <li>Flange type three-sided milling cutter</li> <li>The strength of the vertical blade is good, which makes the tool safer</li> <li>Suitable for all kinds of slot milling</li> </ul>
	CSMZNH  B113P.	 ZN 023~073 B116P.	<ul style="list-style-type: none"> <li>Cut width: 4~14mm</li> <li>Maximum depth of cut: 89mm</li> </ul>	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 63 \sim \phi 250\text{mm}</math></li> <li>Single-piece three-sided milling cutter head</li> <li>The strength of the vertical blade is good, which makes the tool safer</li> <li>Suitable for all kinds of slot milling</li> </ul>
	CSMCNH  B117P.	 CN 1005/1311/1606 B118P.	<ul style="list-style-type: none"> <li>Cutting width: 15~25mm</li> </ul>	<ul style="list-style-type: none"> <li>Cutter DIA <math>\phi 63 \sim \phi 250\text{mm}</math></li> <li>Single-piece three-sided milling cutter head</li> <li>The strength of the vertical blade is good, which makes the tool safer</li> </ul>

## MILLING CUTTER

MANULE



ITEM	MODEL/SHAPE	INSERTS	APPLICATION	FEAURES
THREAD MILL CUTTER	SR00  P. B119	 12~40	Kr=90° ap (max)=40mm	<ul style="list-style-type: none"> <li>Single teeth</li> <li>insert turing dia. <math>\phi 9.5 \sim \phi 48\text{mm}</math></li> </ul>
Gear Mill cutter	CSM  P. B124	 CLX insert P. B128		<ul style="list-style-type: none"> <li>can design inserts accordingly</li> <li>Rough milling and fine milling 2-station or 4-station cutter head can be designed according to customer needs</li> </ul>
Solid millcu tter	CLF/CLB/CHF/CHB  P. B132		<ul style="list-style-type: none"> <li><math>\phi 1.0 \sim \phi 20.0</math></li> </ul>	<ul style="list-style-type: none"> <li>Solid carbide milling cutter shank</li> <li>Including:             <ol style="list-style-type: none"> <li>Two-blade /Four-blade straight shank flat end mill</li> <li>Two-blade/Four-blade straight shank ball end mill</li> </ol> </li> </ul>

# DRILL CUTTER

MANULE



ITEM	MODEL/SHAPE	INSERTS	APPLICATIONS	FEATURES
SHALL OW DRILL CUTTE R	XOP -T2  C02 . p	 XOMX C01 . p	• 2-5 X DIA	<ul style="list-style-type: none"> <li>Indexable drill shank</li> <li>Drilling diameter <math>\phi 14\sim 50mm</math></li> <li>Double inner cooling design</li> </ul>
	CDR -T2  C19 . p	 SPMG C01 . p	• 2.5~3.5 X DIA	<ul style="list-style-type: none"> <li>Large diameter drill</li> <li>With tool holder, diameter adjustable</li> <li>Indexable cartridge drill shank</li> <li>Drilling diameter <math>\phi 51\sim 80mm</math></li> <li>Internal cooling design</li> </ul>
	XCP -T1  C23 . p	 XCMT C24 . p	• 3 X DIA	<ul style="list-style-type: none"> <li>Multifunctional drill</li> <li>Single tooth design</li> <li>Suitable for drilling, boring and turning</li> <li>Drilling diameter <math>\phi 12\sim 32mm</math></li> <li>Internal cooling design</li> </ul>
Solid carbi de drill	CH  C26 . p		• 3~5 X DIA	<ul style="list-style-type: none"> <li>Solid carbide twist drill</li> <li>Drilling diameter <math>\phi 3.3\sim 16.0mm</math></li> </ul>
CROWN DIAMO ND DRILL	CDH  C56 . p	 CDH C52 . p	• 1~10 X DIA	<ul style="list-style-type: none"> <li>High-precision drill tip design</li> <li>Pull-out design after tip installation</li> <li>Strong and sharp drill tip with good chipping performance</li> <li>The overhang diameter can reach 10 times the diameter, with good rigidity</li> </ul>

# BORING CUTTER



MANULE

ITEM	MODEL/SHAPE	FOCUS	APPLICATIONS	FEATURES
Modular Boring Tool and holder	CTD-WFH  D01. P	 WFHF tool holder D02. P	Kr=92° Kr=95°	<ul style="list-style-type: none"> <li>Fine boring main body</li> <li>CK CONNECT</li> <li>Standard cutter head with internal coolant</li> </ul>
	CDJ  D05. P	 CC/TC/TP	Kr=90° Kr=95°	<ul style="list-style-type: none"> <li>Fine adjustment tool holder</li> <li>Fine-tuning precision radius 0.005/div</li> <li>The maximum radial adjustment is 1mm in diameter, and the axial adjustment is 1mm</li> </ul>
	R/LCR  D07. P	 CC/TC/TP	Kr=90°	<ul style="list-style-type: none"> <li>Fine boring unit</li> <li>Two installation methods: angle installation and right angle installation</li> <li>Adjusting the precision radius 0.01/div</li> </ul>
	CTD-WRH  D13. P	 WRH CLAMP D14. P	Kr=90°	<ul style="list-style-type: none"> <li>CK CONNECTOR</li> <li>Standard cutter head with internal coolant</li> </ul>
	SCR  D15. P	 CC/SC/TC	Kr=45° Kr=75° Kr=90°	<ul style="list-style-type: none"> <li>Ordinary boring holder</li> </ul>

# BORING CUTTER



MANULE

ITEM	MODEL/SHAPE	FOCUS	APPLICATIONS	FEATURES
BRIDGE BORING TOOL	CLR  D18. P	 CC 12	Kr=90°	<ul style="list-style-type: none"> <li>• Standard Steel Bridge Rough Boring Tool (Large Bore), Machining Range <math>\phi 150-\phi 850</math></li> </ul>
	CLR-AL  D19. P	 CC 12	Kr=90°	<ul style="list-style-type: none"> <li>• Lightweight aluminum bridge type rough boring tool (large bore), processing range <math>\phi 150-\phi 850</math></li> </ul>
	CLF  D20. P	 CC 09/TC 11	Kr=90°	<ul style="list-style-type: none"> <li>• Standard steel bridge type fine boring tool (large diameter), processing range <math>\phi 150-\phi 850</math></li> </ul>
	CLF-AL  D21. P	 CC 09/TC 11	Kr=90°	<ul style="list-style-type: none"> <li>• Lightweight aluminum bridge type fine boring tool (large bore), processing range <math>\phi 150-\phi 850</math></li> </ul>
SMALL DIA BORIN G	CBJ  D23. P	 CBJ		<ul style="list-style-type: none"> <li>• Fine boring and fine-tuning mechanism</li> <li>• CK6 standard interface</li> <li>• Optional adapter sleeve, clamping D8-D16 rod diameter</li> </ul>
CUTTE R	CBJ  D23. P	 WB/TB/TP		<ul style="list-style-type: none"> <li>• steel boring bars</li> <li>• Processing range D6-D50</li> <li>• Precise boring on the assembly fine-tuning mechanism</li> </ul>

# BORING CUTTER



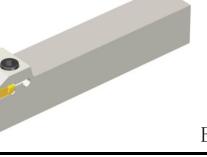
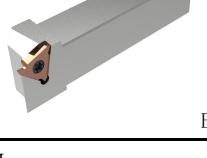
MANULE

ITEM	MODEL/SHAPE	FEAUTRES	ITEM	MODEL/SHAPE	FEATURES
SMALL DIA BORIN G CUTTE R	CWC  D24. P	<ul style="list-style-type: none"> <li>Solid hard anti-vibration boring bar</li> <li>Adapted to CN fine boring head</li> <li>Precise boring on the assembly fine-tuning mechanism</li> </ul>		BT-CK  D30. P	<ul style="list-style-type: none"> <li>Boring tool holder</li> <li>Specification BT40 ~BT50</li> <li>Interface type CK1 ~CK7</li> </ul>
	CN  D25. P	<ul style="list-style-type: none"> <li>Solid hard anti-vibration boring bar</li> <li>Adapted to CN fine boring head</li> <li>Precise boring on the assembly fine-tuning mechanism</li> </ul>		SK-CK  D31. P	<ul style="list-style-type: none"> <li>Boring tool holder</li> <li>Specification SK40 ~SK50</li> <li>Interface type CK1 ~CK7</li> </ul>
borin g cutte r holde r	MC  D26. P	<ul style="list-style-type: none"> <li>Chamfering ring</li> </ul>	borin g cutte r holde r	HSK A-CK  D33. P	<ul style="list-style-type: none"> <li>Boring tool holder</li> <li>Specification HSK63 ~HSK100</li> <li>Interface type CK1 ~CK7</li> </ul>
	SCB  D27. P	<ul style="list-style-type: none"> <li>Super hard solid tungsten carbide boring bar</li> <li>Interface type CK1 ~CK3</li> </ul>		CK  D35. P	<ul style="list-style-type: none"> <li>Equal diameter extension handle</li> <li>Interface type CK1 ~CK7</li> <li>Reducer extension adaptor</li> <li>Interface type CK1 ~CK6</li> </ul>
	SSB  D28. P	<ul style="list-style-type: none"> <li>Straight shank boring bar</li> <li>Interface type CK1 ~CK6</li> </ul>		CT  D37. P	<ul style="list-style-type: none"> <li>Bridge boring tool holder</li> <li>BT/SK/HSK bridge boring holder</li> </ul>

# TURNING CUTTER

MANULE



ITEM	MODEL/SHAPE	INSERT	APPLICATION	FEATURES
GROOVING AND PARTING CUTTER	TTER/L  E05Page	 TDGU/X/C E02Page	<ul style="list-style-type: none"> <li>Cut width: 2~6mm</li> <li>Maximum depth of cut: 32mm</li> </ul>	<ul style="list-style-type: none"> <li>External grooving tool holder</li> </ul>
	TTFR/L-RN  E07Page	 TDGU/X/C E02Page	<ul style="list-style-type: none"> <li>Cut width: 3~6mm</li> <li>Maximum depth of cut: 25mm</li> </ul>	<ul style="list-style-type: none"> <li>External face grooving holder</li> </ul>
	TGFR/L  E09Page	 TDGU/X/C E02Page	<ul style="list-style-type: none"> <li>Cut width: 2~4mm</li> <li>Maximum depth of cut: 8.5mm</li> </ul>	<ul style="list-style-type: none"> <li>Outer face shallow groove grooving tool holder</li> </ul>
	TGIFR/L  E10Page	 TDGU/X/C E02Page	<ul style="list-style-type: none"> <li>Cut width: 3~6mm</li> <li>Maximum depth of cut: 5.5mm</li> </ul>	<ul style="list-style-type: none"> <li>Face Bore Shallow Groove and Face Turning Toolholders</li> </ul>
	TTIR/L  E11Page	 TDGU/X/C E02Page	<ul style="list-style-type: none"> <li>Cut width: 2~4mm</li> <li>Maximum depth of cut: 8.5mm"</li> </ul>	<ul style="list-style-type: none"> <li>Internal grooving tool holder</li> </ul>
	CQCR/L  E12Page	 3CGF16-20 E14Page	<ul style="list-style-type: none"> <li>Cut width: 1.1~4.8mm</li> </ul>	<ul style="list-style-type: none"> <li>External Shallow Grooving Toolholder</li> </ul>
	SQCR/L  E13Page	 3CGF16-20 E14Page	<ul style="list-style-type: none"> <li>Cut width: 2~4mm</li> <li>Maximum depth of cut: 8.5mm</li> </ul>	<ul style="list-style-type: none"> <li>internal hole shallow grooving turning tool holder</li> </ul>

# TURNING CUTTER



MANULE

ITEM	MODEL/SHAPE	INSERT	APPLICATION	FEATURES
GROOV ING CUTTE R	4CHR/L  E16Page	 4CGF 27 E17Page	<ul style="list-style-type: none"> <li>Cut width: 2.0~3.5mm</li> <li>Depth of cut: 4.5-6.5mm</li> </ul>	<ul style="list-style-type: none"> <li>Shallow groove turning tool holder</li> </ul>
TURNI NG INSER TS	4CHPR/L  E16Page	 4CGF 27 E17Page	<ul style="list-style-type: none"> <li>Cut width: 2.0~3.5mm</li> <li>Depth of cut: 4.5-6.5mm</li> </ul>	<ul style="list-style-type: none"> <li>Shallow groove turning tool holder</li> </ul>
EXTER NAL TURNI NG CUTTE R HOLDE R	 E38Page			<ul style="list-style-type: none"> <li>External turning tool holder</li> <li>Positive blade</li> <li>S type screw compression method</li> </ul> <p>There are many types of toolholders, suitable for all kinds of turning blades</p>
Inner hole turni ng tool holde r	 E45Page			<ul style="list-style-type: none"> <li>external turning tool holder</li> <li>Negative blade</li> <li>T-type platen compression method</li> </ul> <p>There are many types of toolholders, suitable for all kinds of turning blades</p>
Inner hole turni ng tool holde r	 E53Page			<ul style="list-style-type: none"> <li>Inner hole turning tool holder</li> <li>Positive blade</li> <li>S type screw compression method</li> </ul> <p>There are many types of toolholders</p>
	 E62Page			<ul style="list-style-type: none"> <li>Inner hole turning tool holder</li> <li>Negative blade</li> <li>T-type platen compression method</li> </ul> <p>There are many types of toolholders, suitable for all kinds of turning blades</p>

# TOOLING SYSTEM



MANULE

ITEM	MODEL/SHAPE	ITEM	MODEL/SHAPE	ITEM	MODEL/SHAPE
Elast ic colle t holde r	BT-ER Elastic collet holder  F02PAGE	FACE MILL CUTTE R HOLDE R	BT-FMB face mill holder  F13PAGE	Side Mill holde r	BT-XS Side Mill Holder  F25PAGE
	SK-ER Elastic collet holder  F04PAGE		SK-FMB face mill holder  F15PAGE		SK-XS Side Mill Holder  F27PAGE
	HSK-ER Elastic collet holder  F06PAGE		HSK-FMB face mill holder  F17PAGE		BT-C Powerful mill holder  F29PAGE
HIGH SPEED HOLDE R	BT-GSK High-speed HOLDER  F09PAGE	Side mount holde r	BT-SLN side mount holder  F19PAGE	Power ful mill holde r	SK-C Powerful mill holder  F30PAGE
	SK-GSK HIGH SPEED HOLDER  F11PAGE		SK-SLN side mount holder  F21PAGE		HSK-C Powerful holder  F31PAGE
	HSK-GSK HIGH SPEED HOLDER  F12PAGE		HSK-SLN side mount holder  F21PAGE		

# TOOLING SYSTEM



MANULE

ITEM	MODEL/SHAPE	ITEM	MODEL/SHAPE	ITEM	MODEL/SHAPE
hydraulic holder	BT-CY hydraulic tool  F33PAGE	heat shrink shank	BT-RS heat shrink shank  F39PAGE	Micro compensation tool holder	BT-VER Micro tapping body  F46PAGE
	SK-CY hydraulic tool  F35PAGE		SK-RS heat shrink shank  F42PAGE		C-VER Micro tapping body  F47PAGE
	HSK-CY hydraulic tool  F37PAGE		HSK-RS heat shrink shank  F43PAGE		HSK-VERMicro tapping body  F48PAGE

# TOOLING SYSTEM

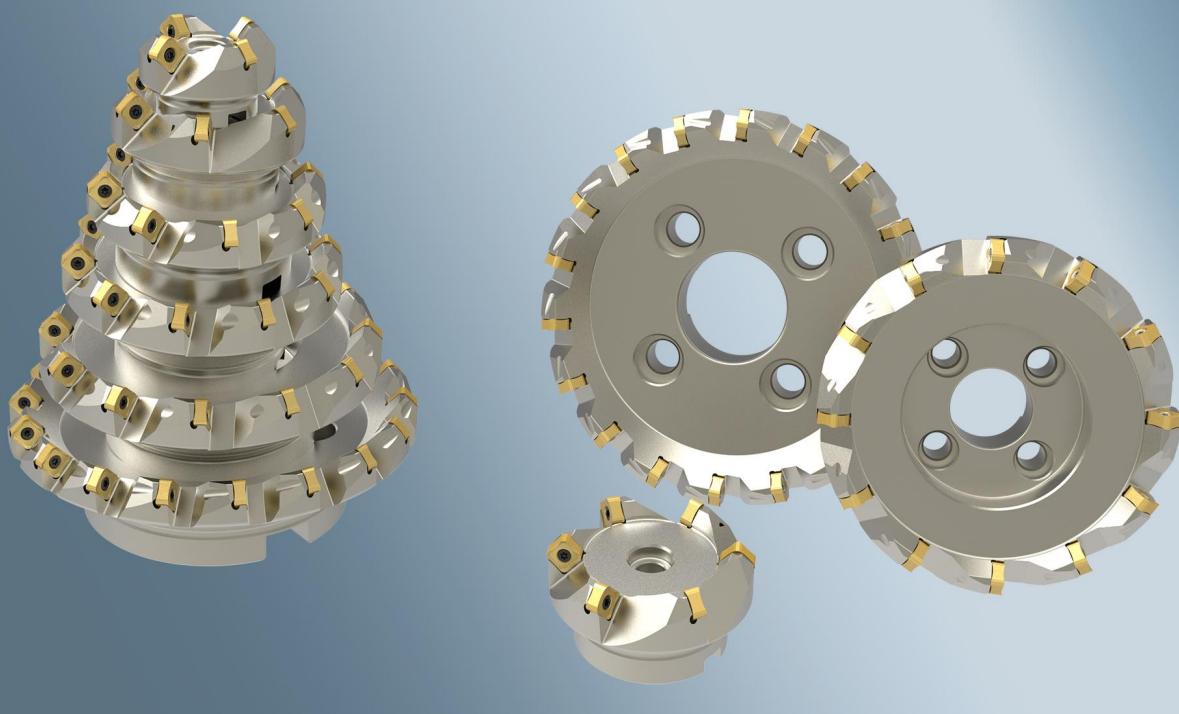
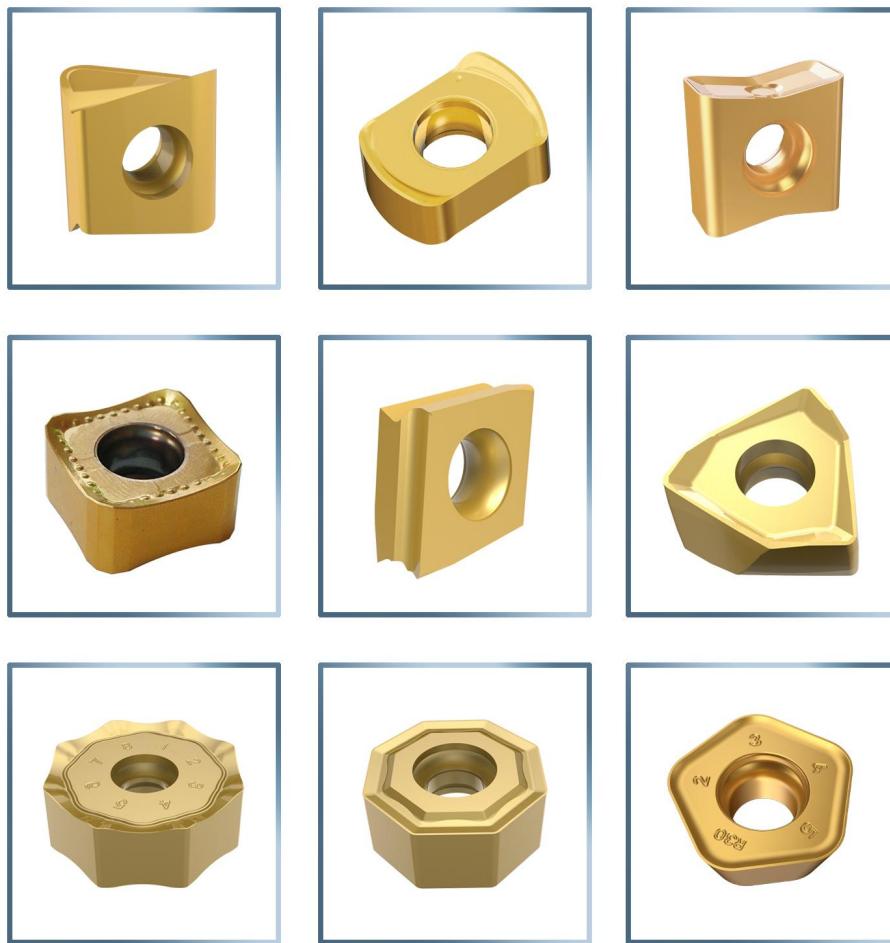


MANULE

ITEM	MODEL/SHAPE	ITEM	MODEL/SHAPE	ITEM	MODEL/SHAPE
colle t	ER collet  F49PAGE	RIVET	ODHC OD COLLECT  F59PAGE	nut	ER NUT  F62PAGE
	ERWater stop collet  F51PAGE		BT-1982 Rivet  F60PAGE		GSK NUT  F62PAGE
	ETP-ER Rigid Tapping Colle  F54PAGE		DIN 69872-SK RIVET  F60PAGE		ER WRENCH  F63PAGE
	GSK Precision collet  F56PAGE		IS07388 RIVET  F61PAGE		GSK WRENCH  F63PAGE
	SC强力筒夹  F57PAGE		ISO RIVET  F61PAGE		MLC WRENCH  F63PAGE
	DHC D MODEL  F58PAGE				

# 超尔铣削刀片系列

Chai Tools ▾



# GRADE



## CHART

workpiece	Insert grades and recommended materials					
	Steel	SS	CAST IRON	nonferrous metal	Alloy	Hard Material
	P	M	K	N	S	H
CT101				●		
CT4100	●	●	●			●
CT5320	●	●				
CT5420	●	●				
CT7320			●			
CT7420			●			
CT8330		●				
CT8420		●			●	
CT9320	●					

GRADE	WORK PIECE	Directions
CT101	N	<ul style="list-style-type: none"> <li>◊ Uncoated</li> <li>◊ Mainly suitable for finishing and medium processing of non-ferrous metals</li> </ul>
CT4100	P M K H	<ul style="list-style-type: none"> <li>◊ Cermet</li> <li>◊ Suitable for machining steel, stainless steel, cast iron and hardened steel</li> </ul>
CT5320 CT5420	P M	<ul style="list-style-type: none"> <li>◊ With coating</li> <li>◊ Mainly used for medium machining and rough machining of steel and stainless steel</li> <li>◊ Nanoscale TiAlN+TiN coating</li> <li>◊ Has high wear resistance and toughness</li> </ul>
CT7320 CT7420	K	<ul style="list-style-type: none"> <li>◊ With coating</li> <li>◊ Mainly used for general machining of cast iron</li> </ul>
CT8330 CT8420	P M S	<ul style="list-style-type: none"> <li>◊ With coating</li> <li>◊ Mainly used for medium processing of stainless steel</li> <li>◊ Medium machining of heat-resistant alloys</li> </ul>
CT9320	P K	<ul style="list-style-type: none"> <li>◊ With coating</li> <li>◊ Mainly used for general machining of steel</li> <li>◊ Wear-resistant and resistance</li> </ul>

# MILLING INSERTS

## INSERTS MANULE



CATE.	NO.	MODEL	PAGE
3	01	3CGF 16L110-R01	B05
	02	3CGF 16L125-R02	
	03	3CGF 16L145-R02	
	04	3CGF 16L150-R02	
	05	3CGF 16L175-R02	
	06	3CGF 16L185-R02	
	07	3CGF 16L200-R02	
	08	3CGF 16L250-R02	
	09	3CGF 16L300-R02	
	10	3CGF 22L125-R02	
	11	3CGF 22L145-R02	
	12	3CGF 22L150-R02	
	13	3CGF 22L175-R02	
	14	3CGF 22L185-R02	
	15	3CGF 22L200-R02	
	16	3CGF 22L230-R02	
	17	3CGF 22L250-R03	
	18	3CGF 22L265-R03	
	19	3CGF 22L280-R03	
	20	3CGF 22L300-R03	
	21	3CGF 22L320-R03	
	22	3CGF 22L330-R03	
	23	3CGF 22L350-R03	
	24	3CGF 22L400-R04	
	25	3CGF 22L430-R04	
	26	3CGF 22L450-R04	
	27	3CGF 22L480-R04	
	28	3CGF 16R110-R01	
	29	3CGF 16R125-R02	
	30	3CGF 16R145-R02	
	31	3CGF 16R150-R02	
	32	3CGF 16R175-R02	
	33	3CGF 16R185-R02	
	34	3CGF 16R200-R02	
	35	3CGF 16R250-R02	
	36	3CGF 16R300-R02	
	37	3CGF 22R125-R02	
	38	3CGF 22R145-R02	
	39	3CGF 22R150-R02	
	40	3CGF 22R175-R02	

B02

CATE.	NO.	MODEL	PAGE
3	41	3CGF 22R185-R02	B05
	42	3CGF 22R200-R02	
	43	3CGF 22R230-R02	
	44	3CGF 22R250-R03	
	45	3CGF 22R265-R03	
	46	3CGF 22R280-R03	
	47	3CGF 22R300-R03	
	48	3CGF 22R320-R03	
	49	3CGF 22R330-R03	
	50	3CGF 22R350-R03	
	51	3CGF 22R400-R04	
	52	3CGF 22R430-R04	
	53	3CGF 22R450-R04	
	54	3CGF 22R480-R04	
	55	4CGF 27L200-R02	B07
	56	4CGF 27L230-R02	
	57	4CGF 27L250-R03	
	58	4CGF 27L270-R03	
	59	4CGF 27L300-R03	
	60	4CGF 27L320-R03	
	61	4CGF 27L350-R03	
	62	4CGF 27R200-R02	
	63	4CGF 27R230-R02	
	64	4CGF 27R250-R03	
	65	4CGF 27R270-R03	
	66	4CGF 27R300-R03	
	67	4CGF 27R320-R03	
	68	4CGF 27R350-R03	
A	69	ANKU 120404PFR-M	B08
	70	ANHU 120404PFR-M	
	71	ANKU 120408PFR-M	
	72	ANKU 120408PER-MM	
	73	ANKU 120412PFR-M	
	74	ANKU 17T608PFR-M	
	75	ANKU 17T608PER-MM	
	76	ANHU 17T608PER-MM	
	77	ANHU 17T608PER-M	
	78	ANHU 17T608PER-SM	
	79	ANKU 17T616PFR-M	

# MILLING INSERTS

## INSERTS MANULE



CATE.	NO.	MODEL	PAGE
A	80	AEGT 1504XPCD	B09
	81	APKT 1705PER-EM	
B	82	BLMP 0603R-M	B10
	83	BLMP 0603R-MM	
	84	BLMP 0904R-M	
	85	BLMP 0904R-MM	
	86	BLMP 1105R-ML	
	87	BLMP 1105R-M	
C	88	CNMX 080504E-M	B11
	89	CNMX 080508E-M	
	90	CNMX 080512E-M	
	91	CNMX 080524E-M	
	92	CNMX 100504-ML	
	93	CNMX 100508-ML	
	94	CNMX 100512-ML	
	95	CNMX 100516-ML	
	96	CNMX 121116	
	97	CNMX 121120	
	98	CNMX 131104-ML	
	99	CNMX 131108-ML	
	100	CNMX 131112-ML	
	101	CNMX 131116-ML	
	102	CNMX 131124-ML	
	103	CNMX 131130-ML	
	104	CNMX 160604-ML	
E	105	CNMX 160608-ML	B12
	106	CNMX 160612-ML	
	107	CNMX 160616-ML	
	108	CNMX 160624-ML	
	109	CNMX 160630-ML	
	110	ENGX 090406R	
	111	ENGX 090406L	
	112	ENGX 090408R	
	113	ENGX 090408L	

CATE.	NO.	MODEL	PAGE
E	118	ENGX 120608R	B12
	119	ENGX 120608L	
	120	ENGX 120610R	
	121	ENGX 120610L	
	122	ENGX 120608R-AL	
	123	ENGX 120608L-AL	
	124	ENGX 120610R-AL	
	125	ENGX 120610L-AL	
	126	ENHX 080408-M	
	127	ENHX 080408-ML	
	128	ENHX 090408-M	
	129	ENHX 090408-ML	
	130	ENHX 120604-ML	
	131	ENHX 120604-AL	
H	132	ENHX 120608-M	B13
	133	ENHX 120608-ML	
L	134	ENHX 120610-M	B14
	135	ENHX 120610-ML	
	136	HNKX 050410N-MM	
	137	HNKX 1006ANTN-M	
	138	LNKX 100512-ML	
	139	LNKX 120608N	
	140	LNKX 120608N-W	
	141	LNHU 090404-M	
	142	LNHU 120608-M	
	143	LNHU 120612-M	
	144	LNHU 120608-AL	
	145	LNHU 160608-M	
	146	LNHU 150812T-ML	B15
	147	LNGX 1504R1.2-MLW-B	
E	148	LNGX 2008R2	
	149	LNGX 2008R2.5	
	150	LNGX 2008R3	
	151	LNGX 2008R3.2	
	152	LNGX 2008R4	
	153	LNGX 2008R4.8	
	154	LNGX 2008R5	
	155	LNGX 2008R6	

# MILLING INSERTS

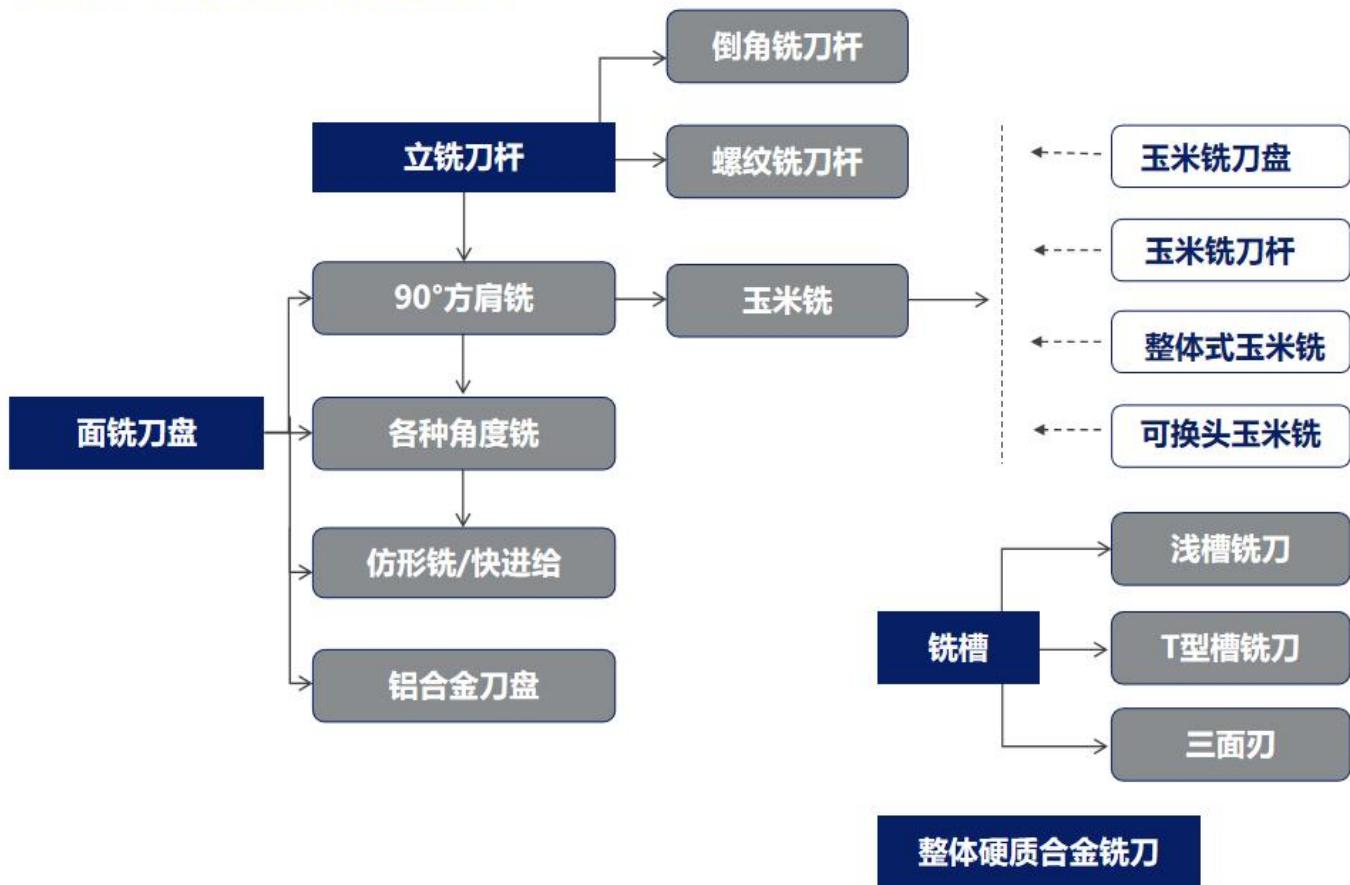
## INSERTS MANULE



CATE.	NO.	MODEL	PAGE	CATE.	NO.	MODEL	PAGE	
L	156	LOHX 140708-ML	B17	S	192	SNHX 120508-M	B24	
	157	LOHX 140712-ML			193	SXMT 130625-M		
	158	LOHX 140716-ML			194	SNGX 1306ZN-M	B25	
	159	LOHX 140720-ML			195	SNGX 1306ZN-ML		
	160	LOHX 140724-ML			196	SNGX 130608-M		
	161	LOHX 140731-ML			197	SNGX 130608-ML		
	162	LOHX 140740-ML			198	SNGX 130608-AL		
	163	LOHX 140750-ML			199	SDKT 140408M-PM	B26	
	164	LOHX 140760-ML			200	SVKT 09T308-M		
	165	ONGU 050408-M	B18		201	SVKT 110408-ML		
O	166	ONGU 050408-ML	W	202	WNHX 040308-ML	B27		
	167	ONGU 050408-MW		203	WNHX 080608-ML			
	168	ONGU 050408-MLW		204	WNHX 080608-TR			
	169	ONKU 050408-M	B19	X	205	XCET 310404	B28	
	170	ONKU 050408-ML			206	XNGU 060408-M		
	171	ONKX 070608N-M			207	XNGU 090508-M		
	172	ONGU 090506-ML			208	XNGU 090508-ML		
	173	ONGU 090506-MLW			209	XNNU 090508R-M		
	174	ONGU 090510-ML		Z	210	ZNHT 018-04-ML	B29	
	175	ONGU 090510-MLW			211	ZNHT 023-04-ML		
	176	ONGU 090520-ML			212	ZNHT 028-04-ML		
P	177	PDKT 090508R-MW			213	ZNHT 033-04-ML		
	178	PDKT 090508L-MW			214	ZNHT 038-04-ML		
	179	PDKT 090530R-M			215	ZNHT 043-04-ML		
Q	180	QNKK 070508N-M	B20	Z	216	ZNHT 043-08-ML	B29	
	181	QNGX 070508N-M			217	ZNHT 048-04-ML		
	182	QNGX 070508N-MW			218	ZNHT 048-08-ML		
	183	QNKK 070508N-MS			219	ZNHT 053-04-ML		
	184	QNMX 070508-ML			220	ZNHT 053-08-ML		
	185	QNKK 0906NB-MM			221	ZNHT 058-04-ML		
S	186	SEKT 12T3M-PM	B22	Z	222	ZNHT 058-08-ML	B29	
	187	SNKX 1206XTN	B23		223	ZNHT 063-04-ML		
	188	SNHX 1206XTN -ML			224	ZNHT 063-08-ML		
	189	SNHX 1206XTN -AL			225	ZNHT 068-08-ML		
	190	SNKX 1707XTN -M			226	ZNHT 068-12-ML		
	191	SNKX 1206ANSN-W			227	ZNHT 073-08-ML		
					228	ZNHT 073-12-ML		



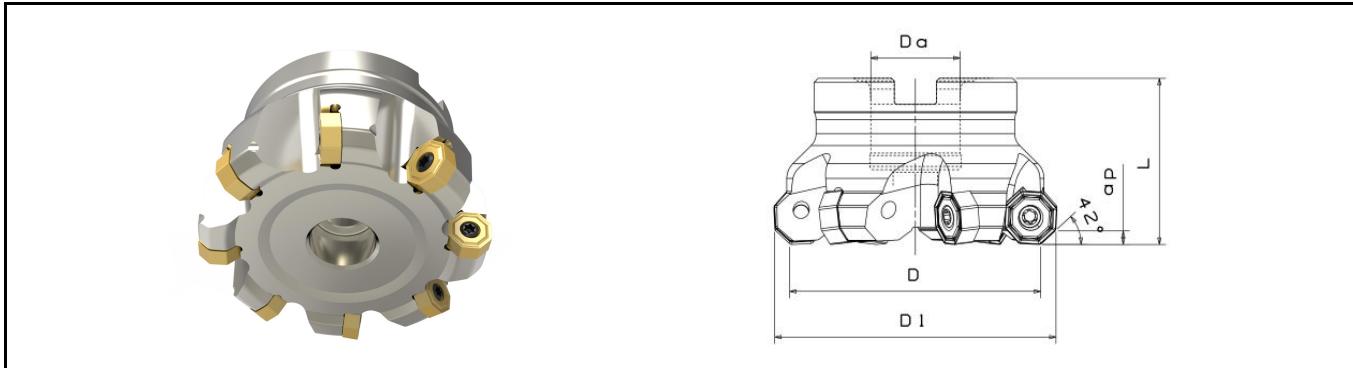
## 超尔铣削刀具系列



# ON SERIES: CFM42ON-05



FACE MILL CUTTER; Kr=42°



MODEL		DIMENSION					CONNECTOR	Kg	INSERT
		D	D1	L	ap	Da			
CFM42ON-450A22R-05	4	50	56.2	40	3	22	A	0.5	ONGU 0504
CFM42ON-550A22R-05	5	50	56.2	40	3	22	A	0.5	
CFM42ON-650A22R-05	6	50	56.2	40	3	22	A	0.5	
CFM42ON-663A22R-05	6	63	69.2	40	3	22	A	0.6	
CFM42ON-863A22R-05	8	63	69.2	40	3	22	A	0.6	
CFM42ON-680A27R-05	6	80	86.2	50	3	27	A	1.1	
CFM42ON-880A27R-05	8	80	86.2	50	3	27	A	1.1	
CFM42ON-980A27R-05	9	80	86.2	50	3	27	A	1.1	
CFM42ON-7100B32R-05	7	100	106.2	50	3	32	B	1.8	
CFM42ON-9100B32R-05	9	100	106.2	50	3	32	B	1.8	
CFM42ON-11100B32R-05	11	100	106.2	50	3	32	B	1.8	
CFM42ON-7125B40R-05	7	125	131.2	63	3	40	B	3.0	
CFM42ON-9125B40R-05	9	125	131.2	63	3	40	B	3.0	
CFM42ON-12125B40R-05	12	125	131.2	63	3	40	B	3.0	

◎Standard cutter head without internal coolant; inserts to be ordered separately

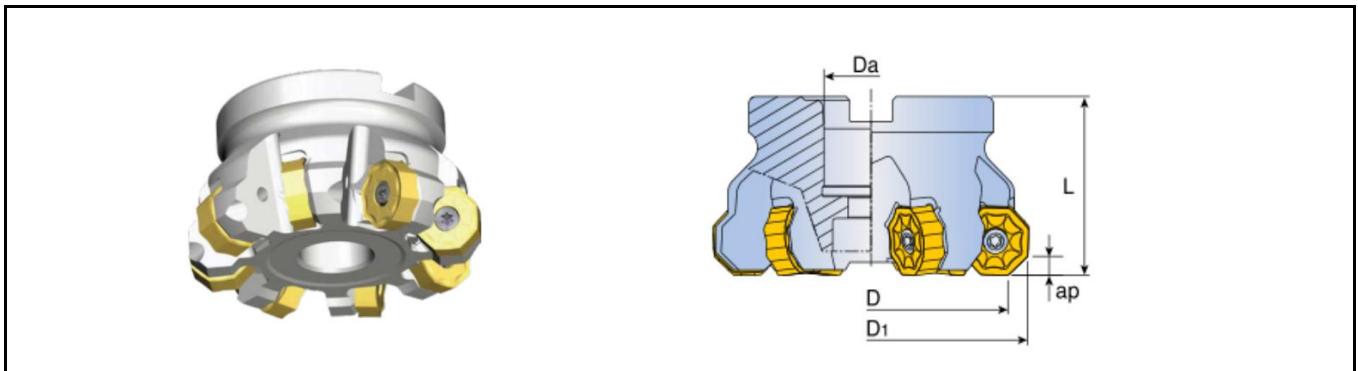
INSERT	SHAPE						INTRODUCTION			
							<ul style="list-style-type: none"> <li>Flat mount INSERT</li> <li>Double-sided 16 blades</li> <li>Large front angle design</li> <li>-W geometry inserts are wiper inserts</li> </ul>			
INSERT MODEL	DIMENSION MM						GRADE			SCREW/WRENCH
	D	L	S	ap	R	b	CT5320	CT7420	CT8320	CT101
ONGU 050408-M	12.7	4	4.0	3	0.8	/	●	●	●	CSC4090 CTS15W
ONGU 050408-ML						/				
ONGU 050408-MW						1.6	●	●	●	
ONGU 050408-MLW						1.6	●	●	●	
ONKU 050408-M						/	●	●	●	
ONKU 050408-ML						/				

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## ON SERIES: CFM43ON-07



FACE MILL CUTTER; Kr=43°



MODEL		DIMENSION					CONNECTOR		INSERT
		D	D1	L	ap	Da			
CFM43ON-563A22R-07		5	63	75.2	50	4	22	A	0.8
CFM43ON-680A27R-07		6	80	92.2	50	4	27	A	1.2
CFM43ON-780A27R-07		7	80	92.2	50	4	27	A	1.2
CFM43ON-7100B32R-07		7	100	112.2	60	4	32	B	2.5
CFM43ON-8100B32R-07		8	100	112.2	60	4	32	B	2.5
CFM43ON-8125B40R-07		8	125	137.2	63	4	40	B	3.0
CFM43ON-10125B40R-07		10	125	137.2	63	4	40	B	3.1
CFM43ON-10160C40R-07		10	160	172.2	63	4	40	C	5.2
CFM43ON-12160C40R-07		12	160	172.2	63	4	40	C	5.4

◎Standard cutter head without internal coolant

◎INSERT to be ordered separately

INSERT MODEL	EDGE LONG	KR (°)	DIMENSION					GRADE				
			D	L	S	ap	R	b	CT5320	CT7420	CT8320	CT8420
ONKX 070608N-M	07	43	19.05	7.9	7	4	0.8	1.1	●	●	●	●

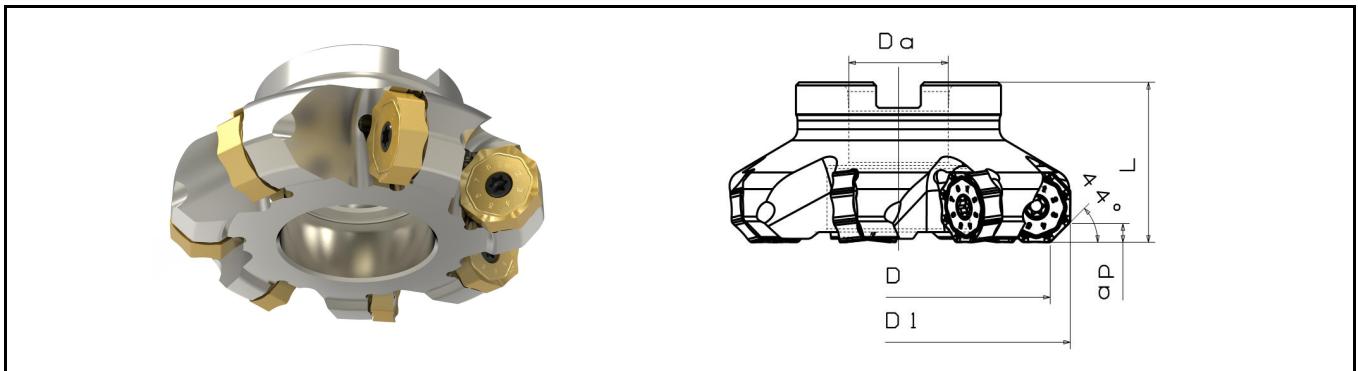
**ACCESSORY**

MODEL	SCREW	WRENCH
CFM43ON-07		
CSG5016		
CTS20W		

## ON SERIES: CFM44ON-09



FACE MILL CUTTER; Kr=44°



MODEL		DIMENSION					CONNECTOR	Kg	INSERT
		D	D1	L	ap	Da			
CFM44ON-563A22R-09	5	63	78	40	5.0	22	A	0.6	ONGU 0905
CFM44ON-663A22R-09	6	63	78	40	5.0	22	A	0.6	
CFM44ON-680A27R-09	6	80	95	50	5.0	27	A	1.1	
CFM44ON-780A27R-09	7	80	95	50	5.0	27	A	1.1	
CFM44ON-7100B32R-09	7	100	115	50	5.0	32	B	1.8	
CFM44ON-8100B32R-09	8	100	115	50	5.0	32	B	1.8	
CFM44ON-8125B40R-09	8	125	140	63	5.0	40	B	3.0	
CFM44ON-10125B40R-09	10	125	140	63	5.0	40	B	3.0	
CFM44ON-10160C40R-09	10	160	175	63	5.0	40	C	4.4	
CFM44ON-12160C40R-09	12	160	175	63	5.0	40	C	4.4	
CFM44ON-12200C60R-09	12	200	215	63	5.0	60	C	6.2	
CFM44ON-16250C60R-09	16	250	265	63	5.0	60	C	13.5	
CFM44ON-20315D60R-09	20	315	330	80	5.0	60	D	27.8	

◎Standard cutter head without internal coolant; inserts to be ordered separately

MODEL	EDGE LONG	DIMENSION MM				GRADE						
		L	S	ap	r	CT5320	CT5420	CT7320	CT7420	CT8320	CT8330	CT8420
ONGU 090506-ML	09	21.85	7.62	5.0	0.6		●			●		●
ONGU 090506-MLW					1.0		●			●		●
ONGU 090510-ML					2.0		●			●		●
ONGU 090510-MLW												
ONGU 090520-ML												

- MLW groove inserts are wiper inserts

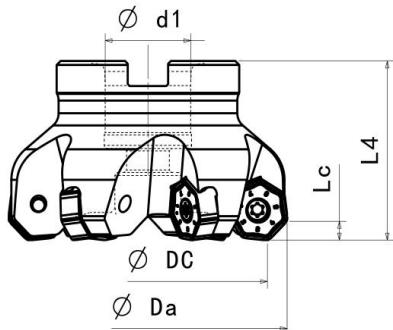
**ACCESSORY**

MODEL	SCREW	WRENCH
CFM44ON-09		
CSG5016		
CTS20W		

## QN series: CFM45QN-07



FACE MILL CUTTER; Kr=45°



MODEL		DIMENSION MM					CONNECTOR	Kg	INSERT
		Dc	Da	d1	L4	Lc			
CFM45QN-340A16R-07	3	40	50	16	40	4.0	A	0.5	QNKK 0705
CFM45QN-450A22R-07	4	50	60	22	45	4.0	A	0.5	
CFM45QN-550A22R-07	5	50	60	22	45	4.0	A	0.5	
CFM45QN-563A22R-07	5	63	73	22	45	4.0	A	0.8	
CFM45QN-663A22R-07	6	63	73	22	45	4.0	A	0.8	
CFM45QN-680A27R-07	6	80	90	27	50	4.0	A	1.5	
CFM45QN-780A27R-07	7	80	90	27	50	4.0	A	1.5	
CFM45QN-7100B32R-07	7	100	110	32	50	4.0	B	2.7	
CFM45QN-8100B32R-07	8	100	110	32	50	4.0	B	2.7	
CFM45QN-8125B40R-07	8	125	135	40	63	4.0	B	4.3	
CFM45QN-10125B40R-07	10	125	135	40	63	4.0	B	4.3	
CFM45QN-9160C40R-07	9	160	170	40	63	4.0	C	6.5	
CFM45QN-12160C40R-07	12	160	170	40	63	4.0	C	6.5	
CFM45QN-18250C60R-07	18	250	260	60	63	4.0	C	10.5	

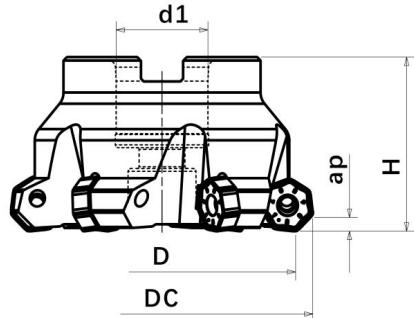
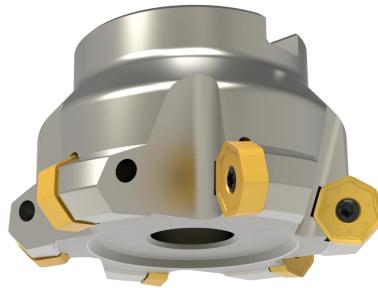
◎Standard cutter head without internal coolant; inserts to be ordered separately

◎Note that the mounting screw of this type of cutter head is M3.5, and it can MATCH the WT.

INSERT	SHAPE					INTRODUCTION				
						Double-sided 14 blades 45° main declination angle, maximum depth of cut 4.0mm It is recommended to control the depth of cut below 3.0mm during processing				
INSERT MODEL	DIMENSION MM					GRADE			SCREW	WREN
	1	d	b	s	r	CT5320	CT5420	CT7320	CT7420	CT8420
QNKK 070508N-M	6.98	14.5	—	5.4	0.8	●	●	●	●	●
						CSG	CTS			
						3585-P	10W-P			

# QN SERIES: CFM45QN-07S

FACE MILL CUTTER; Kr=45°



MODEL		DIMENSION MM					CONNECTOR		INSERT
		D	DC	d1	H	ap			
CFM45QN-340A16R-07S	3	40	50	16	40	4.0	A	0.5	QNGX 07 QNKK 07 QNMX 07
CFM45QN-450A22R-07S	4	50	60	22	45	4.0	A	0.5	
CFM45QN-550A22R-07S	5	50	60	22	45	4.0	A	0.5	
CFM45QN-563A22R-07S	5	63	73	22	45	4.0	A	0.8	
CFM45QN-663A22R-07S	6	63	73	22	45	4.0	A	0.8	
CFM45QN-680A27R-07S	6	80	90	27	50	4.0	A	1.5	
CFM45QN-780A27R-07S	7	80	90	27	50	4.0	A	1.5	
CFM45QN-7100B32R-07S	7	100	110	32	50	4.0	B	2.7	
CFM45QN-8100B32R-07S	8	100	110	32	50	4.0	B	2.7	
CFM45QN-8125B40R-07S	8	125	135	40	63	4.0	B	4.3	
CFM45QN-10125B40R-07S	10	125	135	40	63	4.0	B	4.3	
CFM45QN-9160C40R-07S	9	160	170	40	63	4.0	C	6.5	
CFM45QN-12160C40R-07S	12	160	170	40	63	4.0	C	6.5	

◎Standard cutter head without internal coolant; inserts to be ordered separately

◎-S CUTTER EQUIPPED WITH SCREW M4

◎CUTTER WITH INSERTS MODEL QNKK series, only for MS groove type.

# QN series: CFM45QN-07S

FACE MILL CUTTER; Kr=45°



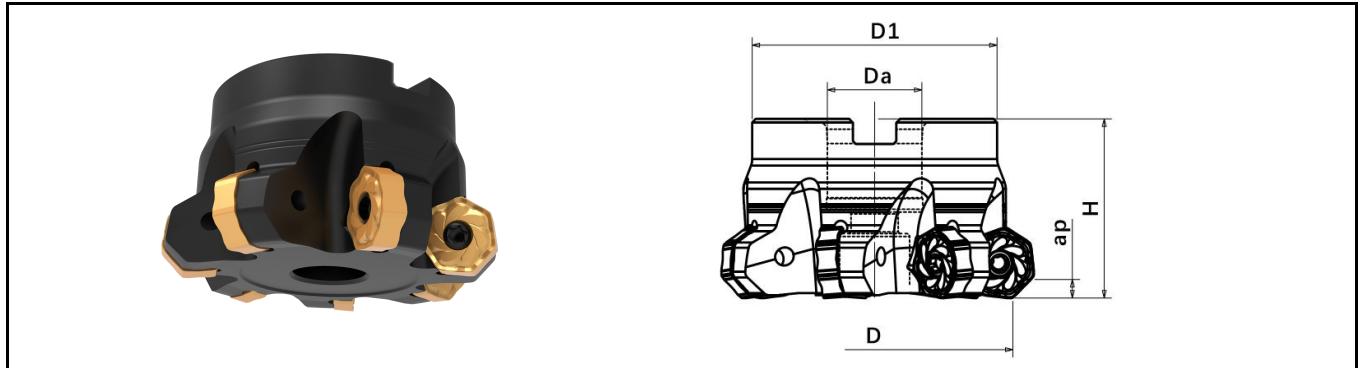
INSERT	SHAPE					INTRODUCTION				INSERT PAGE
INSERT MODEL						<ul style="list-style-type: none"> <li>平装刀片</li> <li>双面14刃</li> <li>45° 主偏角</li> <li>最大切深4.0mm</li> </ul>				B37
	DIMENSION MM					GRADE				SCREW/ WRENCH
	l	d	b	s	r	CT5320	CT5420	CT7320	CT7420	
	6.98	14.5	—	5.4	0.8	●	●	●	●	
QNGX 070508N-M	6.98	14.5	1.1	5.4	0.8	●	●	●	●	CSG4013-P CTS15W-P
QNGX 070508N-MW			—			●	●	●	●	
QNKG 070508N-MS			—			●	●	●	●	

INSERT	SHAPE					INTRODUCTION				INSERT PAGE	
INSERT MODEL	EDGE LONG	DIMENSION MM				GRADE					
		D	S	AP	R	CT5320	CT5420	CT7320	CT7420	CT8320	
QNMX 070508-ML	07	14.5	6.47	5.0	0.8		●			●	●

## QN series : CFM45QN-09



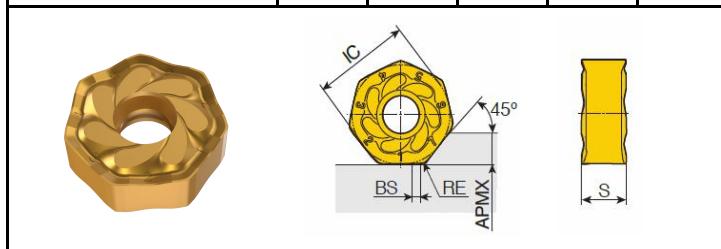
FACE MILL CUTTER; Kr=45°



MODEL		DIMENSION MM					CONNECTOR		INSERT
		D	D1	H	ap	Da			
CFM45QN-563A22R-09	5	63	74.9	50	5	22	A	0.9	QNKA 0906
CFM45QN-663A22R-09	6	63	74.9	50	5	22	A	0.9	
CFM45QN-680A27R-09	6	80	91.9	50	5	27	A	1.4	
CFM45QN-780A27R-09	7	80	91.9	50	5	27	A	1.5	
CFM45QN-7100B32R-09	7	100	112	55	5	32	B	2.4	
CFM45QN-9100B32R-09	9	100	112	55	5	32	B	2.5	
CFM45QN-8125B40R-09	8	125	137	63	5	40	B	3.5	
CFM45QN-10125B40R-09	10	125	137	63	5	40	B	3.6	
CFM45QN-12125B40R-09	12	125	137	63	5	40	B	3.4	
CFM45QN-10160C40R-09	10	160	172	63	5	40	C	4.8	
CFM45QN-12160C40R-09	12	160	172	63	5	40	C	4.8	
CFM45QN-14160C40R-09	14	160	172	63	5	40	C	4.8	
CFM45QN-12200C60R-09	12	200	212	63	5	60	C	6.8	
CFM45QN-16200C60R-09	16	200	212	63	5	60	C	6.9	
CFM45QN-16250C60R-09	16	250	262	63	5	60	C	11.5	
CFM45QN-20250C60R-09	20	250	262	63	5	60	C	11.5	

◎Standard cutter head without internal coolant; inserts to be ordered separately

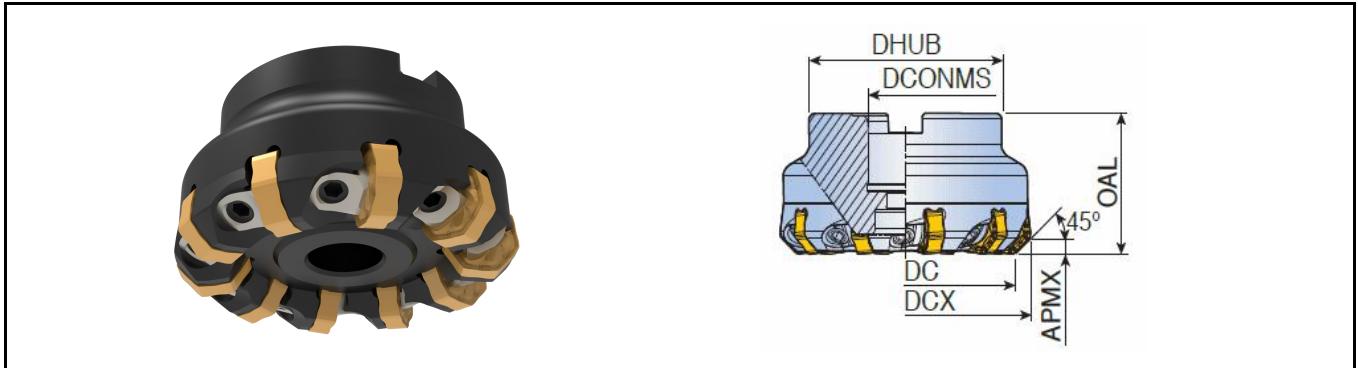
INSERT MODEL	EDGE LONG	DIMENSION MM				GRADE					
		IC	S	ap	r	CT5320	CT5420	CT7320	CT7420	CT8320	CT8330
QNKA 0906NB-MM	09	18.5	6.35	5.5	1.0	●			●		●



MODEL	SCREW	WRENCH
CFM45QN-09	CSG5016	CTS20W

## QNW SERIES: CFM45QNW-09

FACE MILL CUTTER; Kr=45°



MODEL		DIMENSION MM						CONNECTOR	Kg	INSERT
		Dc	DCX	DCONM	DHUB	OAL	APMAX			
CFM45QNW-1080A27R-09	10	80	91.9	27	70	50	5.0	A	1.5	QNKA 0906
CFM45QNW-13100B32R-09	13	100	112	32	85	55	5.1	B	2.9	
CFM45QNW-17125B40R-09	17	125	137	40	85	63	5.0	B	3.8	
CFM45QNW-18160C40R-09	18	160	172	40	110	63	5.1	C	5.6	
CFM45QNW-21160C40R-09	21	160	172	40	110	63	5.0	C	5.6	
CFM45QNW-26200C60R-09	26	200	212	60	130	63	5.1	C	7.9	
CFM45QNW-34250C60R-09	34	250	262	60	160	63	5.0	C	12.7	
CFM45QNW-42315D60R-09	42	315	327	60	220	63	5.1	D	19.9	

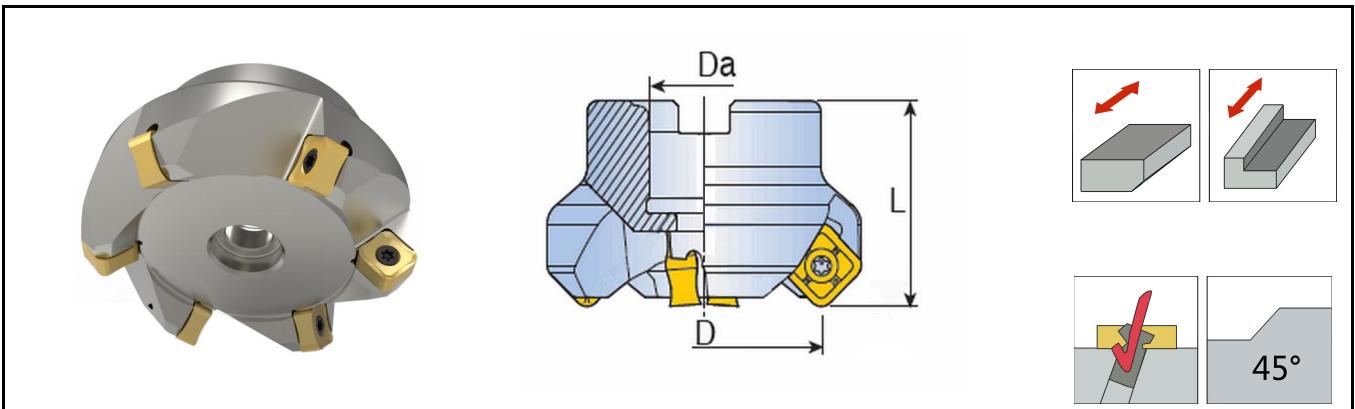
◎Standard cutter head without internal coolant; inserts to be ordered separately

INSERT MODEL	EDGE LONG	DIMENSION MM				GRADE					
		IC	S	ap	r	CT5320	CT5420	CT7320	CT7420	CT8320	CT8330
QNKA 0906NB-MM	09	18.5	6.35	5.5	1.0	●				●	●
ACCESORY											
MODEL	WEDGE			SCREW(SMALL)			WRENCH				
	CFM45QNW-09	CYX8H-X	CLD0802010	CBL40							

## SN SERIES: TFM45SN



FACE MILL CUTTER, Kr=45°



MODEL		DIMENSION MM			MAX DEPTH	CONNECTOR	Kg	SUITABLE INSERT
		D	Da	L				
TFM45SN-350-22R-12	3	50	22	40	6.0	A	0.3	SNKX 1206
TFM45SN-450-22R-12	4	50	22	40		A	0.3	
TFM45SN-550-22R-12	5	50	22	40		A	0.3	
TFM45SN-463-22R-12	4	63	22	40		A	0.5	
TFM45SN-563-22R-12	5	63	22	40		A	0.5	
TFM45SN-663-22R-12	6	63	22	40		A	0.5	
TFM45SN-580-27R-12	5	80	27	50		A	1.2	
TFM45SN-680-27R-12	6	80	27	50		A	1.2	
TFM45SN-1080-27R-12	10	80	27	50		A	1.2	
TFM45SN-6100-32R-12	6	100	32	50		B	1.8	
TFM45SN-8100-32R-12	8	100	32	50		B	1.8	
TFM45SN-12100-32R-12	12	100	32	50		B	1.8	
TFM45SN-7125-40R-12	7	125	40	63		B	3.0	
TFM45SN-10125-40R-12	10	125	40	63		B	3.0	
TFM45SN-16125-40R-12	16	125	40	63		B	3.0	
TFM45SN-8160-40R-12	8	160	40	63		C	4.6	
TFM45SN-12160-40R-12	12	160	40	63		C	4.6	
TFM45SN-20160-40R-12	20	160	40	63		C	4.6	
TFM45SN-10200-60R-12	10	200	60	63		C	6.5	
TFM45SN-18200-60R-12	18	200	60	63		C	6.5	
TFM45SN-22200-60R-12	22	200	60	63		C	6.5	

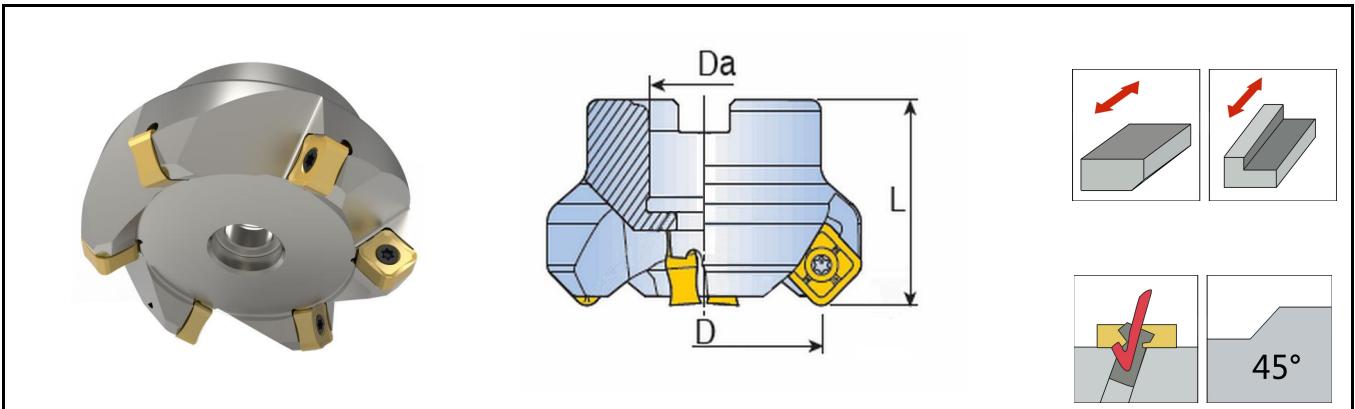
◎Standard cutter head without internal coolant

◎Inserts to be ordered separately

## SN SERIES: TFM45SN



FACE MILL CUTTER, Kr=45°



MODEL		DIMENSION MM			MAX DEPTH	CONNECTOR	Kg	SUITABLE INSERT
		D	Da	L				
TFM45SN-12250-60R-12	12	250	60	63	6.0	C	10.2	SNKX 1206
TFM45SN-20250-60R-12	20	250	60	63		C	10.2	
TFM45SN-24250-60R-12	24	250	60	63		C	10.2	
TFM45SN-15315-60R-12	15	315	60	63		D	18.0	
TFM45SN-22315-60R-12	22	315	60	63		D	18.0	
TFM45SN-26315-60R-12	26	315	60	63		D	18.0	

◎Standard cutter head without internal coolant

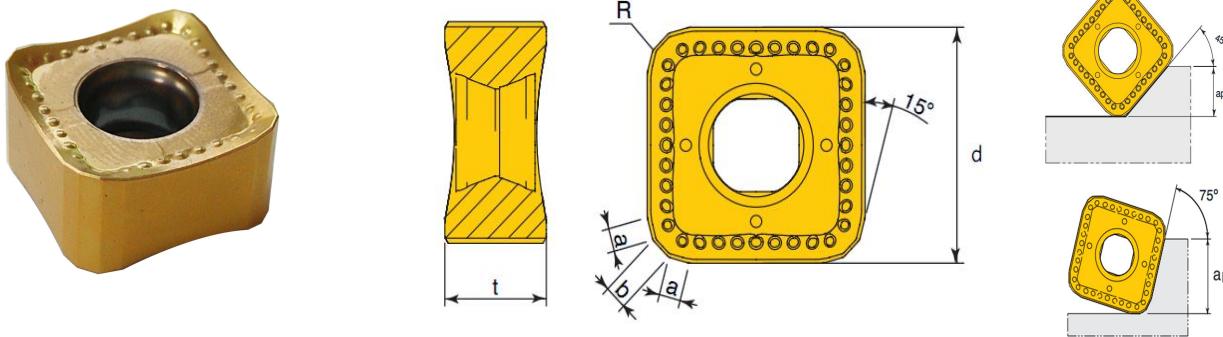
◎Inserts to be ordered separately

### ACCESSORY

MODEL	SCREW	WRENCH
TFM45SN	CST4010	CTS15W

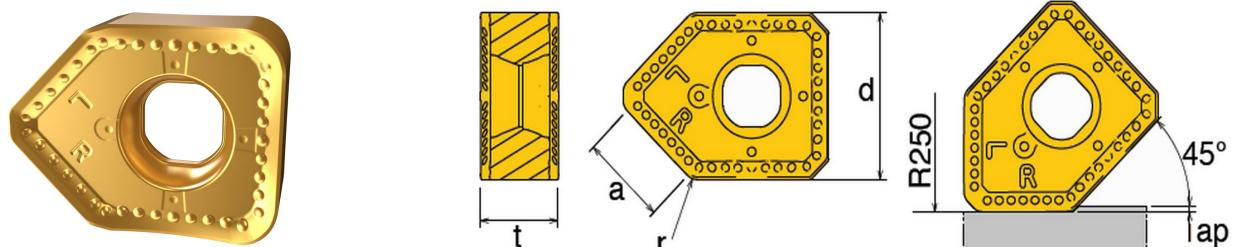
## INSERTS

## SNKX INSERTS



INSERT MODEL	EDGE LONG	DIMENSION						GRADE				
		d	t	a	b	r		CT5320	CT7320	CT8330	CT9320	CT101
SNKX 1206XTN	12	12.7	6.35	1.25	1.3	0.4		●	●	●	●	
SNHX 1206XTN-ML								●	●	●	●	
SNHX 1206XTN-AL												●

## SNKX-W WIPER INSERT

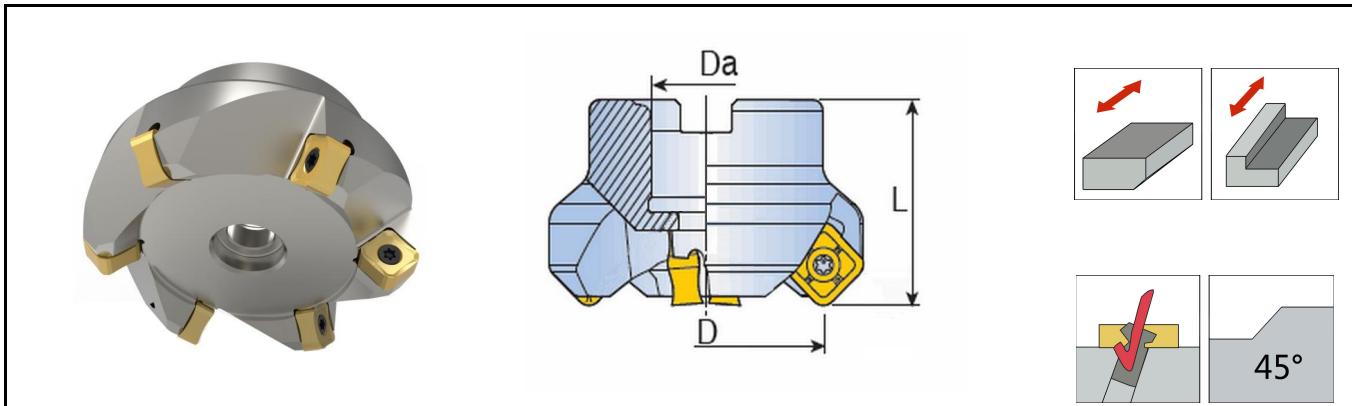


MODEL	DIMENSION					COATING		
	d	t	a	R		CT5320	CT7320	CT9320
SNKX 1206ANSN-W	12.7	6.45	6.9	0.4			●	

## SN SERIES: CFM45SN



FACE MILL CUTTER, Kr=45°



MODEL		DIMENSION (mm)			MAX DEPTH	CONNECTOR		SUITABLE INSERT
		D	Da	L				
CFM45SN-463A22R-17	4	63	22	50	7.8	A	1.0	SNKX 1707
CFM45SN-580A27R-17	5	80	27	50		A	1.5	
CFM45SN-7100B32R-17	7	100	32	50		B	2.3	
CFM45SN-8125B40R-17	8	125	40	63		B	4.0	
CFM45SN-10125B40R-17	10	125	40	63		B	4.0	
CFM45SN-10160C40R-17	10	160	40	63		C	5.4	
CFM45SN-12160C40R-17	12	160	40	63		C	5.4	
CFM45SN-12200C60R-17	12	200	60	63		C	7.5	
CFM45SN-14250C60R-17	14	250	60	63		C	13.0	

◎ Inserts to be ordered separately, standard cutter without collant.

insert	shape						introduction					
							<ul style="list-style-type: none"> <li>Flat mount double-sided 8-edged blade</li> <li>Large rake angle design of blade, cutting lightly</li> </ul> The trial effect and life of the tool are highly recognized by customers					
insert model	edge LONG							grade				
		d	t	a	b	r		CT5320	CT7320	CT8330	CT9320	CT101
SNKX 1707XTN-M	17	17.2	7.8	1.6	1.5	0.5		●	●			

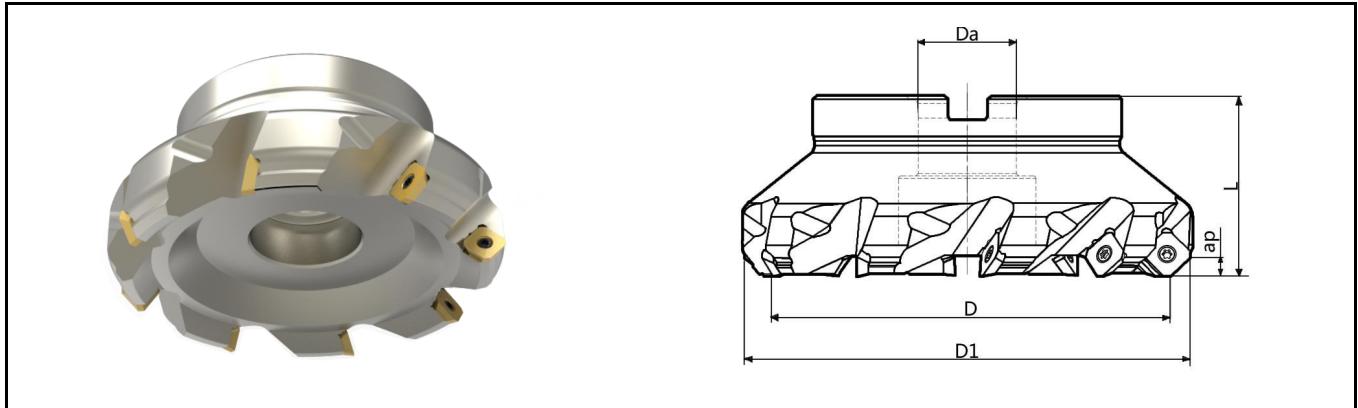
### ACCESSORY

MODEL	SCREW	WRENCH
CFM45SN-17	CSG5016	CTS20W

## SE SERIES: CFM45SE



FACE MILL CUTTER, Kr=45°



MODEL		DIMENSION MM					CONNECTOR		FOR INSERT
		D	D1	Da	L	ap			
CFM45SE-450A22R-12	4	50	62	22	40	6	A	0.3	SEKT 12T3
CFM45SE-563A22R-12	5	63	75	22	40	6	A	0.5	
CFM45SE-680A27R-12	6	80	92	27	50	6	A	1.2	
CFM45SE-7100B32R-12	7	100	112	32	50	6	B	1.2	
CFM45SE-8125B40R-12	8	125	137	40	63	6	B	2.6	
CFM45SE-10160C40R-12	10	160	172	40	63	6	C	4.3	
CFM45SE-12200C60R-12	12	200	212	60	63	6	C	7.6	
CFM45SE-14250C60R-12	14	250	262	60	63	6	C	13.5	

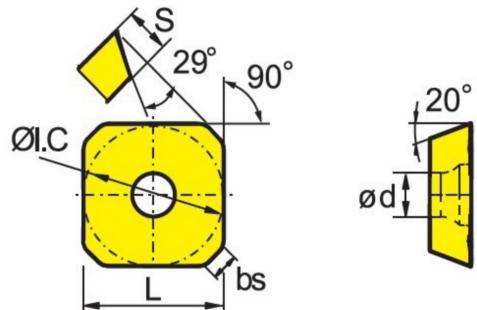
◎Standard cutter head without internal coolant

◎Blades to be ordered separately

### ACCESSORY

MODEL	SCREW	WRENCH
CFM45SE	CSC3580	CTS15W

## INSERTS



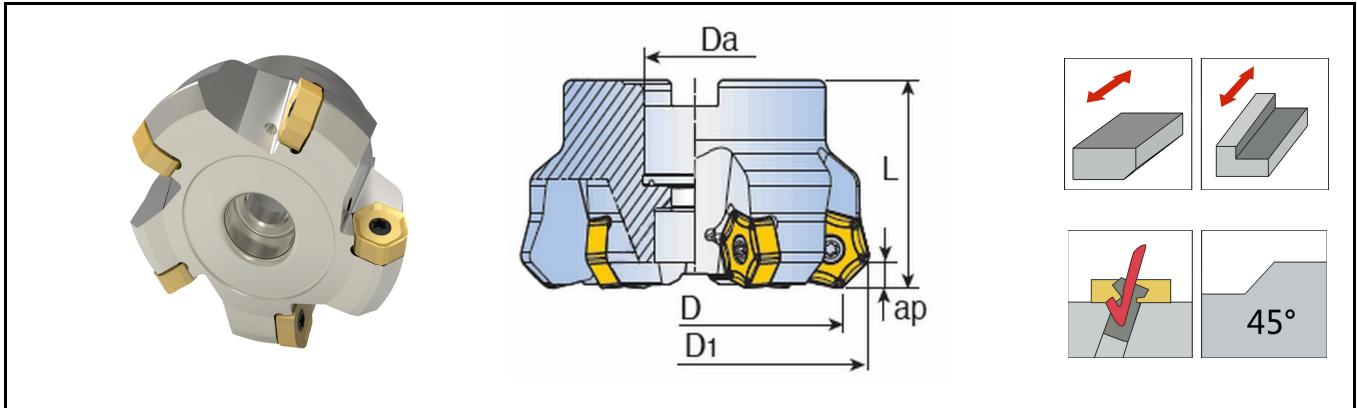
MODEL	EDGE LENGTH	DIMENSION MM						GRADE			
		L	Φ I.C	S	Φ d	bs	R	CT5320	CT7420	CT8240	CT8420
SEKT 12T3M-PM	12	13.4	13.4	3.97	4.1	2.55	—	●	●	●	●



## HN SERIES: TFM45HNS



FACE MILL CUTTER, Kr=45°



MODEL		DIMENSION (mm)					CONNECTOR	Kg	FOR INSERT
		D	D1	Da	L	ap			
TFM45HNS-563-22R-10	5	63	77	22	50	6.1	A	0.8	HNKX 1006
TFM45HNS-663-22R-10	6	63	77	22	50	6.1	A	0.9	
TFM45HNS-680-27R-10	6	80	94	27	55	6.1	A	1.6	
TFM45HNS-780-27R-10	7	80	94	27	55	6.1	A	1.6	
TFM45HNS-7100-32R-10	7	100	114	32	63	6.1	B	2.7	
TFM45HNS-9100-32R-10	9	100	114	32	63	6.1	B	2.8	
TFM45HNS-8125-40R-10	8	125	139	40	63	6.1	B	3.4	
TFM45HNS-10125-40R-10	10	125	139	40	63	6.1	B	3.4	
TFM45HNS-12125-40R-10	12	125	139	40	63	6.1	B	3.4	
TFM45HNS-10160-40R-10	10	160	174	40	63	6.1	C	4.8	
TFM45HNS-12160-40R-10	12	160	174	40	63	6.1	C	4.8	
TFM45HNS-14160-40R-10	14	160	174	40	63	6.1	C	4.9	
TFM45HNS-12200-60R-10	12	200	214	60	63	6.1	C	6.9	
TFM45HNS-16200-60R-10	16	200	214	60	63	6.1	C	7.0	
TFM45HNS-16250-60R-10	16	250	264	60	63	6.1	C	11.8	
TFM45HNS-20250-60R-10	20	250	264	60	63	6.1	C	12.0	

◎Standard cutter head with

◎Blades to be ordered separately

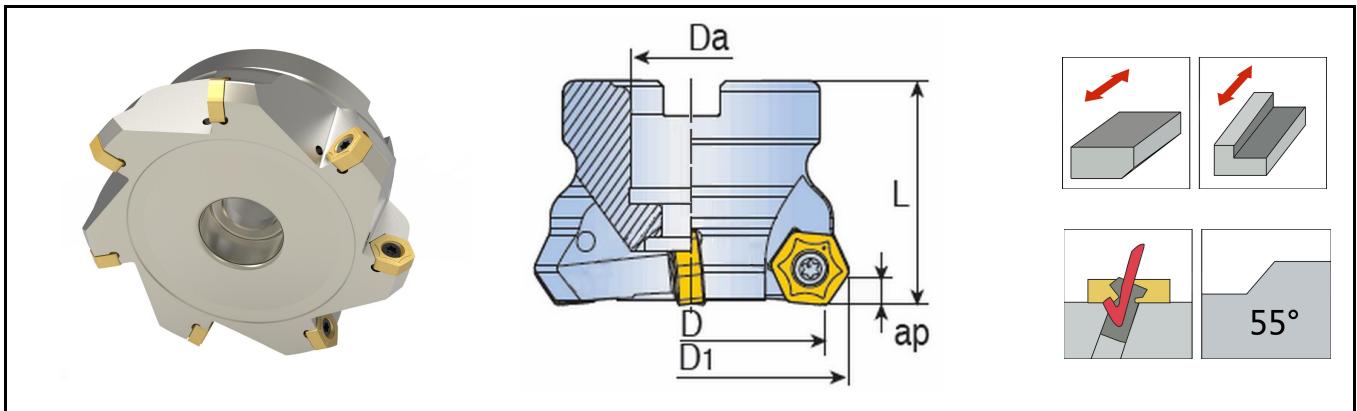
### ACCESSORY

MODEL	SCREW	WRENCH
TFM45HNS	CSG5016	CTS20W

## HN SERIES: TFM55AHNS



FACE MILL CUTTER, Kr=55°



MODEL		DIMENSION MM					CONNECTOR		FOR INSERT
		D	D1	Da	L	ap			
TFM55AHNS 450-22R-05B		4	50	58.16	22	40	5	A	0.4
TFM55AHNS 650-22R-05		6	50	58.16	22	40	5	A	0.4
TFM55AHNS 563-22R-05B		5	63	71.16	22	40	5	A	0.6
TFM55AHNS 863-22R-05		8	63	71.16	22	40	5	A	0.5
TFM55AHNS 680-27R-05B		6	80	88.16	27	50	5	A	1.3
TFM55AHNS 880-27R-05		8	80	88.16	27	50	5	A	1.2
TFM55AHNS 1080-27R-05		10	80	88.16	27	50	5	A	1.2
TFM55AHNS 7100-32R-05B		7	100	108.16	32	50	5	B	2.0
TFM55AHNS 10100-32R-05		10	100	108.16	32	50	5	B	2.0
TFM55AHNS 12100-32R-05		12	100	108.16	32	50	5	B	2.0
TFM55AHNS 10125-40R-05B		10	125	133.16	40	63	5	B	3.2
TFM55AHNS 12125-40R-05		12	125	133.16	40	63	5	B	3.4
TFM55AHNS 16125-40R-05		16	125	133.16	40	63	5	B	3.2
TFM55AHNS 12160-40R-05B		12	160	168.16	40	63	5	C	4.7

◎Standard cutter head with

◎BTTYPE cutter is designed for unequal teeth.

◎Inserts to be ordered separately

### ACCESSORY

MODEL	SCREW	WRENCH
TFM55AHNS	CST4010	CTS15W

## HN series: TFM55AHNS



face mill cutter, Kr=55°

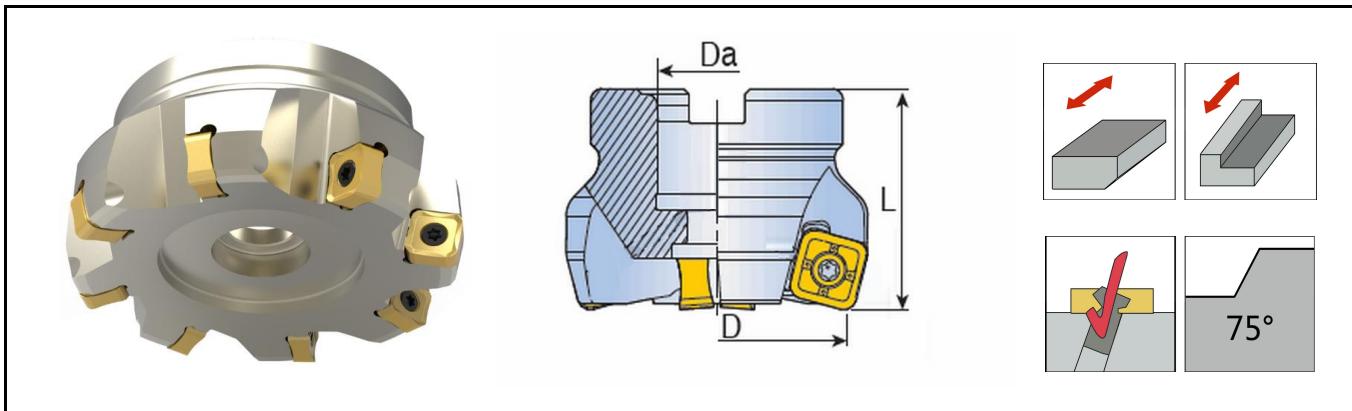
insert	shape					introduction			
MODEL	EDGE LONG	DIMENSION MM				feed (mm/teeth)	GRADE		
		d	t	ap	r		CT5320	CT5420	CT7320
HNKX 050410N-MM	05	12.7	5.0	5.0	1.0	0.05~0.2	●	●	●

INSERTS	shape					introduction			
MODEL	EDGE LONG	DIMENSION MM				Feed (mm/TEETH)	GRADE		
		d	t	ap	r		CT5320	CT5420	CT7320
HNKX 1006ANTN-M	10	19.05	6.35	6.1	1.0	0.1~0.2	●	●	●

## SN SERIES: TFM75SN



FACE MILL CUTTER, Kr=75°



MODEL		DIMENSION MM			MAX DEPTH	CONNECTOR	Kg	FOR INSERT
		D	Da	L				
TFM75SN-350-22R-12	3	50	22	40	9.0	A	0.3	SNKX 1206
TFM75SN-450-22R-12	4	50	22	40		A	0.3	
TFM75SN-550-22R-12	5	50	22	40		A	0.3	
TFM75SN-463-22R-12	4	63	22	40		A	0.5	
TFM75SN-563-22R-12	5	63	22	40		A	0.5	
TFM75SN-663-22R-12	6	63	22	40		A	0.5	
TFM75SN-580-27R-12	5	80	27	50		A	1.2	
TFM75SN-680-27R-12	6	80	27	50		A	1.2	
TFM75SN-1080-27R-12	10	80	27	50		A	1.2	
TFM75SN-6100-32R-12	6	100	32	50		B	1.8	
TFM75SN-8100-32R-12	8	100	32	50		B	1.8	
TFM75SN-12100-32R-12	12	100	32	50		B	1.8	
TFM75SN-7125-40R-12	7	125	40	63		B	3.0	
TFM75SN-10125-40R-12	10	125	40	63		B	3.0	
TFM75SN-16125-40R-12	16	125	40	63		B	3.0	
TFM75SN-8160-40R-12	8	160	40	63		C	4.6	
TFM75SN-12160-40R-12	12	160	40	63		C	4.6	
TFM75SN-20160-40R-12	20	160	40	63		C	4.6	
TFM75SN-10200-60R-12	10	200	60	63		C	6.5	
TFM75SN-18200-60R-12	18	200	60	63		C	6.5	
TFM75SN-22200-60R-12	22	200	60	63		C	6.5	
TFM75SN-12250-60R-12	12	250	60	63		C	10.2	
TFM75SN-20250-60R-12	20	250	60	63		C	10.2	
TFM75SN-24250-60R-12	24	250	60	63		C	10.2	

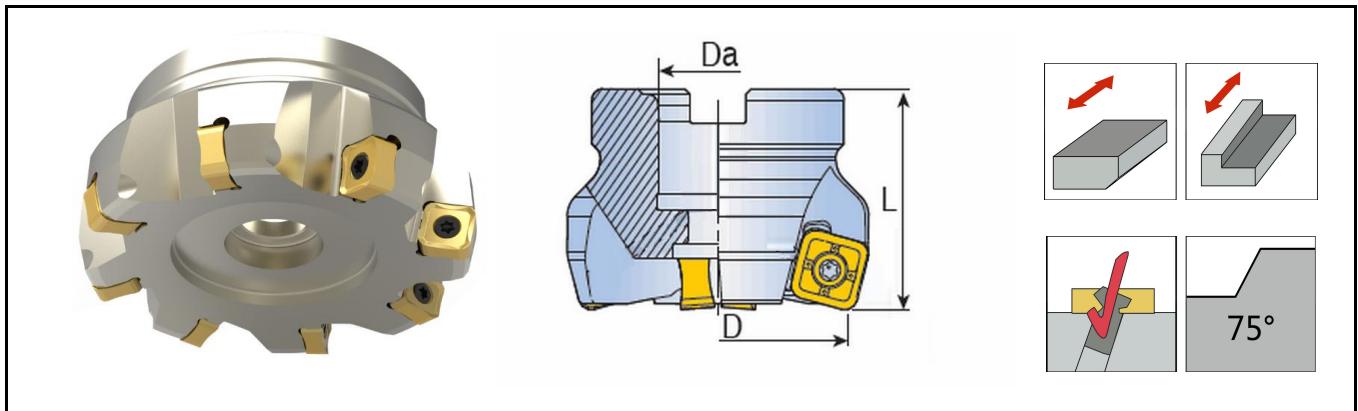
◎Standard cutter head without internal coolant

◎INSERT TO BE ORDERED SEPERATELY

## SN SERIES: TFM75SN



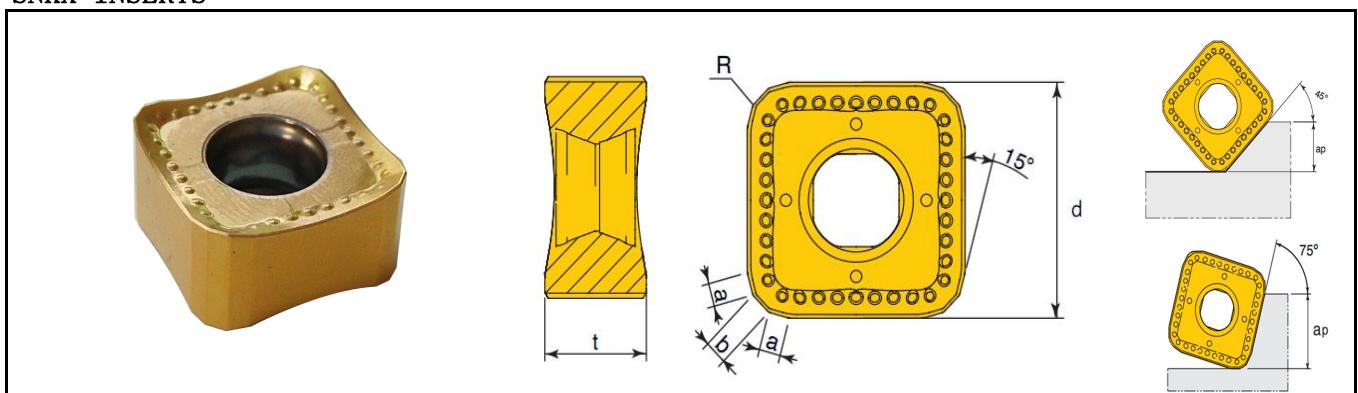
FACE MILL CUTTER, Kr=75°



MODEL		DIMENSION MM			MAX DEPTH	CONNECTOR		FOR INSERT
		D	Da	L				
TFM75SN-15315-60R-12	15	315	60	63	9.0	D	18.0	SNKX 1206
TFM75SN-22315-60R-12	22	315	60	63		D	18.0	
TFM75SN-26315-60R-12	26	315	60	63		D	18.0	

◎Standard cutter head without internal coolant, INSERTS TO BE ORDERED SEPERATELY

### SNKX INSERTS



MODEL	EDGE LONG							GRADE				
		d	t	a	b	r		CT5320	CT7320	CT8330	CT9320	CT101
SNKX 1206XTN	12	12.7	6.35	1.25	1.3	0.4		●	●	●	●	
SNHX 1206XTN-ML								●	●	●	●	
SNHX 1206XTN-AL												●

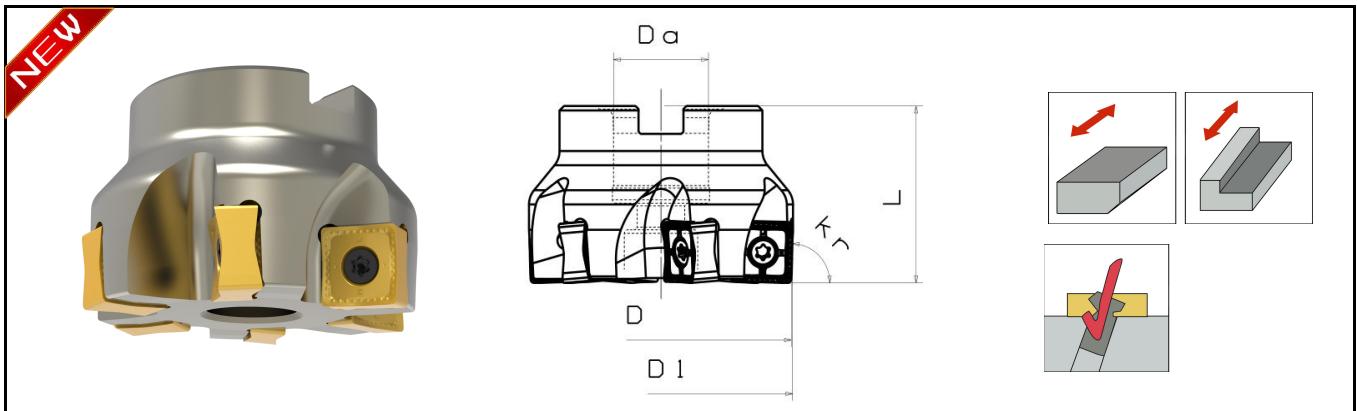
### ACCESSORY

MODEL	SCREW	WRENCH
TFM75SN	CST4010	CTS15W

## SN SERIES: CFM88SN



FACE MILL CUTTER, Kr=88°



MODEL	kr	CONNE CTOR	DIMENSION				SUITABLE INSERT
			D	D1	Da	L	
CFM88SN-450A22R-13-B	88°	A	4	50	51	22	0.4
CFM88SN-550A22R-13		A	5	50	51	22	0.4
CFM88SN-563A22R-13-B		A	5	63	64	22	0.6
CFM88SN-663A22R-13		A	6	63	64	22	0.6
CFM88SN-680A27R-13-B		A	6	80	81	27	1.3
CFM88SN-780A27R-13		A	7	80	81	27	1.3
CFM88SN-980A27R-13		A	9	80	81	27	1.3
CFM88SN-7100B32R-13-B		B	7	100	101	32	1.8
CFM88SN-8100B32R-13		B	8	100	101	32	1.8
CFM88SN-11100B32R-13		B	11	100	101	32	1.8
CFM88SN-10125B40R-13		B	10	125	125.9	40	2.9
CFM88SN-14125B40R-13		B	14	125	125.9	40	2.9
CFM88SN-12160C40R-13		C	12	160	160.8	40	4.3
CFM88SN-18160C40R-13		C	18	160	160.8	40	4.3
CFM88SN-14200C60R-13		C	14	200	200.8	60	6.2
CFM88SN-22200C60R-13		C	22	200	200.8	60	6.2

SNGX 1306ZN

◎ STANDARD CUTTER WITHOUT COOLANT, INSERTS TO BE ORDERED SEPERATELY

◎ D1 is cutter MAX diameter, -B is unequal teeth.

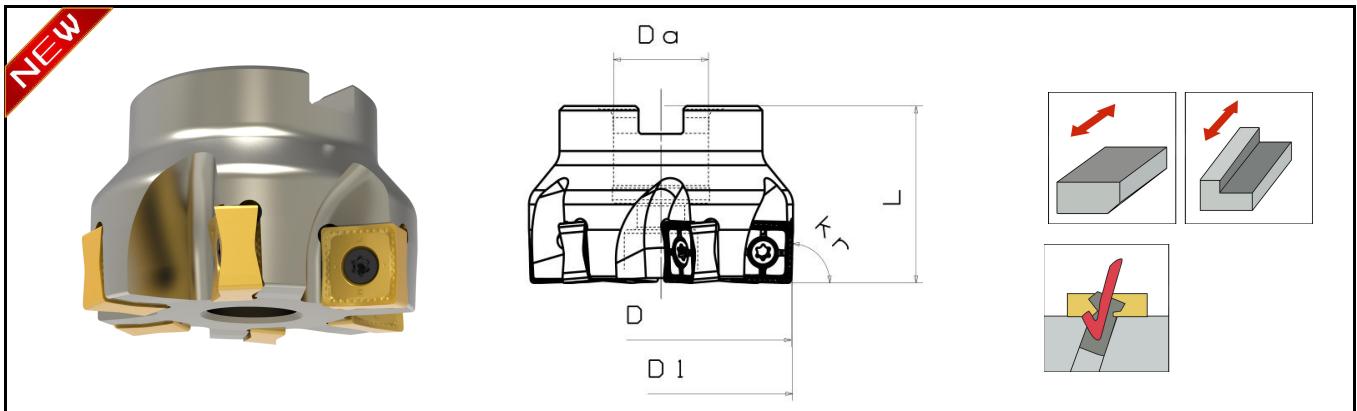
### ACCESSORY

MODEL	SCREW	WRENCH
CFM88SN	CST4010	CTS15W

## SN series: CFM90SN



FACE MILL CUTTER, Kr=90°



MODEL	kr	CONNE CTOR	DIMENSION (mm)				SUITABLE INSERT
			D	D1	Da	L	
CFM90SN-450A22R-13-B	90°	A	4	50	50.84	22	0.4
CFM90SN-550A22R-13		A	5	50	50.84	22	0.4
CFM90SN-563A22R-13-B		A	5	63	63.52	22	0.6
CFM90SN-663A22R-13		A	6	63	63.52	22	0.6
CFM90SN-680A27R-13-B		A	6	80	80.6	27	1.3
CFM90SN-780A27R-13		A	7	80	80.6	27	1.3
CFM90SN-980A27R-13		A	9	80	80.6	27	1.3
CFM90SN-7100B32R-13-B		B	7	100	100.58	32	1.8
CFM90SN-8100B32R-13		B	8	100	100.58	32	1.8
CFM90SN-13100B32R-13		B	13	100	100.58	32	1.9
CFM90SN-10125B40R-13		B	10	125	125.72	40	3.0
CFM90SN-16125B40R-13		B	16	125	125.72	40	3.0

SNGX 130608

◎STANDARD CUTTER WITHOUT COOLANT, INSERTS TO BE ORDERED SEPERATELY

◎D1 is cutter MAX diameter, -B is unequal teeth.

### ACCESSORY

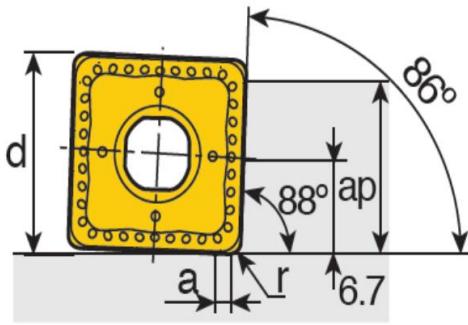
MODEL	SCREW	WRENCH
CFM90SN	CST4010	CTS15W

## INSERTS

## SNGX INSERT

**NEW**



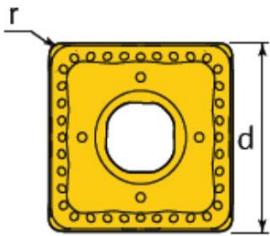
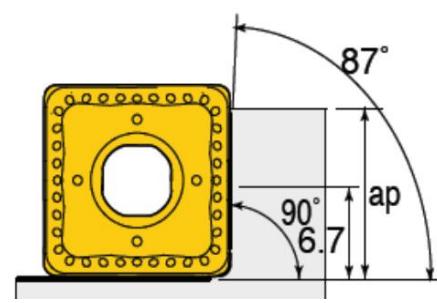


MODEL	EDGE LONG	KR (°)	DIMENSION MM					GRADE				
			d	a	r	ap		CT5320	CT7320	CT8320	CT8520	CT101
SNGX 1306ZN-M	13	88	13.5	2.2	0.8	2-10		●	●	●		
SNGX 1306ZN-ML	13	88	13.5	2.2	0.8	2-10		●	●	●	●	

◎SNGX1306ZN-M/ML grooving cutter can match 88° Kr cutter

## SNGX insert

**NEW**

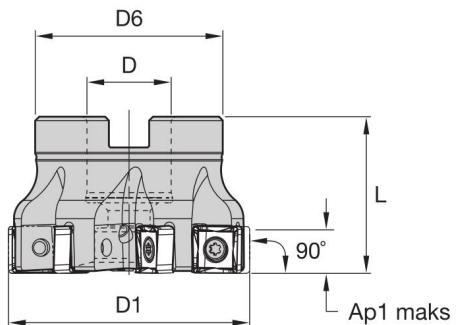
MODEL	EDGE LONG	KR (°)	DIMENSION MM					GRADE				
			d	a	r	ap		CT5320	CT7320	CT8320	CT8520	CT101
SNGX 130608-M	13	90	13.5	2.2	0.8	2-10		●	●	●		
SNGX 130608-ML						2-10		●	●	●	●	
SNGX 130608-AL						2-10						●

◎SNGX130608-M/ML/AL grooving inserts can match KR 90° CUTTER

## SNHX SERIES: CFM90SN



FACE MILL CUTTER, Kr=90°



MODEL		DIMENSION MM					CONNECTOR	Kg	SUITABLE INSERT
		D	Da	L	ap	d6			
CFM90SN-450A22R-12	4	50	22	40	10	47	A	0.32	SNHX 1205
CFM90SN-550A22R-12	5	50	22	40	10	47	A	0.32	
CFM90SN-563A22R-12	5	63	22	40	10	47	A	0.48	
CFM90SN-663A22R-12	7	63	22	40	10	47	A	0.45	
CFM90SN-580A27R-12	5	80	27	50	10	58	A	0.96	
CFM90SN-780A27R-12	7	80	27	50	10	58	A	1.03	
CFM90SN-6100B32R-12	6	100	32	50	10	70	B	1.69	
CFM90SN-8100B32R-12	8	100	32	50	10	70	B	1.58	
CFM90SN-7125B40R-12	7	125	40	63	10	85	B	2.79	
CFM90SN-10125B40R-12	10	125	40	63	10	85	B	2.98	
CFM90SN-8160C40R-12	8	160	40	63	10	110	C	4.10	
CFM90SN-12160C40R-12	12	160	40	63	10	110	C	4.15	

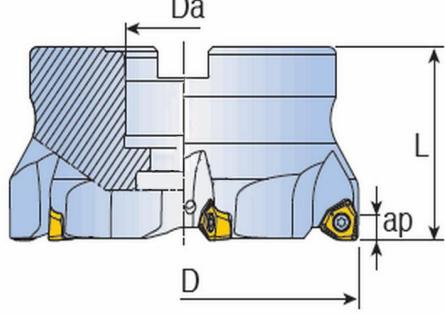
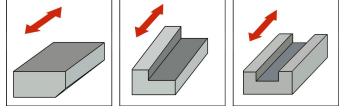
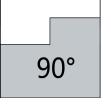
◎ STANDARD CUTTER WITHOUT COOLANT, INSERTS TO BE ORDERED

INSERTS	SHAPE					introduction				
		D	BS	R <sub>e</sub>	L <sub>i</sub>	S	Positive large rake angle inserts	Blade Integral Wiper Design		
MODEL	DIMENSION				GRADE		SCREW	WRENCH		
	L1	D	S	Bs	R	CT5420	CT7420	CT8420		
SNHX 120508-M	12.7	12.7	4.6	1.34	0.8	●	●	●	CSG4013-P	CTS15W-P

## XN SERIES: CFM90XN



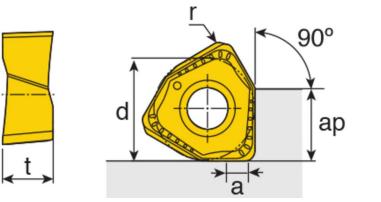
FACE MILL CUTTER, Kr=90°

MODEL		DIMENSION)				CONNECTOR	Kg	SUITABLE INSERTS
		D	Da	L	ap			
CFM90XN-440A16R-06		4	40	16	40	6.2	A	0.3
CFM90XN-450A22R-06		4	50	22	40	6.2	A	0.4
CFM90XN-650A22R-06		6	50	22	40	6.2	A	0.4
CFM90XN-463A22R-06		4	63	22	40	6.2	A	0.5
CFM90XN-663A22R-06		6	63	22	40	6.2	A	0.5
CFM90XN-763A22R-06		7	63	22	40	6.2	A	0.5
CFM90XN-580A27R-06		5	80	27	50	6.2	A	1.0
CFM90XN-780A27R-06		7	80	27	50	6.2	A	1.0
CFM90XN-980A27R-06		9	80	27	50	6.2	A	1.0
CFM90XN-6100B32R-06		6	100	32	50	6.2	B	1.9
CFM90XN-8100B32R-06		8	100	32	50	6.2	B	1.9
CFM90XN-11100B32R-06		11	100	32	50	6.2	B	1.9
CFM90XN-7125B40R-06		7	125	40	63	6.2	B	3.2
CFM90XN-11125B40R-06		11	125	40	63	6.2	B	3.2
CFM90XN-14125B40R-06		14	125	40	63	6.2	B	3.2

◎Standard cutter head without internal coolant; inserts to be ordered

INSERT MODEL	DIMENSION)						GRADE			
	d	t	ap	a	r	FEED (mm/TEETH)	CT5320	CT5420	CT7320	CT7420
XNGU 060408-M	9.26	4.76	6.2	1.96	0.8	0.08-0.15	●	●	●	●
XNGU 090508-M	13.05	6.70	9.2	2.0	0.8	0.10-0.20		●		●
XNGU 090508-ML	13.05	6.70	9.2	2.0	0.8	0.05-0.10		●		●
XNNU 090508R-M	13.05	6.70	9.2	2.0	0.8	0.05-0.10		●		●

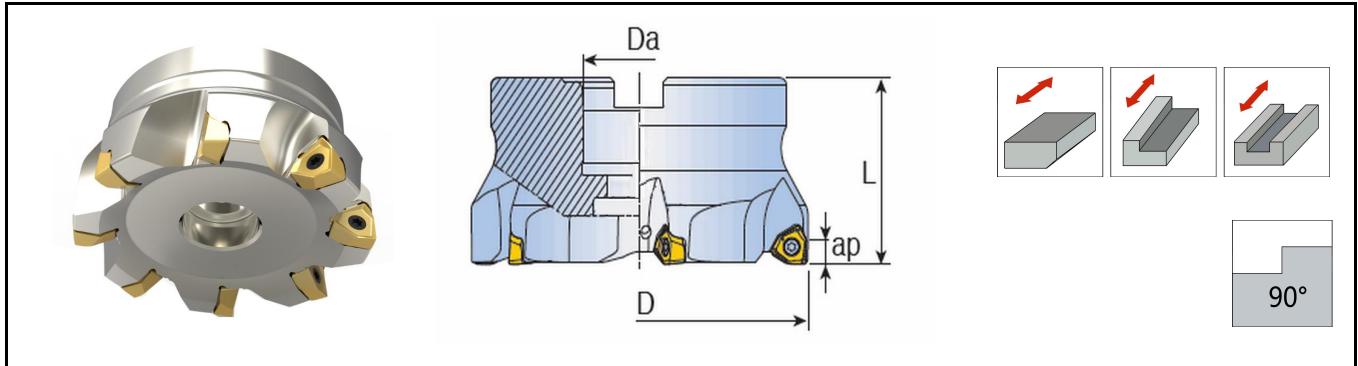


MODEL	SCREW	WRENCH
CFM90XN-06	CSC3080	CTS08W
CFM90XN-09	CST4010	CTS15W

## XN SERIES: CFM90XN



FACE MILL CUTTER, Kr=90°



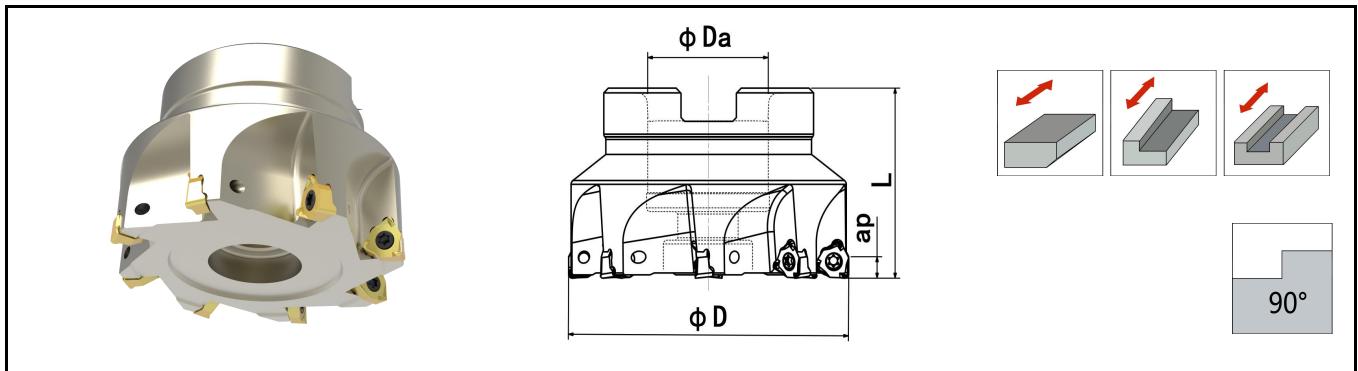
MODEL		DIMENSION)				CONNECTOR	Kg	SUITABLE INSERTS
		D	Da	L	ap			
CFM90XN-450A22R-09	4	50	22	40	9.2	A	0.3	XNGU 0905
CFM90XN-550A22R-09	5	50	22	40	9.2	A	0.4	
CFM90XN-463A22R-09	4	63	22	40	9.2	A	0.5	
CFM90XN-663A22R-09	6	63	22	40	9.2	A	0.5	
CFM90XN-763A22R-09	7	63	22	40	9.2	A	0.5	
CFM90XN-580A27R-09	5	80	27	50	9.2	A	1.0	
CFM90XN-780A27R-09	7	80	27	50	9.2	A	1.1	
CFM90XN-980A27R-09	9	80	27	50	9.2	A	1.1	
CFM90XN-6100B32R-09	6	100	32	50	9.2	A	1.9	
CFM90XN-8100B32R-09	8	100	32	50	9.2	B	1.8	
CFM90XN-11100B32R-09	11	100	32	50	9.2	B	1.9	
CFM90XN-7125B40R-09	7	125	40	63	9.2	B	3.1	
CFM90XN-11125B40R-09	11	125	40	63	9.2	B	3.1	
CFM90XN-14125B40R-09	14	125	40	63	9.2	B	3.2	
CFM90XN-12160C40R-09	12	160	40	63	9.2	C	4.3	
CFM90XN-16160C40R-09	16	160	40	63	9.2	C	4.3	
CFM90XN-14200C60R-09	14	200	60	63	9.2	C	5.9	
CFM90XN-18200C60R-09	18	200	60	63	9.2	C	5.9	
CFM90XN-18250C60R-09	18	250	60	63	9.2	C	10.7	
CFM90XN-22250C60R-09	22	250	60	63	9.2	C	10.8	

◎Standard cutter head without internal coolant; inserts to be ordered separately

MODEL	SCREW	WRENCH
CFM90XN-09	CST4010	CTS15W

## WN SERIES: CFM90WN

FACE MILL CUTTER, Kr=90°



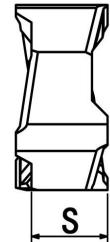
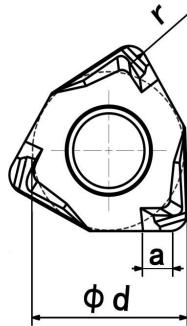
MODEL		DIMENSION)				CONNECTOR	Kg	SUITABLE INSERTS
		D	Da	L	ap			
CFM90WN-640A16R-04	6	40	16	40	4.0	A	0.2	WNHX 0403
CFM90WN-740A16R-04	7	40	16	40	4.0	A	0.2	
CFM90WN-850A22R-04	8	50	22	40	4.0	A	0.4	
CFM90WN-950A22R-04	9	50	22	40	4.0	A	0.4	
CFM90WN-963A22R-04	9	63	22	40	4.0	A	0.7	
CFM90WN-1063A27R-04	10	63	22	40	4.0	A	0.7	
CFM90WN-450A22R-08	4	50	22	40	7.5	A	0.3	WNHX 0806
CFM90WN-550A22R-08	5	50	22	40	7.5	A	0.3	
CFM90WN-463A22R-08	4	63	22	40	7.5	A	0.4	
CFM90WN-663A22R-08	6	63	22	40	7.5	A	0.4	
CFM90WN-763A22R-08	7	63	22	40	7.5	A	0.4	
CFM90WN-663A27R-08	6	63	27	40	7.5	A	0.4	
CFM90WN-763A27R-08	7	63	27	40	7.5	A	0.4	
CFM90WN-580A27R-08	5	80	27	50	7.5	A	1.0	
CFM90WN-780A27R-08	7	80	27	50	7.5	A	1.0	
CFM90WN-980A27R-08	9	80	27	50	7.5	A	1.0	
CFM90WN-6100B32R-08	6	100	32	50	7.5	B	1.5	
CFM90WN-8100B32R-08	8	100	32	50	7.5	B	1.5	
CFM90WN-11100B32R-08	11	100	32	50	7.5	B	1.5	
CFM90WN-7125B40R-08	7	125	40	63	7.5	B	2.8	
CFM90WN-11125B40R-08	11	125	40	63	7.5	B	2.8	
CFM90WN-14125B40R-08	14	125	40	63	7.5	B	2.8	
CFM90WN-12160C40R-08	12	160	40	63	7.5	C	4.8	
CFM90WN-16160C40R-08	16	160	40	63	7.5	C	4.8	

©Standard cutter head without internal coolant; inserts to be ordered separately

**WN**



INSERTS



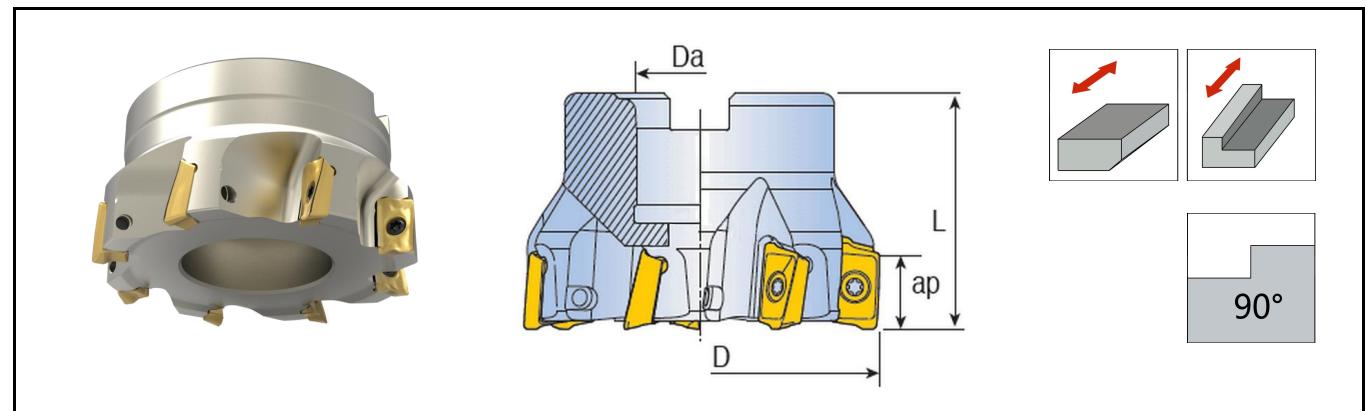
MODEL	EDGE LONG	DIMENSION)				GRADE		COMPATIBLE SCREW/WRENCH
		d	r	S	a	CT5320	CT7420	
WNHX 040308-ML	04	7.64	0.8	3.29	1.1	●	●	CSG2565-P/CTS08W-P
WNHX 080608-ML	08	12.48	0.8	6.35	1.2~2.0	●	●	CSG4013-P CTS15W-P
WNHX 080608-TR	08	12.48	0.8	6.35	1.2~2.0	●		



## AP17 SERIES: TFM90AP



FACE MILL CUTTER, Kr=90°



MODEL		DIMENSION				CONNECTOR	Kg	SUITABLE INSERT
		D	Da	L	ap			
TFM90AP 350-22R-17-B	3	50	22	40	16.1	A	0.4	APKT 1705
TFM90AP 450-22R-17-B	4	50	22	40	16.1	A	0.3	
TFM90AP 550-22R-17	5	50	22	40	16.1	A	0.4	
TFM90AP 463-22R-17-B	4	63	22	40	16.1	A	0.5	
TFM90AP 663-22R-17	6	63	22	40	16.1	A	0.5	
TFM90AP 480-27R-17-B	4	80	27	50	16.1	A	0.8	
TFM90AP 680-27R-17	6	80	27	50	16.1	A	0.9	
TFM90AP 780-27R-17	7	80	27	50	16.1	A	0.9	
TFM90AP 6100-32R-17-B	6	100	32	50	16.1	B	1.3	
TFM90AP 8100-32R-17	8	100	32	50	16.1	B	1.5	
TFM90AP 7125-40R-17-B	7	125	40	63	16.1	B	2.9	
TFM90AP 8125-40R-17	8	125	40	63	16.1	B	3.0	
TFM90AP 9125-40R-17	9	125	40	63	16.1	B	3.1	
TFM90AP 8160-40R-17-B	8	160	40	63	16.1	C	4.1	
TFM90AP 10160-40R-17	10	160	40	63	16.1	C	4.2	
TFM90AP 12200-60R-17	12	200	60	63	16.1	C	6.1	

◎Standard cutter head without internal coolant, inserts to be ordered separately

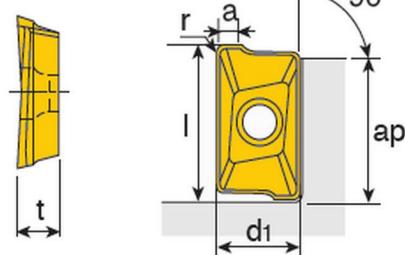
◎B TYPE is unequal teeth.

### ACCESSORY

MODEL	SCREW	WRENCH
TFM90AP	CSC4090	CTS15W

# APKT 17

INSERTS

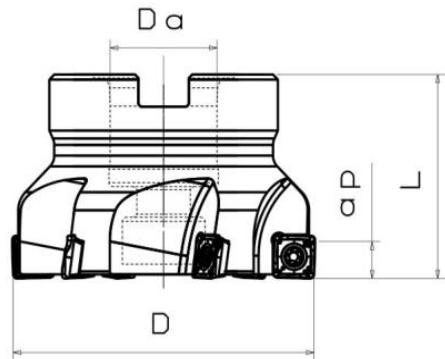


MODEL	EDGE LONG	DIMENSION						GRADE			
		d	ap	L	t	a	r	CT5320	CT7420	CT8320	CT9320
APKT 1705PER-EM	17	10.7	16.1	18.5	5.56	3.0	0.8	●	●		

## SD14 SERIES: CFM90SD



FACE MILL CUTTER, Kr=90°



MODEL		DIMENSION				CONNECTOR	Kg	SUITABLE INSERT
		D	L	ap	Da			
CFM90SD-550A22R-14	5	50	40	10	22	A	0.7	SDKT 1404
CFM90SD-663A22R-14	6	63	40	10	22	A	0.7	
CFM90SD-680A27R-14	6	80	50	10	27	A	1.2	
CFM90SD-880A27R-14	8	80	50	10	27	A	1.1	
CFM90SD-8100B32R-14	8	100	50	10	32	B	1.1	
CFM90SD-10100B32R-14	10	100	50	10	32	B	1.9	
CFM90SD-10125B40R-14	10	125	63	10	40	B	1.8	
CFM90SD-12125B40R-14	12	125	63	10	40	B	1.7	
CFM90SD-15160C40R-14	15	160	63	10	40	C	3.2	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPERATELY

INSERTS MODEL	EDGE LONG	DIMENSION					GRADE			
		d	S	bs	La	R	CT5420	CT7420	CT8240	CT8420
SDKT 140408M-PM	14	13.8	3.9	2.0	10.3	0.8	●	●	●	●

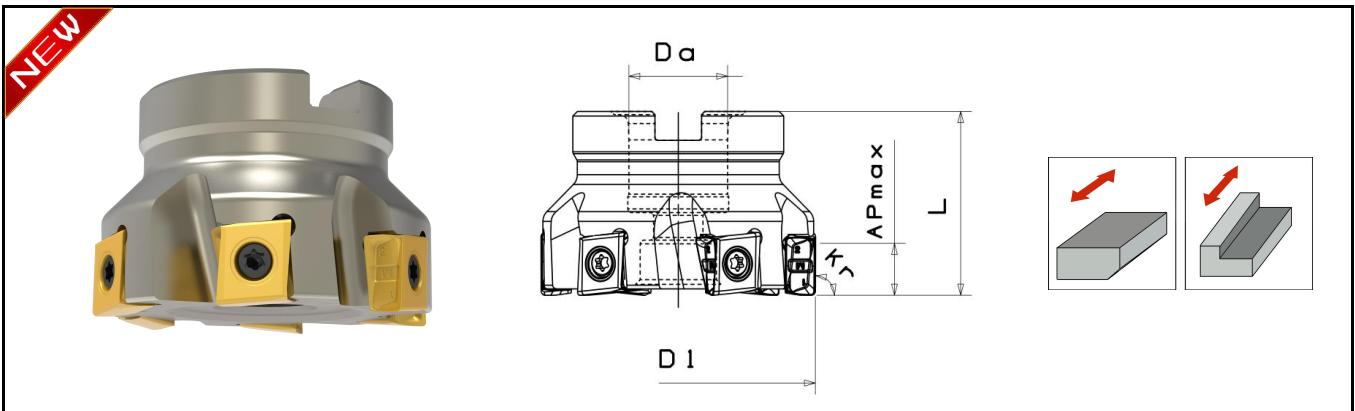
### ACCESSORY

MODEL	SCREW	WRENCH
CFM90SD-14	CSG3585-P	CTS10W-P

# LN SERIES: CFM490LN



FACE MILL CUTTER, Kr=90°



MODEL	kr		DIMENSION				CONNECTOR		SUITABLE INSERT
			D1	Da	L	APmax			
CFM490LN-550A22R-09	90°	5	50	22	40	8.5	A	0.3	LNHU 0904
CFM490LN-750A22R-09			50	22	40		A	0.4	
CFM490LN-663A22R-09			63	22	40		A	0.5	
CFM490LN-1063A22R-09			63	22	40		A	0.5	
CFM490LN-450A22R-12		4	50	22	40	11.5	A	0.3	LNHU 1206
CFM490LN-650A22R-12			50	22	40		A	0.3	
CFM490LN-663A22R-12			63	22	40		A	0.5	
CFM490LN-863A22R-12			63	22	40		A	0.5	
CFM490LN-780A27R-12		7	80	27	50		A	1.0	
CFM490LN-1080A27R-12			80	27	50		A	1.2	
CFM490LN-8100B32R-12			100	32	50		B	2.0	
CFM490LN-12100B32R-12			100	32	50		B	2.1	
CFM490LN-10125B40R-12		10	125	40	63		B	3.1	
CFM490LN-14125B40R-12			125	40	63		B	3.4	
CFM490LN-11160C40R-16			160	40	63	15.0	C	4.1	LNHU 1608
CFM490LN-14160C40R-16			160	40	63		C	4.3	
CFM490LN-12200C60R-16		12	200	60	63		C	5.7	
CFM490LN-16200C60R-16			200	60	63		C	5.8	

◎STANDARD CUTTER WITHOUT INTERNAL COOLANT, INSERTS TO BE ORDERED SEPERATELY.

## ACCESSORY

MODEL	SCREW	WRENCH
CFM490LN-09	CSC3010	CTS08W
CFM490LN-12	CSG4013-P	CTS15W-P
CFM490LN-16	CSG5016	CTS20W

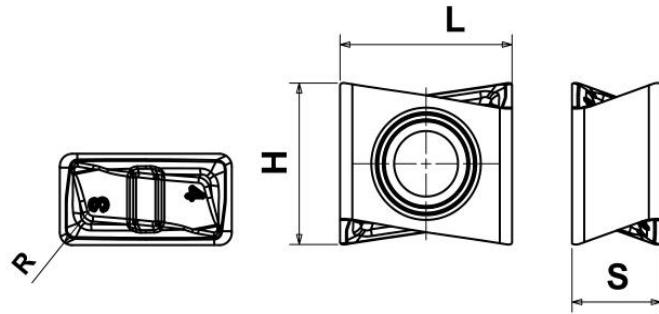
## LN SERIES: CFM490LN



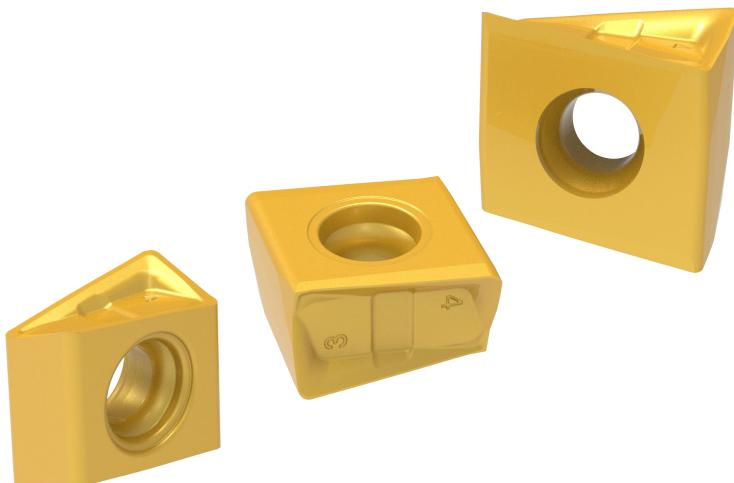
FACE MILL CUTTER, Kr=90°

### LNHU INSERT



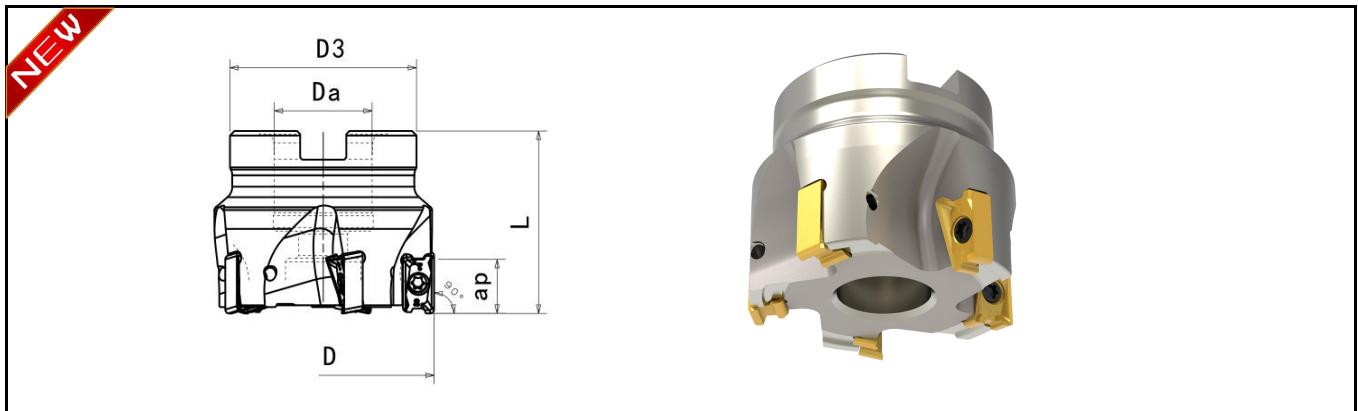


MODEL	EDGE LONG	KR (°)	DIMENSION					GRADE			
			L	H	S	R	APmax	CT5320	CT7320	CT8320	CT101
LNHU 090404-M	09	90	9.02	8.55	4.48	0.4	8.5	●	●	●	
LNHU 120608-M	12		12.7	13.0	6.75	0.8	11.5	●	●	●	
LNHU 120612-M	12		12.7	13.0	6.75	1.2	11.5	●	●	●	
LNHU 120608-AL	12		12.7	13.0	6.75	0.8	11.5				●
LNHU 160808-M	16		16.4	16.2	8.0	0.8	15.0	●	●	●	



## AN SERIES: CFM90AN

FACE MILL CUTTER, Kr=90°



MODEL	KR		DIMENSION					Kg	SUITABLE INSERT
			D	Da	D3	L	ap		
CFM90AN-440A16R-12	90°	4	40	16	37	40	11.5	0.23	ANKU 1204
CFM90AN-640A16R-12		6	40	16	37	40	11.5	0.22	
CFM90AN-740A16R-12		7	40	16	37	40	11.5	0.23	
CFM90AN-550A22R-12		5	50	22	42	40	11.5	0.31	
CFM90AN-750A22R-12		7	50	22	42	40	11.5	0.32	
CFM90AN-950A22R-12		9	50	22	42	40	11.5	0.32	
CFM90AN-663A22R-12		6	63	22	50	40	11.5	0.56	
CFM90AN-963A22R-12		9	63	22	50	40	11.5	0.56	
CFM90AN-880A27R-12		8	80	27	60	50	11.5	1.12	
CFM90AN-1080A27R-12		10	80	27	60	50	11.5	1.11	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT.

◎ INSERTS TO BE ORDERED SEPERATELY.

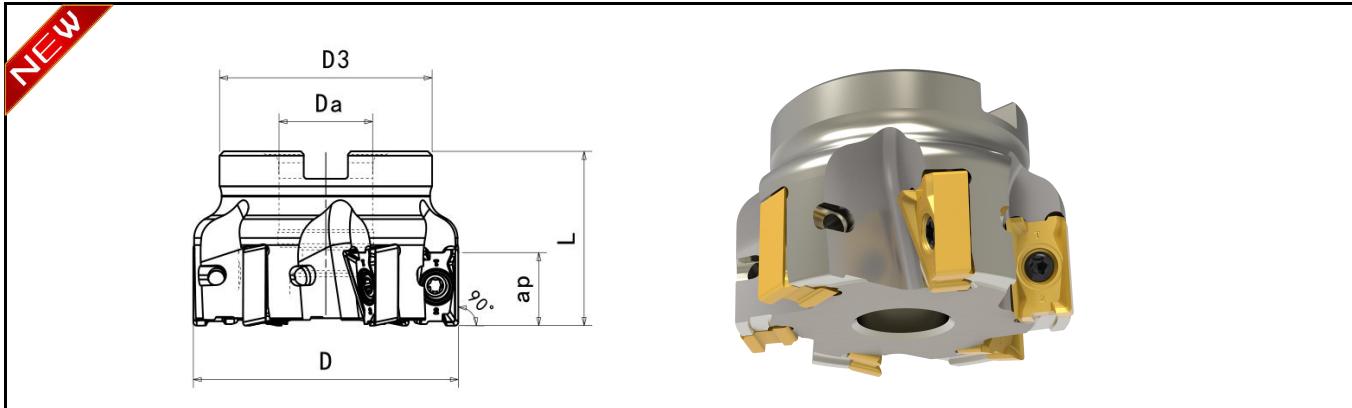
### ACCESSORY

MODEL	SCREW	WRENCH
CFM90AN-**-12	CSC3080	CTS10W

## AN SERIES: CFM90AN



FACE MILL CUTTER, Kr=90°



MODEL	KR	◎	DIMENSION					Kg	SUITABLE INSERT
			D	Da	D3	L	ap		
CFM90AN-440A16R-17	90°	4	40	16	38	40	16.5	0.20	ANKU 17T6 ANHU 17T6
CFM90AN-540A16R-17		5	40	16	38	40	16.5	0.19	
CFM90AN-450A22R-17		4	50	22	45	40	16.5	0.28	
CFM90AN-550A22R-17		5	50	22	45	40	16.5	0.28	
CFM90AN-650A22R-17		6	50	22	45	40	16.5	0.27	
CFM90AN-563A22R-17		5	63	22	47	40	16.5	0.50	
CFM90AN-663A22R-17		6	63	22	47	40	16.5	0.49	
CFM90AN-763A22R-17		7	63	22	47	40	16.5	0.50	
CFM90AN-580A27R-17		5	80	27	58	50	16.5	1.03	
CFM90AN-780A27R-17		7	80	27	58	50	16.5	1.02	
CFM90AN-980A27R-17		9	80	27	58	50	16.5	1.04	
CFM90AN-6100B32R-17		6	100	32	85	50	16.5	1.58	
CFM90AN-8100B32R-17		8	100	32	85	50	16.5	1.57	
CFM90AN-11100B32R-17		11	100	32	85	50	16.5	1.64	
CFM90AN-7125B40R-17		7	125	40	85	63	16.5	2.93	
CFM90AN-9125B40R-17		9	125	40	85	63	16.5	2.98	
CFM90AN-12125B40R-17		12	125	40	85	63	16.5	3.00	
CFM90AN-8160C40R-17		8	160	40	110	63	16.5	4.67	
CFM90AN-12160C40R-17		12	160	40	110	63	16.5	4.78	
CFM90AN-16160C40R-17		16	160	40	110	63	16.5	4.75	

◎STANDARD CUTTER WITHOUT INTERNAL COOLANT; INSERTS TO BE ORDERED SEPERATELY.

### ACCESSORY

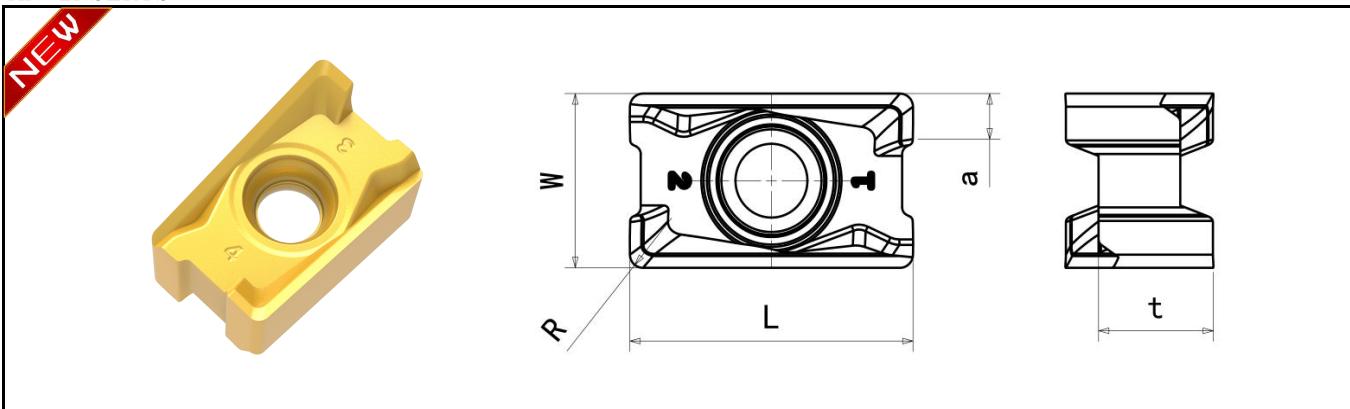
MODEL	SCREW	WRENCH
CFM90AN-**-17	CSC4013	CTS15W

**AN**

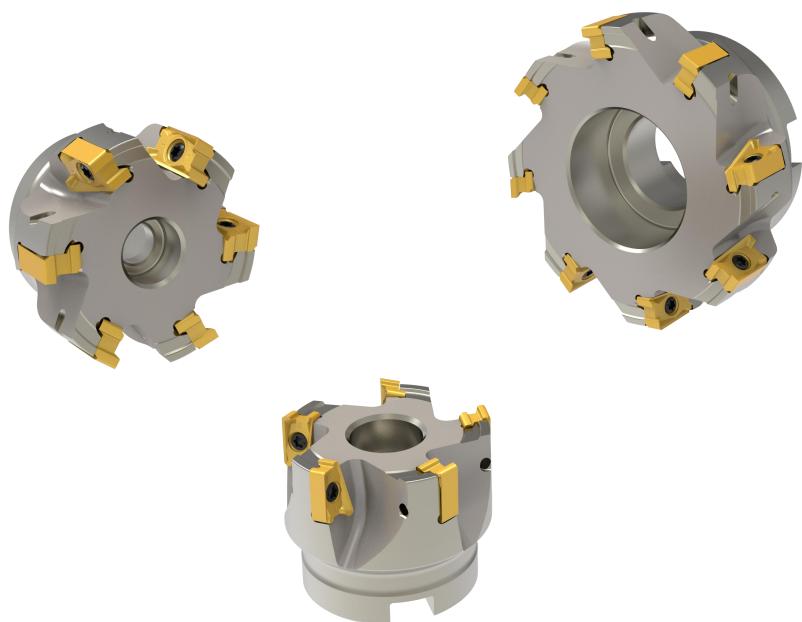


INSERTS

AN INSERTS



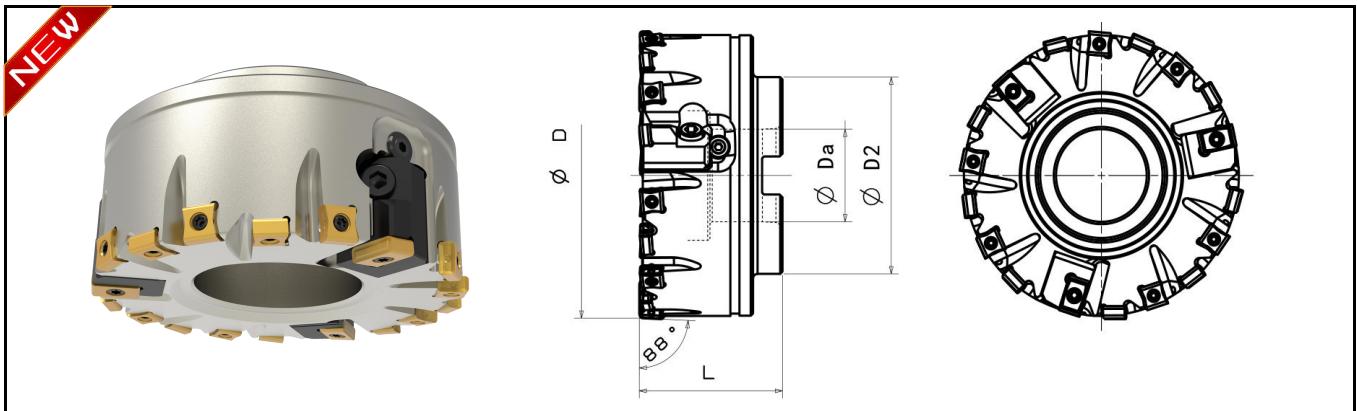
MODEL	EDGE LONG	kr	DIMENSION					GRADE				
			L	W	t	a	R	CT5320	CT5420	CT7320	CT8320	CT9320
ANKU 120404PFR-M	12	90°	12.55	7.0	4.84	1.7	0.4	●	●	●	●	●
ANHU 120404PFR-M							0.4					
ANKU 120408PFR-M							0.8					
ANKU 120408PER-MM							0.8					
ANKU 120412PFR-M							1.2					
ANKU 17T608PFR-M	17	90°	17.3	10.4	7.03	2.7	0.8	●	●	●	●	●
ANKU 17T608PER-MM							0.8					
ANHU 17T608PER-MM							0.8					
ANHU 17T608PER-M							0.8					
ANHU 17T608PER-SM							0.8					
ANKU 17T616PFR-M							1.6					



# CFM88LN

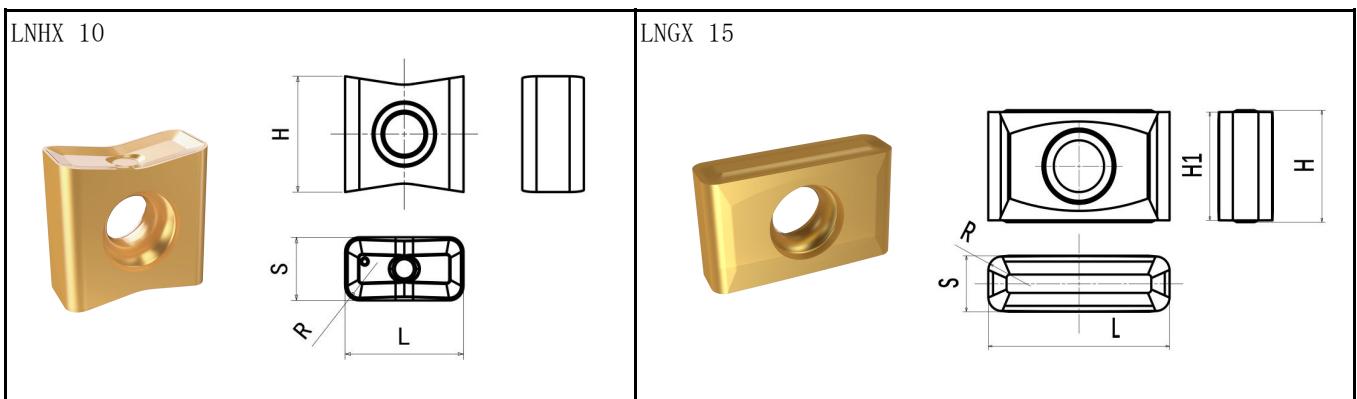


FINE FINISHING FACE MILL CUTTER



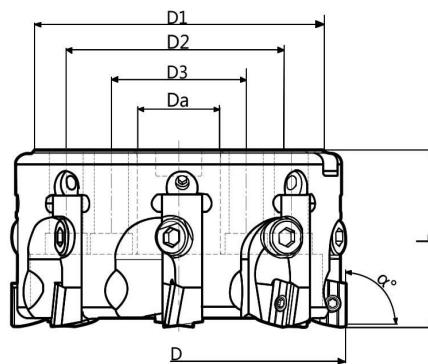
MODEL		DIMENSION				CONNECTOR		Kg	SUITABLE INSERT
		D	Da	D2	L				
CFM88LN-1080A27R-10J	2+8	80	27	58	50	A	2.0		
CFM88LN-12100A32R-10J	2+10	100	32	70	50	A	2.5		
CFM88LN-18125B40R-10J	3+15	125	40	85	63	B	4.0		
CFM88LN-21160C40R-10J	3+18	160	40	110	63	C	6.0		
CFM88LN-27200C60R-10J	3+24	200	60	130	70	C	9.0		
CFM88LN-32250C60R-10J	4+28	250	60	160	70	C	16.3		

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT; INSERTS TO BE ORDERED SEPERATELY; WITH CLAMP.



MODEL	EDGE LONG	DIMENSION					GRADE		ACCESSORY	
		L	H	H1	S	R	CT5320	CT7420	SCREW	WRENCH
LNKX 100512-ML	10	10.0	9.53	—	5.2	1.2	•		CSC3080	CTS10W
LNGX 1504R1.2-MLW-B	15	15.87	9.37	9.52	4.76	1.2	•	•	CSC4090	CTS15W

## MILLING CUTTER CLAMP SYSTEM

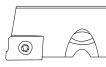
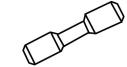


MODEL		DIMENSION						CONNECTOR	 Kg	CLAMP MODEL
		D	Da	D3	D2	D1	L			
CZH-6125B40R	6	125	40	—	—	108	68	B	3.83	CZH-CA
CZH-8125B40R	8	125	40	—	—	108	68	B	3.54	
CZH-8160C40R	8	160	40	66.7	—	137	63	C	5.78	
CZH-12160C40R	12	160	40	66.7	—	137	63	C	5.20	
CZH-10200C60R	10	200	60	101.6	—	178	63	C	8.80	
CZH-14200C60R	14	200	60	101.6	—	178	80	C	12.57	
CZH-12250C60R	12	250	60	101.6	—	228	63	C	14.78	
CZH-18250C60R	18	250	60	101.6	—	228	63	C	13.93	
CZH-16315D60R	16	315	60	101.6	177.8	293	80	D	30.74	
CZH-22315D60R	22	315	60	101.6	177.8	293	80	D	25.42	
CZH-26400D60R	26	400	60	101.6	177.8	300	80	D	—	
CZH-40500D60R	40	500	60	101.6	177.8	300	80	D	—	

◎STANDARD CUTTER WITHOUT ]

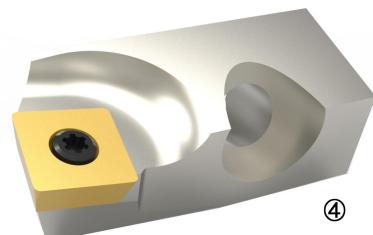
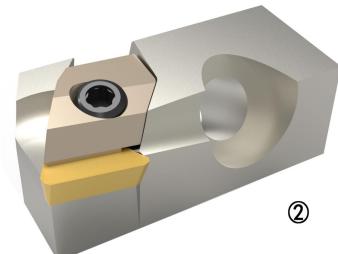
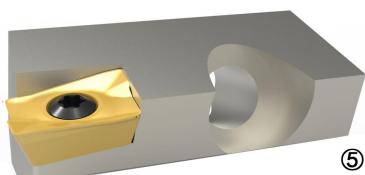
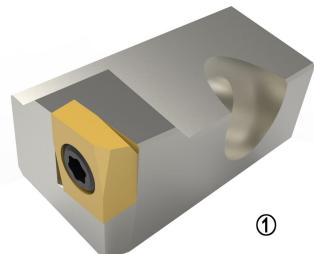
◎CLAMP TO BE ORDERED SEPERATELY,

## ACCESSORY

MODEL	CLAMP	WEDGE	WEDGE SCREW	MOUNT SCREW	WRENCH	WRENCH
						
CZH	CZH-CA	CYC12Y	CLD0602010	CLA08025125	CBL30	CTS15W

## CZH-CA

MILL CUTTER CLAMP, COMPATIBLE WITH CZH SERIES



NO.	MODEL	INSERT
1	CZH-MDHX10CA	MDHX...10
2	CZH-TP1603CA	TP...1603
3	CZH-RP1605CA	RP...1605
4	CZH-SD1204CA	SD...1204
5	CZH-AD1505CA	AD...1505
6	CZH-LN1206CA	LN...1206

© INSERTS TO BE ORDERED SEPERATELY

### CZH CLAMP

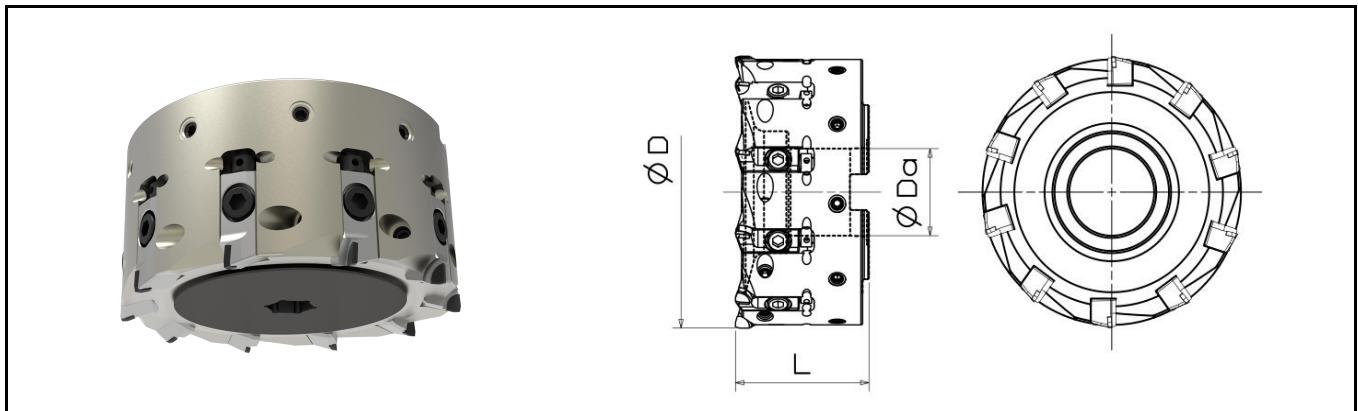
- Roughing and finishing with one tool
- Quick tool holder fixing function
- Easy to adjust tool runout value
- Easy to change cartridges with different insert types and entering angles



# ALUMINUM MILL CUTTER: CFM90PCD-L



ALUMINUM MILL CUTTER



MODEL		DIMENSION				Kg	COMPATIBLE CLAMP
		D	Da	L	Tmax		
CFM90PCD-463B22R-L	4	63	22	48	4	0.80	DJ-PCD-AL
CFM90PCD-680B27R-L	6	80	27	50	4	0.75	
CFM90PCD-8100B32R-L	8	100	32	50	4	1.20	
CFM90PCD-10125B40R-L	10	125	40	63	4	2.20	
CFM90PCD-12160C40R-L	12	160	40	63	4	2.15	
CFM90PCD-14180C40R-L	14	180	40	63	4	2.60	
CFM90PCD-16200C60R-L	16	200	60	63	4	4.40	
CFM90PCD-18250C60R-L	18	250	60	63	4	7.00	
CFM90PCD-20315C60R-L	20	315	60	80	4	14.10	
CFM90PCD-22400C60R-L	22	400	60	80	4	22.10	

◎STANDARD CUTTER WITH INNER COOLANT

◎CLAMP TO BE ORDERED SEPERATLY, STANDARD CUTTER NOT INCLUDING CLAMP.



## ACCESSORY

MODEL	CLAMP	CLAMP SCREW	WRENCH	CLAMP Dynamic balance adjustment screw
CFM90PCD-L	DJ-PCD-AL	CLA0601210	CBL50/CBL30	CLC0600610

# ALUMINUM MILL CUTTER: CFM90AE



ALUMINUM MILL CUTTER

NEW

MODEL		DIMENSION					Kg	MATERIAL	INSERT
		D	Da	D1	L	APmax			
CFM90AE-640A16R-15	6	40	16	36	40	11	0.36	STEEL	AEGT 1504
CFM90AE-850A22R-15	8	50	22	45	40	11	0.55		
CFM90AE-1063A22R-15	10	63	22	45	40	11	0.75		

◎STANDARD CUTTER WITH INTERNAL COOLANT

◎INSERTS TO BE ORDERED SEPERATELY

NEW

MODEL		DIMENSION					Kg	MATERIAL	INSERT
		D	Da	D1	L	APmax			
CFM90AE-1280A27R-15	12	80	27	50	50	11	0.96	STEEL RIGHT + ALU ALLOY BODY	AEGT 1504
CFM90AE-16100B32R-15	16	100	32	70	50	11	1.45		
CFM90AE-20125B40R-15	20	125	40	90	63	11	2.40		
CFM90AE-24160C40R-15	24	160	40	115	63	11	3.00		
CFM90AE-30200C40R-15	30	200	60	150	63	11	4.25		
CFM90AE-36250C60R-15	36	250	60	200	63	11	6.50		

◎STANDARD CUTTER WITH INTERNAL COOLANT

◎INSERTS TO BE ORDERED SEPERATELY

# ALUMINUM MILL CUTTER: CFM90AE



ALUMINUM MILL CUTTER

NEW

MODEL	EDGE LENGTH	WIPER	KR	DIMENSION						EDGE MATERIAL
				L	d1	t	R	L1	BS	
AEGT 1504XPCD	15	YES	90	14.0	9.2	5.0	0.4	6.8	1.54	PCD

CUTTER DIA	COVER BOLT	RING SCREW	WRENCH					
40-63	CLP10	—	—					
80	CLP12	CLJ0510	CBL25					
100	CLP16	CLJ0610	CBL30					
125	CLP20	CLJ0810	CBL40					
160	CLP24	CLJ0810	CBL40					
200	CLP28	CLJ0810	CBL40					
250	CLP32	CLJ0810	CBL40					

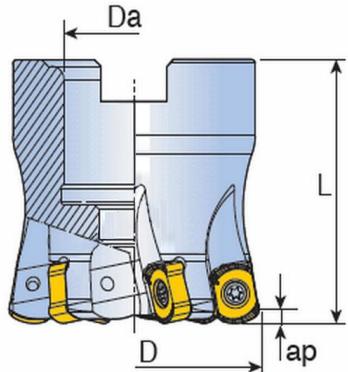
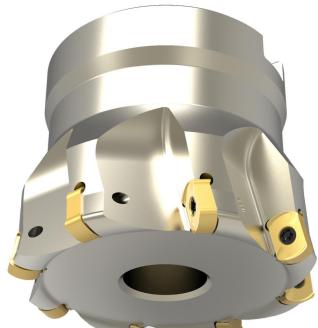
## ACCESSORY

MODEL	DIA	INSERT SCR.	Mir-adj. sc.	WRENCH	balance s.	WRENCH	steel wire
CFM90AE	40-63	CSG4013-P	CSX3011-P	CTS15W-P	CLC0600610	CBL30	—
	80-250						CLGC060

# FAST FEED SERIES: TFMBL



## FAST FEED MILL CUTTER



MODEL		DIMENSION				CONNECTOR		INSERT
		D	da	L	ap			
TFMBL 432-16R-06	4	32	16	40	1.0	A	0.1	BLMP 0603
TFMBL 532-16R-06	5	32	16	40	1.0	A	0.1	
TFMBL 640-16R-06	6	40	16	40	1.0	A	0.2	
TFMBL 640-22R-06	6	40	22	40	1.0	A	0.2	
TFMBL 650-22R-06	6	50	22	50	1.0	A	0.4	
TFMBL 750-22R-06	7	50	22	50	1.0	A	0.4	
TFMBL 850-22R-06	8	50	22	50	1.0	A	0.4	
TFMBL 752-22R-06	7	52	22	40	1.0	A	0.4	
TFMBL 852-22R-06	8	52	22	40	1.0	A	0.4	
TFMBL 763-22R-06	7	63	22	50	1.0	A	0.6	
TFMBL 863-22R-06	8	63	22	50	1.0	A	0.6	
TFMBL 963-22R-06	9	63	22	50	1.0	A	0.6	
TFMBL 966-27R-06	9	66	27	50	1.0	A	0.7	
TFMBL 440-16R-09	4	40	16	40	1.5	A	0.2	BLMP 0904
TFMBL 540-16R-09	5	40	16	40	1.5	A	0.2	
TFMBL 550-22R-09	5	50	22	50	1.5	A	0.4	
TFMBL 650-22R-09	6	50	22	50	1.5	A	0.4	
TFMBL 750-22R-09	7	50	22	50	1.5	A	0.4	
TFMBL 652-22R-09	6	52	22	40	1.5	A	0.4	
TFMBL 752-22R-09	7	52	22	40	1.5	A	0.4	
TFMBL 663-22R-09	6	63	22	50	1.5	A	0.4	
TFMBL 763-22R-09	7	63	22	50	1.5	A	0.4	

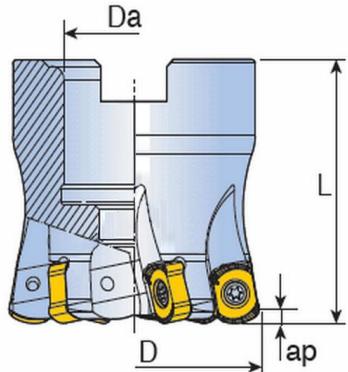
◎STANDARD CUTTER WITHOUT ]

◎INSERTS TO BE ORDERED SEPARATELY

## FAST FEED SERIES: TFMBL



### FAST FEED MILL CUTTER



MODEL		DIMENSION				CONNECTOR		INSERT
		D	da	L	ap			
TFMBL 863-22R-09	8	63	22	50	1.5	A	0.6	BLMP 0904
TFMBL 766-27R-09	7	66	27	50	1.5	A	0.7	
TFMBL 866-27R-09	8	66	27	50	1.5	A	0.8	
TFMBL 780-27R-09	7	80	27	50	1.5	A	1.2	
TFMBL 880-27R-09	8	80	27	50	1.5	A	1.2	
TFMBL 980-27R-09	9	80	27	50	1.5	A	1.2	
TFMBL 1080-27R-09	10	80	27	50	1.5	A	1.2	
TFMBL 8100-32R-09	8	100	32	60	1.5	A	2.3	
TFMBL 9100-32R-09	9	100	32	60	1.5	A	2.3	
TFMBL 10100-32R-09	10	100	32	60	1.5	A	2.3	
TFMBL 11100-32R-09	11	100	32	60	1.5	A	2.3	
TFMBL 12100-32R-09	12	100	32	60	1.5	A	2.3	
TFMBL 12125-40R-09	12	125	40	60	1.5	A	2.7	
TFMBL 14125-40R-09	14	125	40	60	1.5	A	2.7	

◎ STANDARD CUTTER WITHOUT ]

◎ INSERTS TO BE ORDERED SEPARATELY

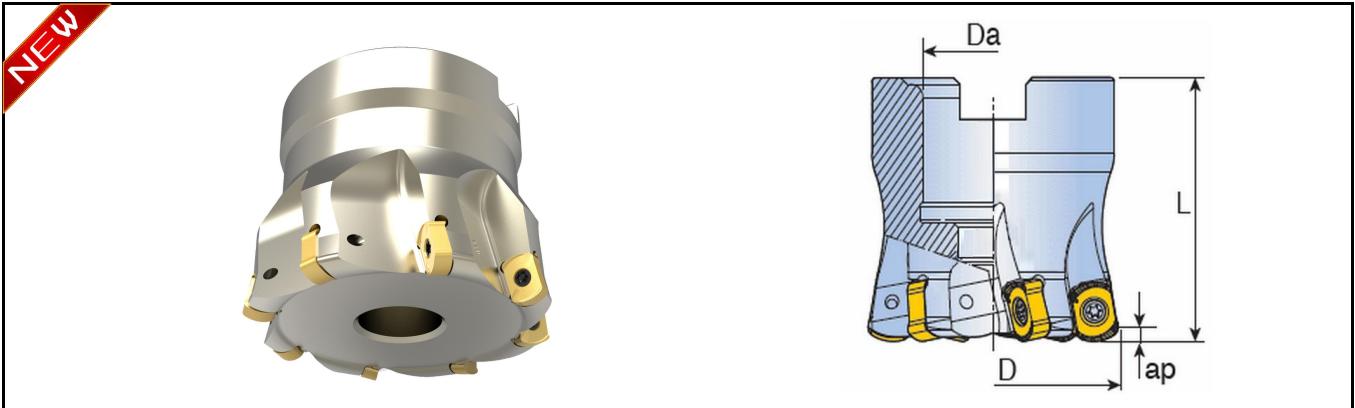
### ACCESSORY

MODEL	SCREW	WRENCH
TEBL-06	CSC2560	CTS08W
TEBL-09	CSC3581	CTS15W

## FAST FEED SERIES: TFMBL



### FAST FEED MILL CUTTER



MODEL		DIMENSION				CONNECTOR	Kg	INSERT
		D	da	L	ap			
TFMBL 440-16R-11	4	40	16	40	2.0	A	0.2	BLMP 1105
TFMBL 450-22R-11	4	50	22	40	2.0	A	0.3	
TFMBL 550-22R-11	5	50	22	40	2.0	A	0.3	
TFMBL 552-22R-11	5	52	22	40	2.0	A	0.3	
TFMBL 563-22R-11	5	63	22	50	2.0	A	0.7	
TFMBL 663-22R-11	6	63	22	50	2.0	A	0.7	
TFMBL 666-22R-11	6	66	22	50	2.0	A	0.83	
TFMBL 680-27R-11	6	80	27	60	2.0	A	1.4	
TFMBL 780-27R-11	7	80	27	60	2.0	A	1.4	
TFMBL 6100-32R-11	6	100	32	60	2.0	B	2.2	
TFMBL 7100-32R-11	7	100	32	60	2.0	B	2.2	

◎ STANDARD CUTTER WITHOUT ]

◎ INSERTS TO BE ORDERED SEPARATELY

### ACCESSORY

MODEL	SCREW	WRENCH
TEBL-11	CSD5012	CTS20W

# FAST FEED SERIES: TFMBL

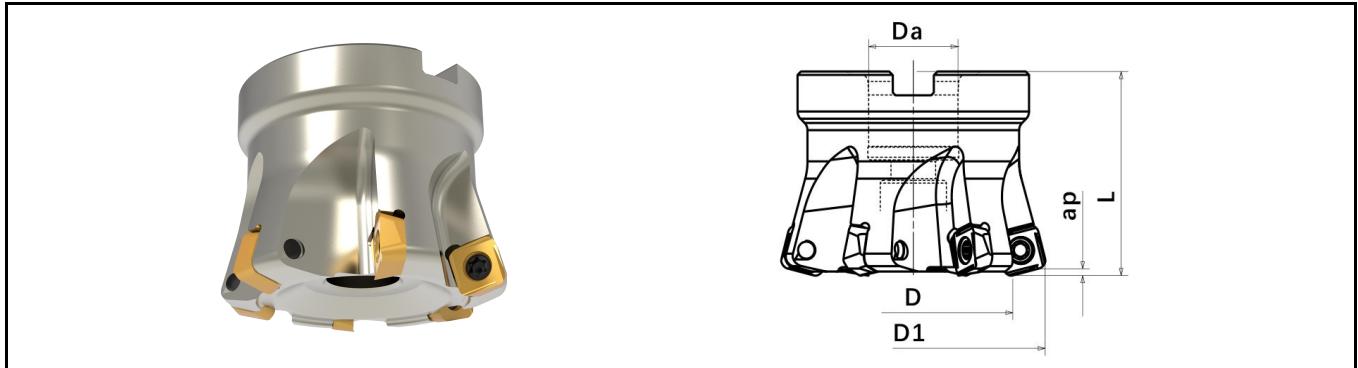
## FAST FEED MILL CUTTER



INSERT	SHAPE						INTRODUCTION			
MODEL	EDGE LONG	DIMENSION						GRADE		
		1	d1	t	ap	FEED mm/TEETH	CUT DEP.	CT5320	CT5420	CT9080
BLMP 0603R-M	06	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●	●	●
BLMP 0603R-MM	06	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●	●	●
BLMP 0904R-M	09	11.9	9.18	4.80	1.5	0.3-3.5	0.1-1.5	●	●	●
BLMP 0904R-MM	09	11.9	9.18	4.80	1.5	0.3-3.5	0.1-1.5	●	●	●
BLMP 1105R-ML	11	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	●	●	●
BLMP 1105R-M	11	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	●	●	●

## FAST FEED SERIES: CFMSX-13

FAST FEED FACE MILL CUTTER



MODEL		DIMENSION					CONNECTOR	Kg	INSERT
		D1	D	L	ap	Da			
CFMSX-350A22R-13	3	50	29.3	40	2	22	A	0.3	SXMT 1306
CFMSX-450A22R-13	4	50	29.3	40	2	22	A	0.4	
CFMSX-452A22R-13	4	52	31.3	40	2	22	A	0.3	
CFMSX-552A22R-13	5	52	31.3	40	2	22	A	0.2	
CFMSX-463A22R-13	4	63	42.4	50	2	22	A	0.6	
CFMSX-563A22R-13	5	63	42.4	50	2	22	A	0.5	
CFMSX-463A27R-13	4	63	42.4	50	2	27	A	0.5	
CFMSX-566A27R-13	5	66	45.3	50	2	27	A	0.6	
CFMSX-580A27R-13	5	80	59.4	60	2	27	A	1.3	
CFMSX-680A27R-13	6	80	59.4	60	2	27	A	1.3	
CFMSX-580B32R-13	5	80	59.4	60	2	32	A	1.3	
CFMSX-6100B32R-13	6	100	79.4	60	2	32	B	1.9	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

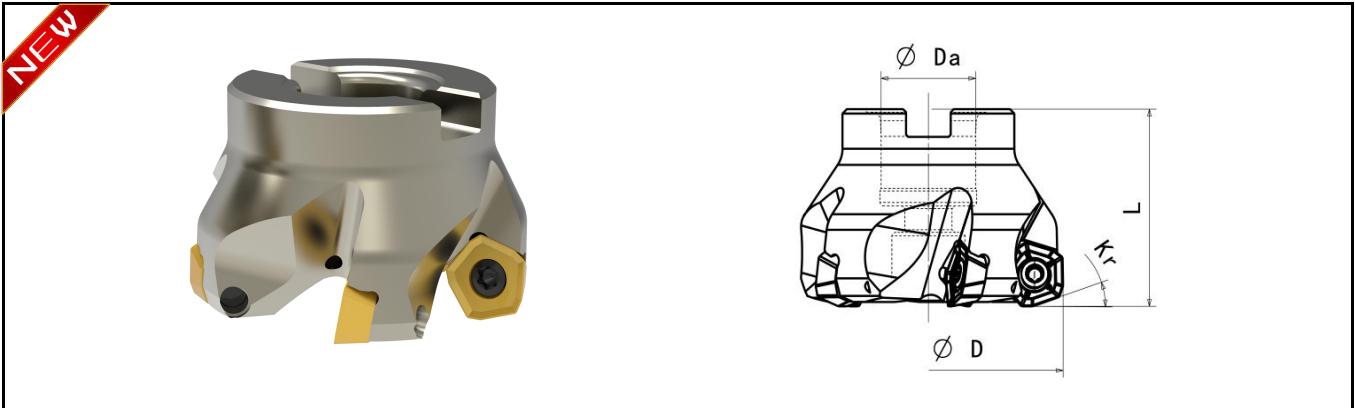
◎ INSERTS TO BE ORDERED SEPARATELY

MODEL	MODEL	DIMENSION				GRADE															
		d	t	ap	r	CT5320	CT5420	CT7320	CT7420												
SXMT 130625-M	13	13.05	6.65	2.0	2.5	●	●	●	●												
		<b>ACCESSORY</b> <table border="1"> <thead> <tr> <th>MODEL</th> <th>SCREW</th> <th>WRENCH</th> </tr> </thead> <tbody> <tr> <td>CFMSX-13</td> <td></td> <td></td> </tr> <tr> <td>CSG5012-P</td> <td></td> <td></td> </tr> <tr> <td>CTS20W-P</td> <td></td> <td></td> </tr> </tbody> </table>		MODEL	SCREW	WRENCH	CFMSX-13			CSG5012-P			CTS20W-P								
MODEL	SCREW	WRENCH																			
CFMSX-13																					
CSG5012-P																					
CTS20W-P																					

## PD SERIES: CFM19PD



FAST FEED MILL CUTTER, Kr=19°



MODEL		DIMENSION				CONNECTOR	Kg	INSERT
		D	Da	L	kr°			
CFM19PD-342A16R-09		3	42	16	40	19	0.18	PDKT 0905
CFM19PD-450A22R-09		4	50	22	40		0.23	
CFM19PD-452A22R-09		4	52	22	40		0.24	
CFM19PD-563A22R-09		5	63	22	40		0.31	
CFM19PD-666A22R-09		6	66	22	40		0.32	
CFM19PD-580A27R-09		5	80	27	50		0.83	
CFM19PD-6100B32R-09		6	100	32	50	B	1.40	
CFM19PD-8100B32R-09		8	100	32	50		1.38	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

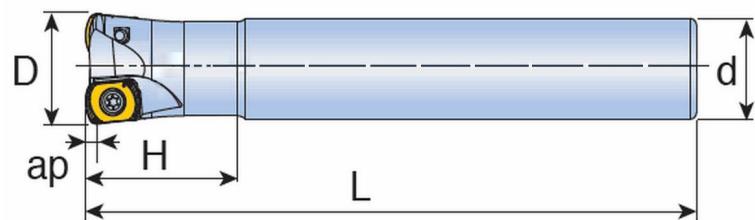
◎ INSERTS TO BE ORDERED SEPARATELY

MODEL	DIMENSION							GRADE			SCREW/WRENCH
	D	H	S	Kr1°	Kr2°	A1°	A2°	CT5420	CT7320	CT8320	
PDKT 090508R-MW	13.5	14.46	5.45	19	72	15	20	●			CSD5012 CTS20W
PDKT 090508L-MW	13.5	14.46	5.45	19	72	15	20	●			
PDKT 090530R-M	13.5	14.46	5.45	—	72	15	20	●			

## FAST FEED SERIES: TEBL



Fast feed end mill shank



MODEL		DIMENSION						INSERT
		D	d	L	H	ap		
TEBL 216-15-06-L150	2	16	15	150	40	0.7		
TEBL 216-16-06	2	16	16	150	40	0.7		
TEBL 216-16-06-S	2	16	16	100	30	0.7		
TEBL 217-16-06-S	2	17	16	100	30	0.7		
TEBL 217-16-06	2	17	16	150	40	0.7		
TEBL 217-16-06-L200	2	17	16	200	20	0.7		
TEBL 218-16-06	2	18	16	150	25	0.7		
TEBL 220-20-06-L200	2	20	20	200	80	1.0		
TEBL 320-19-06-L180	3	20	19	180	80	1.0		
TEBL 320-20-06-S	3	20	20	130	50	1.0		
TEBL 320-20-06	3	20	20	160	80	1.0		
TEBL 321-20-06-S	3	21	20	150	20	1.0		
TEBL 321-20-06-L200	3	21	20	200	20	1.0		
TEBL 325-25-06-L220	3	25	25	220	50	1.0		
TEBL 425-24-06-L180	4	25	24	180	60	1.0		
TEBL 425-25-06-S	4	25	25	140	60	1.0		
TEBL 425-25-06	4	25	25	180	60	1.0		
TEBL 425-25-06-L250	4	25	25	250	40	1.0		
TEBL 326-25-06-L200	3	26	25	200	30	1.0		
TEBL 326-25-06-L250	3	26	25	250	30	1.0		
TEBL 426-25-06-S	4	26	25	150	30	1.0		
TEBL 426-25-06-L200	4	26	25	200	30	1.0		
TEBL 426-25-06-L250	4	26	25	250	30	1.0		
TEBL 530-32-06-S	5	30	32	150	70	1.0		

BLMP 0603

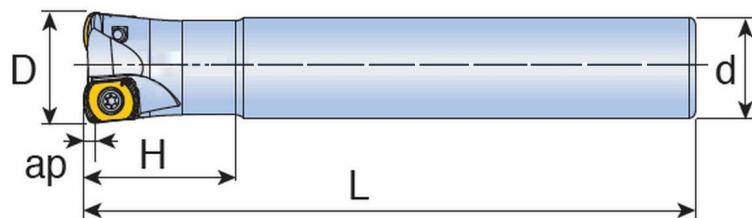
◎ STANDARD SHANK WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

## FAST FEED SERIES: TEBL



Fast feed end mill shank



MODEL		DIMENSION						INSERT
		D	d	L	H	ap		
TEBL 430-32-06-S	4	30	32	150	70	1.0		BLMP 0603
TEBL 430-32-06-L200	4	30	32	200	120	1.0		
TEBL 530-32-06-L200	5	30	32	200	120	1.0		
TEBL 432-32-06-S	4	32	32	150	70	1.0		
TEBL 532-32-06-S	5	32	32	150	70	1.0		
TEBL 532-32-06-L200	5	32	32	200	120	1.0		
TEBL 433-32-06-L220	4	33	32	220	40	1.0		
TEBL 433-32-06-L300	4	33	32	300	50	1.0		
TEBL 533-32-06-S	5	33	32	150	30	1.0		
TEBL 533-32-06-L200	5	33	32	200	40	1.0		
TEBL 533-32-06-L250	5	33	32	250	40	1.0		
TEBL 435-32-06-L200	4	35	32	200	50	1.0		
TEBL 435-32-06-L300	4	35	32	300	50	1.0		
TEBL 535-32-06-L200	5	35	32	200	50	1.0		
TEBL 535-32-06-L300	5	35	32	300	50	1.0		
TEBL 540-32-06-L220	5	40	32	220	40	1.0		
TEBL 640-32-06-S	6	40	32	150	40	1.0		
TEBL 640-32-06-L220	6	40	32	220	40	1.0		

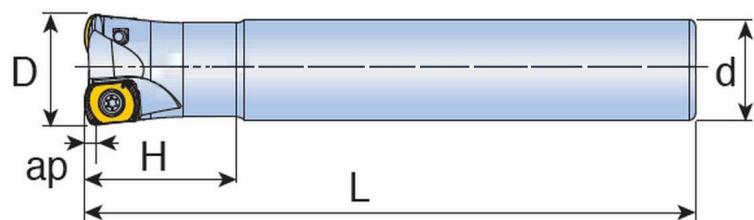
◎STANDARD SHANK WITHOUT INTERNAL COOLANT

◎INSERTS TO BE ORDERED SEPARATELY

## FAST FEED SERIES: TEBL



Fast feed end mill shank



MODEL		DIMENSION						INSERT
		D	d	L	H	ap		
TEBL 225-25-09-L150	2	25	25	150	70	1.5		BLMP 0904
TEBL 225-25-09-L200	2	25	25	200	100	1.5		
TEBL 325-25-09-L150	3	25	25	150	70	1.5		
TEBL 325-25-09-L200	3	25	25	200	110	1.5		
TEBL 326-25-09-L150	3	26	25	150	30	1.5		
TEBL 326-25-09-L220	3	26	25	220	30	1.5		
TEBL 330-32-09-L160	3	30	32	160	70	1.5		
TEBL 330-32-09-L220	3	30	32	220	120	1.5		
TEBL 332-32-09-L160	3	32	32	160	70	1.5		
TEBL 332-32-09-L220	3	32	32	220	120	1.5		
TEBL 432-32-09-L160	4	32	32	160	70	1.5		
TEBL 432-32-09-L220	4	32	32	220	120	1.5		
TEBL 433-32-09-L180	4	33	32	180	30	1.5		
TEBL 433-32-09-L250	4	33	32	250	30	1.5		
TEBL 440-32-09-L180	4	40	32	180	40	1.5		
TEBL 440-32-09-L250	4	40	32	250	40	1.5		
TEBL 540-32-09-L180	5	40	32	180	40	1.5		
TEBL 540-32-09-L250	5	40	32	250	40	1.5		

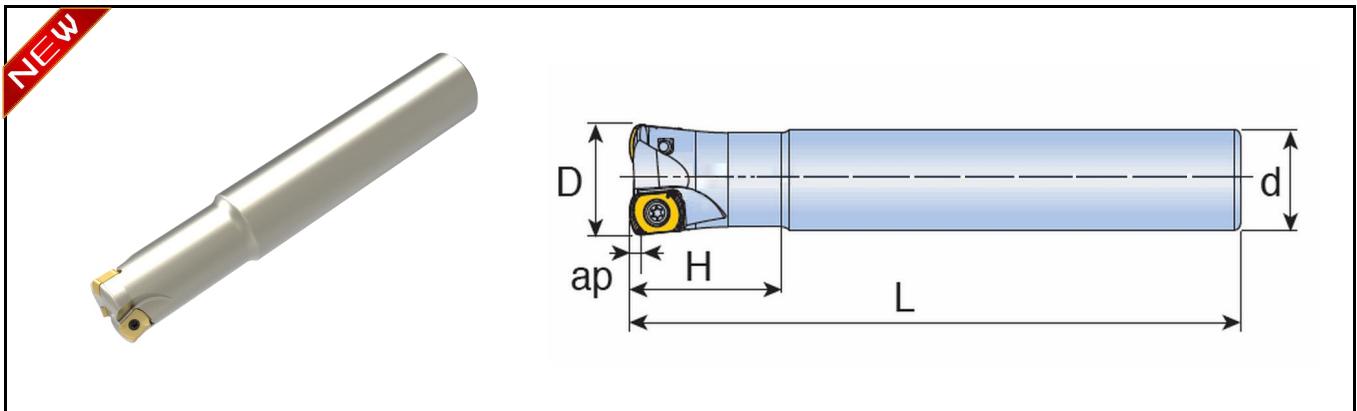
◎STANDARD SHANK WITHOUT INTERNAL COOLANT; INSI

### ACCESSORY

MODEL	SCREW	WRENCH
TEBL-06	CSC2560	CTS08W
TEBL-09	CSC3581	CTS15W

## FAST FEED SERIES: TFMBL

Fast feed milling tool shank



MODEL		DIMENSION						INSERT
		D	d	L	H	ap		
TEBL 230-32-11-L150	2	30	32	150	70	2.0		BLMP 1105
TEBL 232-32-11-L150	2	32	32	150	70	2.0		
TEBL 232-32-11-L200	2	32	32	200	70	2.0		
TEBL 332-32-11-L200	3	32	32	200	70	2.0		
TEBL 233-32-11-L200	2	33	32	200	40	2.0		
TEBL 233-32-11-L250	2	33	32	250	50	2.0		
TEBL 333-32-11-L250	3	33	32	250	50	2.0		
TEBL 335-32-11-L200	3	35	32	200	40	2.0		
TEBL 340-32-11-L150	3	40	32	150	40	2.0		
TEBL 340-32-11-L200	3	40	32	200	40	2.0		

◎ STANDARD SHANK WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

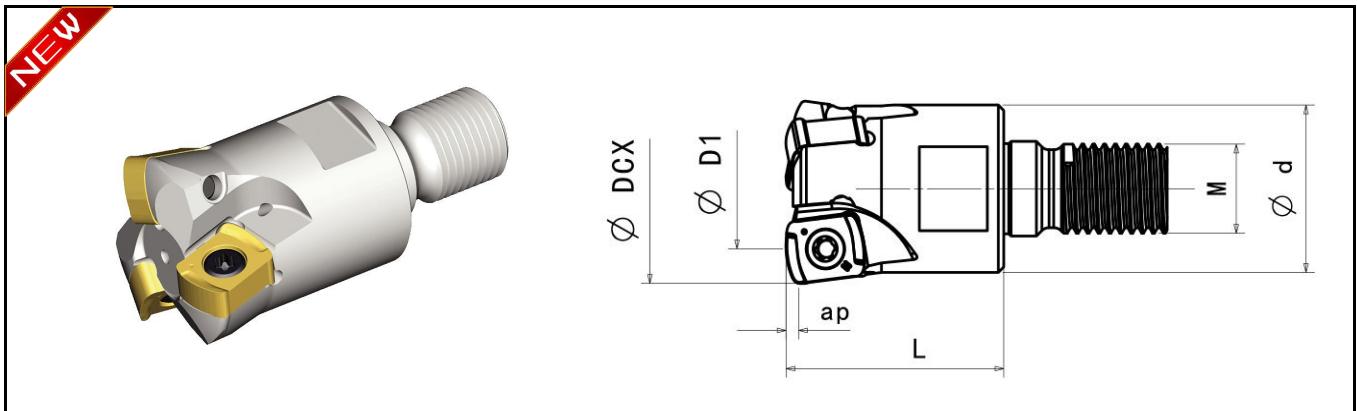
### ACCESSORY

MODEL	SCREW	WRENCH
TEBL-11	CSD5012	CTS20W

## FAST FEED SERIES: TFMBL



Fast feed milling cutter thread head



MODEL		DIMENSION							INSERT
		DCX	D1	L	d	ap	M	P	
TEBL 230-M16-11	2	30	14.7	43	29	2.0	16		BLMP 1105
TEBL 232-M16-11	2	32	16.6	43	29	2.0	16		
TEBL 233-M16-11	2	33	17.6	43	29	2.0	16		
TEBL 335-M16-11	3	35	19.5	43	29	2.0	16		
TEBL 340-M16-11	3	40	24.4	43	29	2.0	16		
TEBL 342-M16-11	3	42	26.4	43	29	2.0	16		

◎ STANDARD SHANK WITHOUT INTERNAL COOLANT

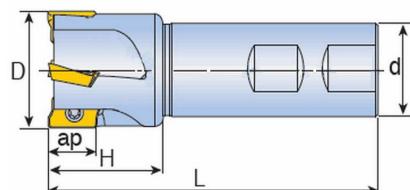
◎ INSERTS TO BE ORDERED SEPARATELY

INSERT	SHAPE					INTRODUCTION		
				FAST FEED INSERT				
MODEL	EDGE LONG	1	d1	t	ap	FEED mm/TEETH	CUT DEP mm	GRADE
BLMP 0603R-M	06	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	● ● ●
BLMP 0603R-MM	06	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	● ● ●
BLMP 0904R-M	09	11.9	9.18	4.80	1.5	0.3-3.5	0.1-1.5	● ● ●
BLMP 0904R-MM	09	11.9	9.18	4.80	1.5	0.3-3.5	0.1-1.5	● ● ●
BLMP 1105R-ML	11	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	● ● ●
BLMP 1105R-M	11	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	● ● ●

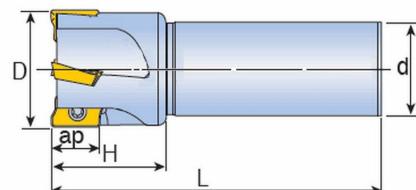
## AP17SERIES: CE90AP



### END MILL CUTTER HOLDER



图一



图二

MODEL		DIMENSION					PIC	SUITABLE INSERT
		D	d	L	H	ap		
CE90AP-225L210Y24R-17	2	25	24	210	40	16.1	二	APKT 1705
CE90AP-225L210Y25R-17	2	25	25	210	40	16.1	二	
CE90AP-226L200Y25R-17	2	26	25	200	40	16.1	二	
CE90AP-226L250Y25R-17	2	26	25	250	40	16.1	二	
CE90AP-232L250Y32R-17	2	32	32	250	65	16.1	二	
CE90AP-233L300Y32R-17	2	33	32	300	40	16.1	二	
CE90AP-332L200Y32R-17	3	32	32	200	65	16.1	二	
CE90AP-333L200Y32R-17	3	33	32	200	55	16.1	二	
CE90AP-333L250Y32R-17	3	33	32	250	55	16.1	二	
CE90AP-240L250Y32R-17	2	40	32	250	54	16.1	二	
CE90AP-340L200Y32R-17	3	40	32	200	54	16.1	二	
CE90AP-440L200Y32R-17	4	40	32	200	57	16.1	二	

◎STANDARD CUTTER WITHOUT ]

◎PIC 2 IS STANDARD.

◎INSERTS TO BE ORDERED SEPARATELY

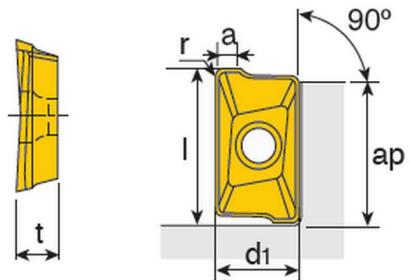
### ACCESSORY

MODEL	SCREW	WRENCH
CE90AP	CSC4090	CTS15W

# APKT



## INSERT

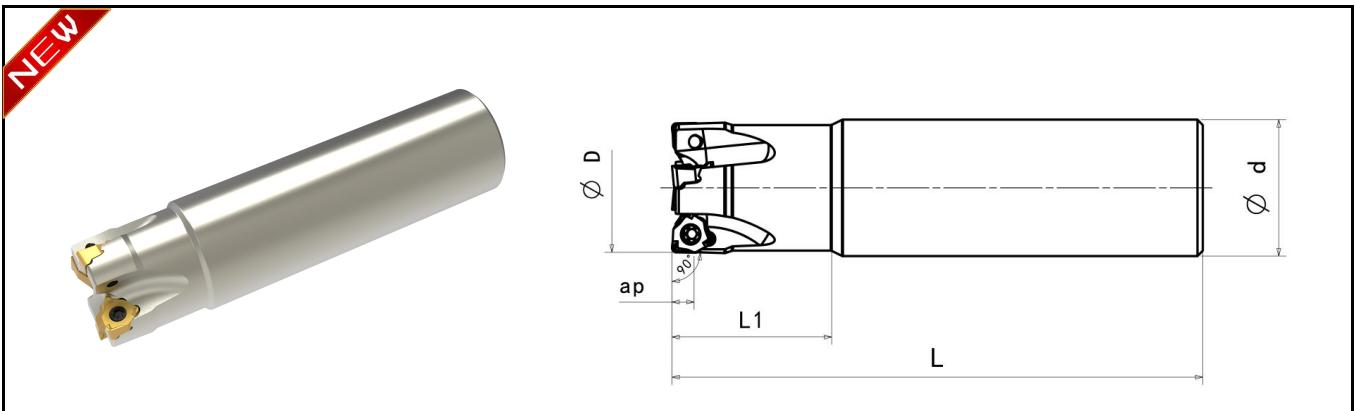


MODEL	EDGE LENGTH	DIMENSION						GRADE			
		d	ap	L	t	a	r	CT5320	CT7420	CT8320	CT9320
APKT 1705PER-EM	17	10.7	16.1	18.5	5.56	3.0	0.8	●	●		

# WN04SERIES: CE90WN



## END MILL CUTTER HOLDER



MODEL		DIMENSION					WEIGHT	SUITABLE INSERT
		D	d	L	H	ap		
CE90WN-220L150Y20R-04	2	20	20	150	29	4.0	0.7	WNHX 0403
CE90WN-320L150Y20R-04	3	20	20	150	29	4.0	0.7	
CE90WN-425L170Y25R-04	4	25	25	170	29	4.0	0.6	
CE90WN-525L170Y25R-04	5	25	25	170	29	4.0	0.6	
CE90WN-532L195Y32R-04	5	32	32	195	31	4.0	1.2	
CE90WN-632L195Y32R-04	6	32	32	195	31	4.0	1.2	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

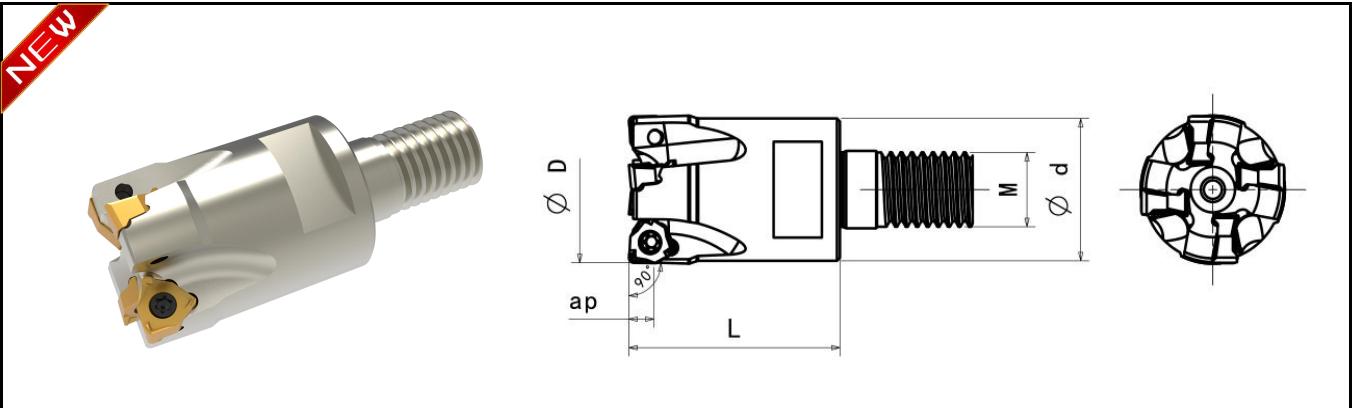
◎ INSERTS TO BE ORDERED SEPARATELY

MODEL	EDGE LENGTH	DIMENSION				GRADE			
		d	r	S	a	CT5320	CT7420	CT8320	CT8420
WNHX 040308-ML	04	7.64	0.8	3.29	1.1	●	●		

# WN04SERIES: CE90WN



## END MILL CUTTER HOLDER



MODEL		DIMENSION					WEIGHT	SUITABLE INSERT
		D	d	L	M	ap		
CE90WN-220M10R-04	2	20	18.3	28	M10	4.0	0.1	WNHX 0403
CE90WN-320M10R-04	3	20	18.3	28	M10	4.0	0.1	
CE90WN-425M12R-04	4	25	23	30	M12	4.0	0.2	
CE90WN-525M12R-04	5	25	23	30	M12	4.0	0.2	
CE90WN-532M16R-04	5	32	30	40	M16	4.0	0.3	
CE90WN-632M16R-04	6	32	30	40	M16	4.0	0.3	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

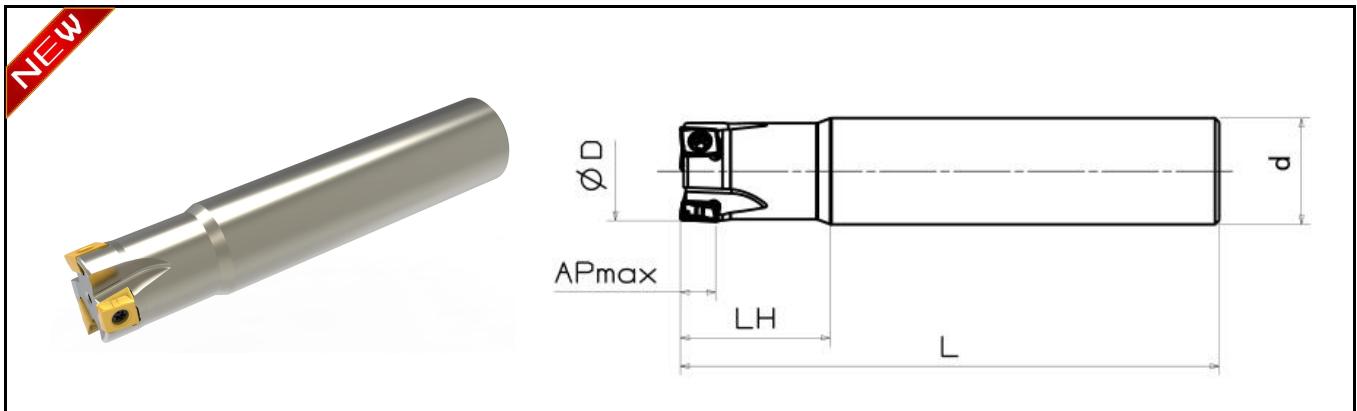
## ACCESSORY

MODEL	SCREW	WRENCH
CE90WN	CSG2565-P	CTS08W-P

## LNSERIES: CE490LN



END MILL CUTTER, Kr=90°



MODEL	kr		DIMENSION					SUITABLE INSERT
			D	LH	d	L	APmax	
CE490LN-220L150Y20R-09	90°	2	20	30	20	150	8.5	LNHU 0904
CE490LN-220L150Y20R-09		3	20	30	20	150		
CE490LN-325L150Y25R-09		3	25	30	25	150		
CE490LN-425L150Y25R-09		4	25	30	25	150		
CE490LN-332L150Y32R-09		3	32	30	32	150		
CE490LN-532L150Y32R-09		5	32	30	32	150		
CE490LN-440L170Y32R-09		4	40	30	32	170		
CE490LN-640L170Y32R-09		6	40	30	32	170		

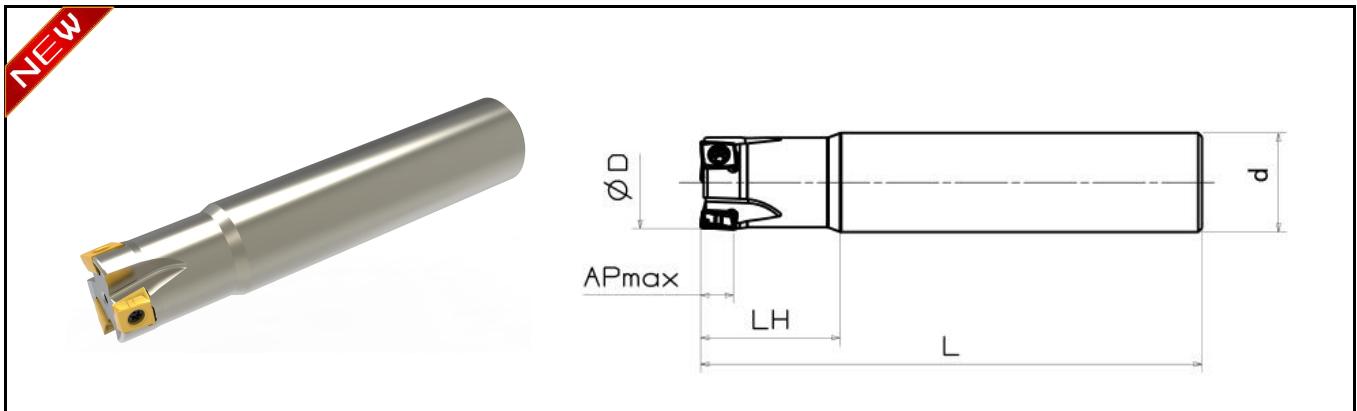
### ACCESSORY

MODEL	DIA	SCREW	WRENCH
CE490LN-09	20	CSC3080	CTS10W
CE490LN-09	25、32、40	CSC3010	CTS08W

## LNSERIES: CE490LN



end mill shank, Kr=90°



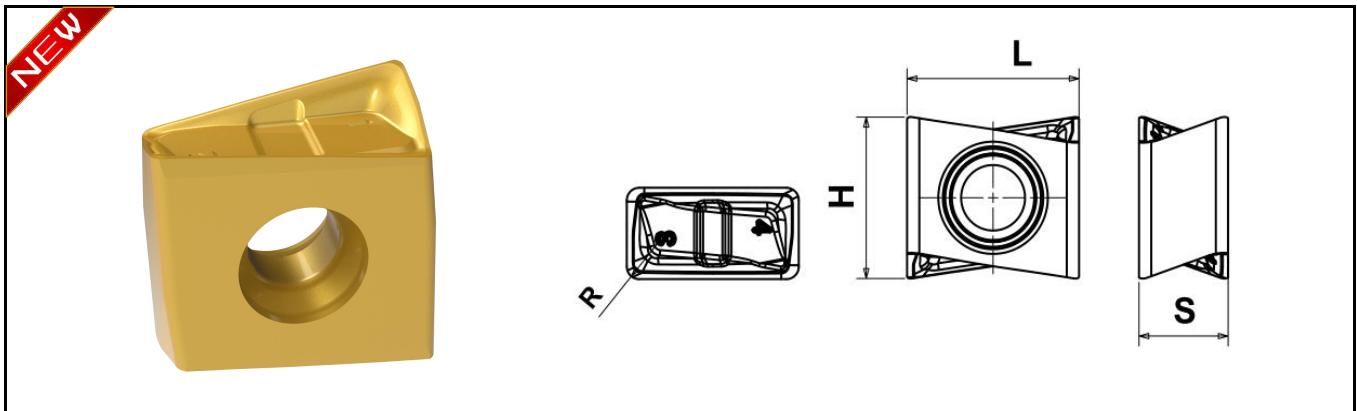
MODEL	kr	◎	DIMENSION					SUITABLE INSERT
			D	LH	d	L	APmax	
CE490LN-230L150Y25R-12	90°	2	30	35	25	150	11.5	LNHU 1206
CE490LN-330L150Y25R-12		3	30	35	25	150		
CE490LN-232L150Y32R-12		2	32	35	32	150		
CE490LN-332L150Y32R-12		3	32	35	32	150		
CE490LN-235L150Y32R-12		2	35	35	32	150		
CE490LN-335L150Y32R-12		3	35	35	32	150		
CE490LN-340L170Y32R-12		3	40	35	32	170		
CE490LN-440L170Y32R-12		4	40	35	32	170		

### ACCESSORY

MODEL	SCREW	WRENCH
CE490LN-12	CSC4013	CTS15W

**LN**

INSERT

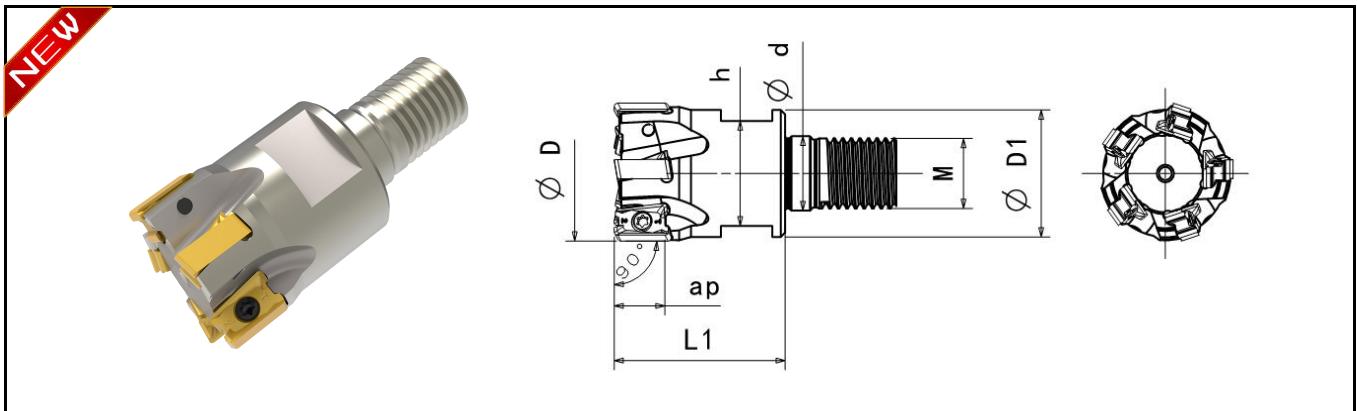


MODEL	EDGE LEONG	KR (°)	DIMENSION					GRADE			
			L	H	S	R	APmax	CT5320	CT7320	CT8320	CT101
LNHU 090404-M	09	90	9.02	8.55	4.48	0.4	8.5	●	●	●	
LNHU 120608-M	12		12.7	13.0	6.75	0.8	11.5	●	●	●	
LNHU 120612-M	12		12.7	13.0	6.75	1.2	11.5	●	●	●	
LNHU 120608-AL	12		12.7	13.0	6.75	0.8	11.5				●
LNHU 160808-M	16		16.4	16.2	8.0	0.8	15.0	●	●	●	

## ANSERIES: CE90AN-M



Threaded end mill shank, Kr=90°



MODEL		DIMENSION							SUITABLE INSERT
		D	D1	d	M	L1	h	ap	
CE90AN-220M10R-12	2	20	18	10.5	M10	28	15	11.5	ANKU 1204
CE90AN-325M12R-12	3	25	21	12.5	M12	40	17		
CE90AN-432M16R-12	4	32	29	17.0	M16	40	24		
CE90AN-532M16R-12	5	32	29	17.0	M16	40	24		
CE90AN-225M12R-17	2	25	21	12.5	M12	32	17		
CE90AN-332M16R-17	3	32	29	17.0	M16	40	24	16.5	ANKU 17T6 ANHU 17T6
CE90AN-432M16R-17	4	32	29	17.0	M16	40	24		
CE90AN-435M16R-17	4	35	29	17.0	M16	40	24		
CE90AN-540M16R-17	5	40	29	17.0	M16	40	24		

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

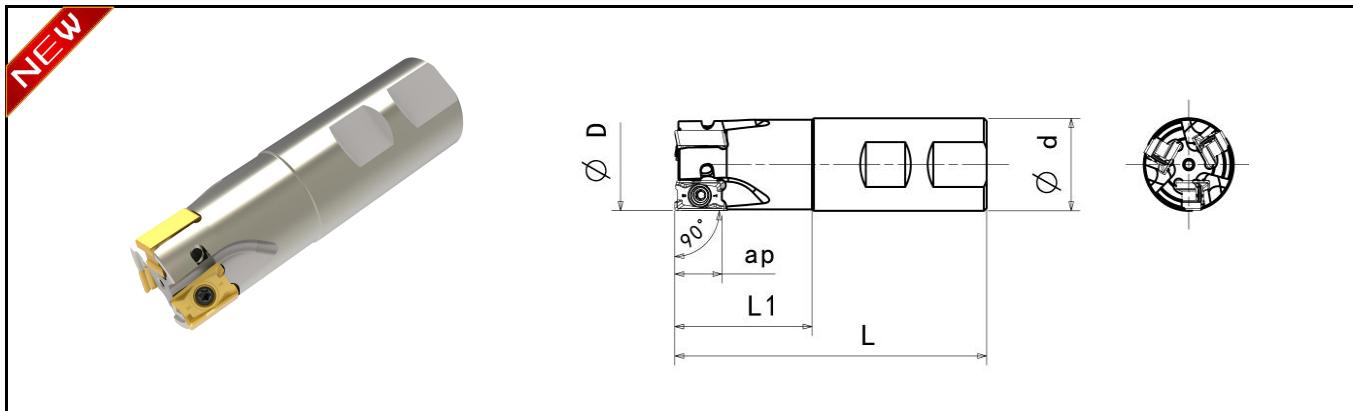
◎ INSERTS TO BE ORDERED SEPARATELY

### ACCESSORY

MODEL	DIA	SCREW	WRENCH
CE90AN-**-12	20、25、32、40	CSC3080	CTS10W
CE90AN-**-17	25、32	CSD4010	CTS15W
CE90AN-**-17	40	CSC4013	CTS15W

## ANSERIES: CE90AN-Z

END MILL CUTTER, Kr=90°



MODEL	kr		DIMENSION					Kg	SUITABLE INSERT
			D	d	L	L1	ap		
CE90AN-220L79Z20R-12	90°	2	20	20	79	28	11.5	0.17	ANKU 1204
CE90AN-320L79Z20R-12		3	20	20	79	28		0.16	
CE90AN-325L89Z25R-12		3	25	25	89	32		0.29	
CE90AN-432L110Z32R-12		4	32	32	110	49		0.60	
CE90AN-540L110Z32R-12		5	40	32	110	49		0.66	
CE90AN-225L89Z25R-17		2	25	25	89	32	16.5	0.28	ANKU 17T6 ANHU 17T6
CE90AN-332L111Z32R-17		3	32	32	111	50		0.58	
CE90AN-340L111Z32R-17		3	40	32	111	50		0.65	
CE90AN-440L111Z32R-17		4	40	32	111	50		0.65	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

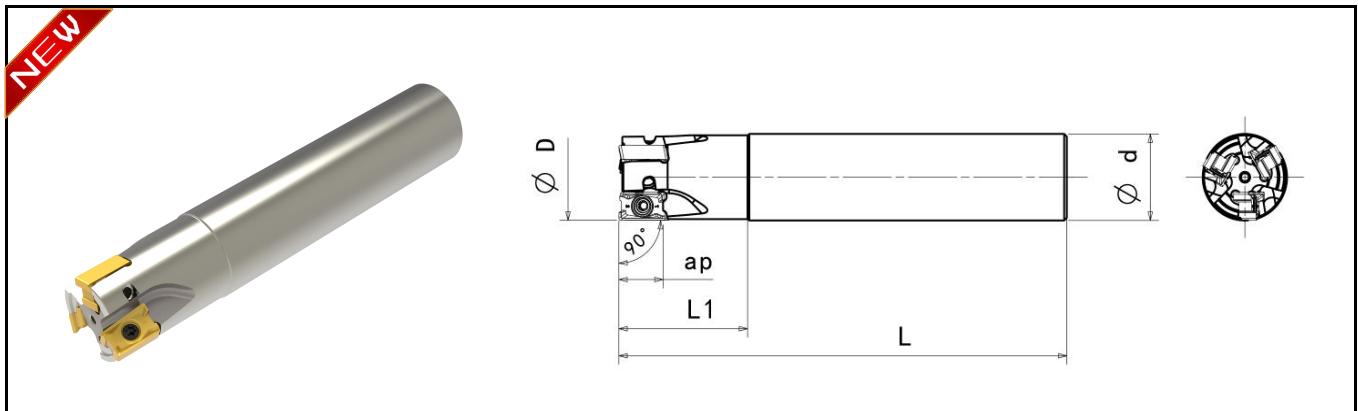
◎ INSERTS TO BE ORDERED SEPARATELY

### ACCESSORY

MODEL	DIA	SCREW	WRENCH
CE90AN-**-12	20、25、32、40	CSC3080	CTS10W
CE90AN-**-17	25、32	CSD4010	CTS15W
CE90AN-**-17	40	CSC4013	CTS15W

## ANSERIES: CE90AN-Y

END MILL CUTTER, Kr=90°



MODEL	KR	90°	DIMENSION					Kg	SUITABLE INSERT
			D	d	L	L1	ap		
CE90AN-220L150Y20R-12	90°	11.5	2	20	20	150	28	0.33	ANKU 1204
CE90AN-320L90Y20R-12			3	20	20	90	28	0.21	
CE90AN-320L150Y20R-12			3	20	20	150	28	0.33	
CE90AN-325L170Y25R-12			3	25	25	170	43	0.63	
CE90AN-425L100Y25R-12			4	25	25	100	43	0.33	
CE90AN-425L170Y25R-12			4	25	25	170	43	0.59	
CE90AN-432L200Y32R-12			4	32	32	200	49	1.16	
CE90AN-532L110Y32R-12			5	32	32	110	49	0.61	
CE90AN-532L200Y32R-12			5	32	32	200	49	1.17	
CE90AN-540L200Y32R-12			5	40	32	200	49	1.22	
CE90AN-225L100Y25R-17	16.5	16.5	2	25	25	100	43	0.28	ANKU 17T6 ANHU 17T6
CE90AN-225L170Y25R-17			2	25	25	170	43	0.58	
CE90AN-332L110Y32R-17			3	32	32	110	49	0.58	
CE90AN-332L200Y32R-17			3	32	32	200	50	1.14	
CE90AN-432L110Y32R-17			4	32	32	110	49	0.58	
CE90AN-432L200Y32R-17			4	32	32	200	50	1.14	
CE90AN-340L200Y32R-17			3	40	32	200	50	1.21	
CE90AN-440L200Y32R-17			4	40	32	200	50	1.20	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

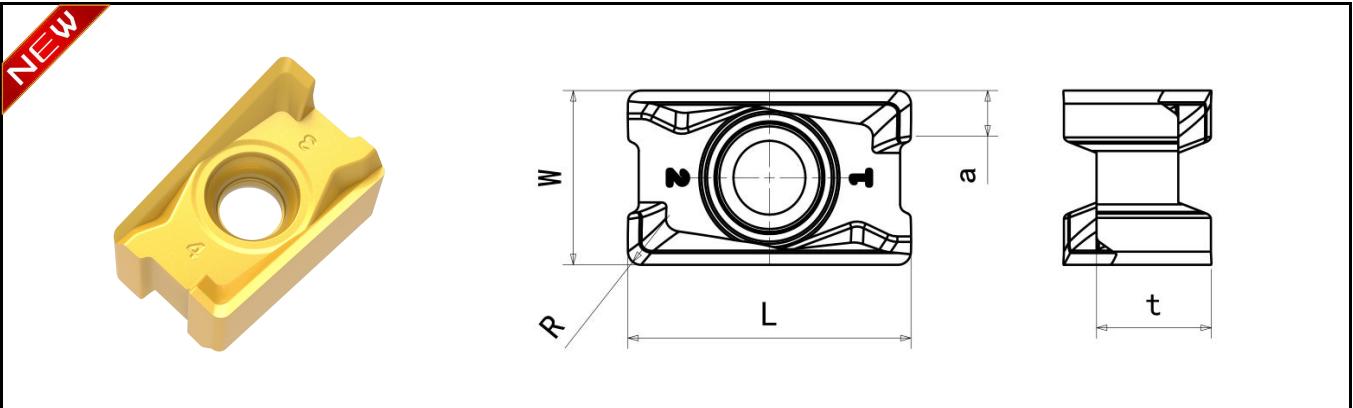
◎ INSERTS TO BE ORDERED SEPARATELY

**AN**



**INSERTS**

**AN INSERTS**



MODEL	EDGE LEONG	KR	DIMENSION					GRADE				
			L	W	t	a	R	CT5320	CT7320	CT7420	CT8320	CT9320
ANKU 120404PFR-M	12	90°	12.55	7.0	4.84	1.7	0.4	●	●	●	●	●
ANHU 120404PFR-M							0.4					
ANKU 120408PFR-M							0.8					
ANKU 120408PER-MM							0.8					
ANKU 120412PFR-M							1.2					
ANKU 17T608PFR-M							0.8	●	●	●	●	●
ANKU 17T608PER-MM	17	90°	17.3	10.4	7.03	2.7	0.8					
ANHU 17T608PER-MM							0.8					
ANHU 17T608PER-M							0.8					
ANHU 17T608PER-SM							0.8					
ANHU 17T616PFR-M							1.6					

**ACCESSORY**

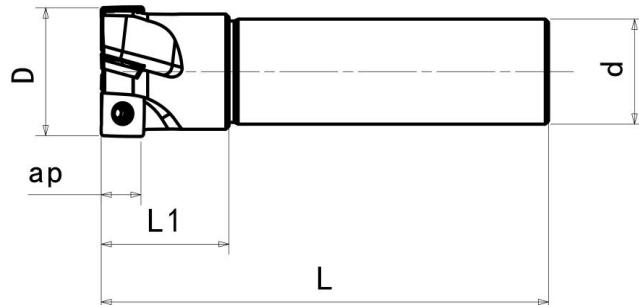
MODEL	DIA	SCREW	WRENCH
CE90AN-**-12	20、25、32、40	CSC3080	CTS10W
CE90AN-**-17	25、32	CSD4010	CTS15W
CE90AN-**-17	40	CSC4013	CTS15W



## SD14SERIES: CE90SD-Z



Cylindrical END MILL CUTTER , Kr=90 °

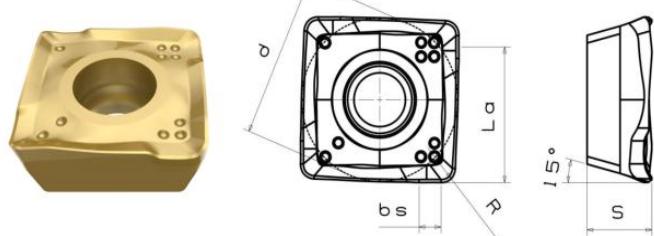


MODEL		DIMENSION							SUITABLE INSERT
		D	L	ap	L1	d			
CE90SD-340L170Y32R-14	3	40	170	10	40	32		1.0	SDKT 1404
CE90SD-340L250Y32R-14	3	40	250	10	40	32		1.5	
CE90SD-440L170Y32R-14	4	40	170	10	40	32		1.0	
CE90SD-350L120Y32R-14	3	50	120	10	40	32		0.8	
CE90SD-450L120Y32R-14	4	50	120	10	40	32		0.8	
CE90SD-463L120Y32R-14	4	63	120	10	40	32		1.0	
CE90SD-563L120Y32R-14	5	63	120	10	40	32		1.0	

◎Standard shank without internal coolant

◎INSERTS TO BE ORDERED SEPARATELY

MODEL	EDGE LENGTH	DIMENSION					GRADE			
		d	S	bs	La	R	CT5420	CT7420	CT8240	CT8420
SDKT 140408M-PM	14	13.8	3.9	2.0	10.3	0.8	●	●	●	●



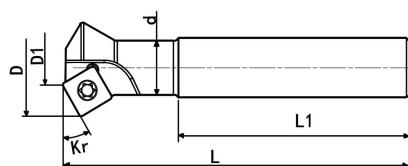
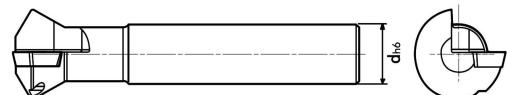
### ACCESSORY

MODEL	SCREW	WRENCH
CE90SD-14	CSG3585-P	CTS10W-P

# CCF...SP



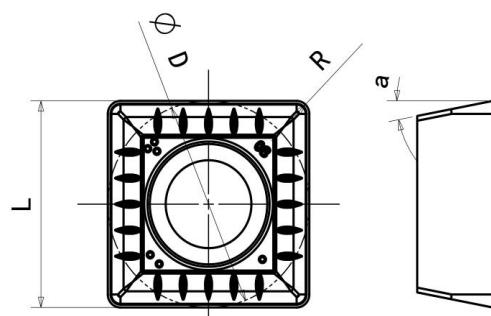
## Chamfering Mill Holder



MODEL	Kr (°)		DIMENSION						INSERT
			D	D1	d1	d	L	L1	
CCF30SP-112L120Y20R-12	30	1	32.4	11.6	18	20	120	80	SPKT 1204
CCF45SP-112L120Y20R-12	45	1	28.6	11.35	18	20	120	80	
CCF45SP-225L160Y25R-12	45	2	41.66	24.34	24.4	25	160	120	
CCF60SP-225L160Y25R-12	60	2	36.78	24.48	24.4	25	160	120	

◎STANDARD CUTTER HOLDER WITHOUT INTERNAL COOLANT, INSERTS TO BE ORDERED SEPARATELY

## INSERTS



MODEL	DIMENSION				GRADE			
	d	t	a	r	CT5320	CT7320	CT8420	CT9320
SPKT 120408-KM	12.7	4.76	11°	0.8			●	

## ACCESSORY

MODEL	SCREW	WRENCH
CCF...SP	CSD5012	CTQ20

# CCF...TC



## Chamfering Mill Holder

MODEL	Kr (°)		MIN DIA	DIMENSION					INSERT
				D	d1	d	L	L1	
CCF45TC-D4RY16R-11	45	1	4	16	15.5	16	130	100	TCMT 1102
CCF45TC-D6RY20R-16	45	1	6	23.3	19.6	20	200	150	TCMT 16T3

◎ STANDARD CUTTER HOLDER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

## TCMT INSERTS

MODEL	DIMENSION				GRADE			
	d	t	a	r	CT5320	CT7320	CT8330	CT9320
TCMT 110204	6.35	2.38	7°	0.4	●	●	●	●
TCMT 16T308	9.52	3.97	7°	0.8	●	●	●	●

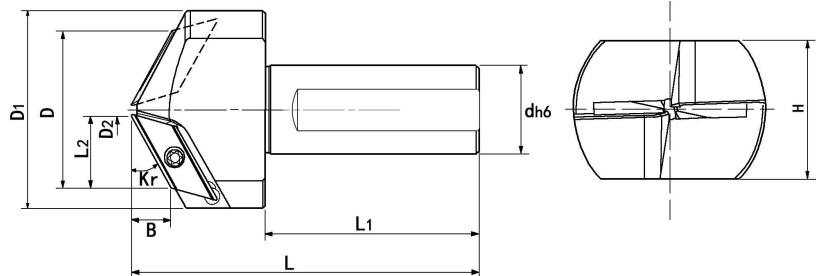
## ACCESSORY

MODEL	INSERT SCREW	WRENCH
CCF...TC...11	CSC2560	CTS08W
CCF...TC...16	CSC4090	CTS15W

# CCF...XC



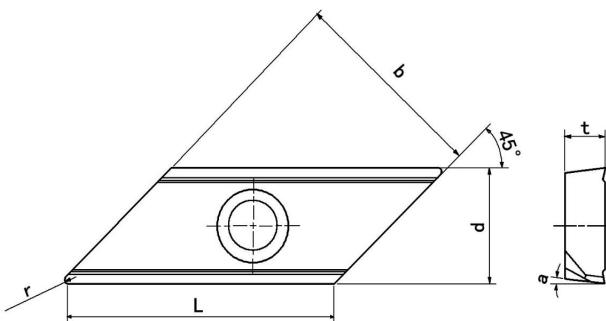
## Chamfering Mill Holder



MODEL		DIMENSION									
		Kr	B	L2	D	D1	D2	L	L1	d	H
CCF60XC-134L130W32R-31	1	60	25.5	14.5	34	40	5	130	80	32	—
CCF45XC-246L130W32R-31	2	45	20.5	20.5	46	56	5	130	80	32	45
CCF30XC-255L130W32R-31	2	30	14.5	25.5	55	72	5	130	80	32	50

◎STANDARD CUTTER WITHOUT INTERNAL COOLANT INSERTS TO BE ORDERED SEPARATELY

◎MIN DIA  $\phi$  5mm



MODEL	EDGE LENGTH	DIMENSION						GRADE			
		L	b	d	t	a	r	CT5320	CT5420	CT7320	CT7420
XCET 310404	31	29.2	22	12.7	4.5	7°	0.4	●			

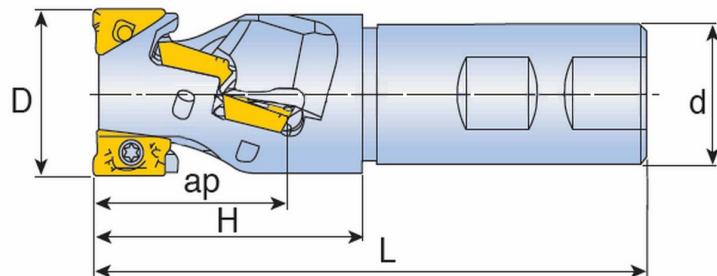
## ACCESSORY

MODEL	INSERT SCREW	WRENCH
CCF60XC-134L130W32R-31		
CCF45XC-246L130W32R-31	CSY5012	CTS20W
CCF30XC-255L130W32R-31		

## AP17Corn TYPE milling series: CCM90AP



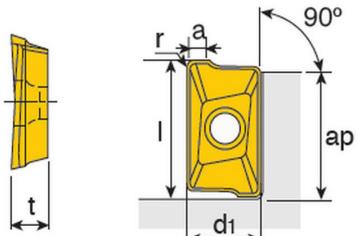
Corn TYPE milling cutter HOLDER



MODEL		TEETH	DIMENSION						INSERT
			D	d	H	L	ap		
CCM90AP-2232L120Z32-17	2	4	32	32	50	120	30		
CCM90AP-2340L140Z32-17	2	6	40	32	65	140	44		APKT 1705

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY



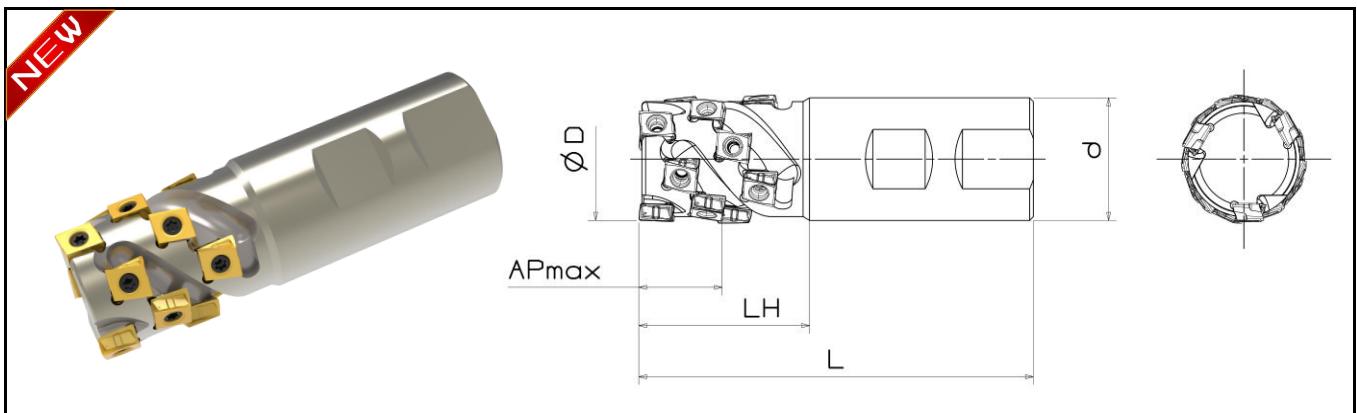
MODEL	EDGE LENGTH	DIMENSION						GRADE			
		d	ap	L	t	a	r	CT5320	CT7420	CT8320	CT9320
APKT 1705PER-EM	17	10.7	16.1	18.5	5.56	3.0	0.8	●	●		

ACCESSORY	MODEL	SCREW		WRENCH	
	CCM90AP	CSC4090		CTS15W	

## LN SERIES: CCM490LN



Corn milling cutter HOLDER, Kr=90°



MODEL	kr		TEETH	DIMENSION					INSERT
				D	APmax	LH	L	d	
CCM490LN-2525L100Z25R-09	90°		2	10	25	36	43	100	25
CCM490LN-3532L105Z32R-09			3	15	32	36	44	105	32
CCM490LN-3632L115Z32R-09			3	18	32	43	52	115	32
CCM490LN-3640L125Z40R-09			3	18	40	43	54	125	40
CCM490LN-3740L135Z40R-09			3	21	40	51	64	135	40

◎STANDARD CUTTER WITHOUT INTERNAL COOLANT; INSERTS TO BE ORDERED SEPARATELY

MODEL	EDGE LONG	KR (°)	DIMENSION					GRADE			
			L	H	S	R	APmax	CT5320	CT5420	CT7320	CT8320
LNHU 090404-M	09	90	9.02	8.55	4.48	0.4	8.5	●	●	●	●

ACCESSORY	MODEL	SCREW	WRENCH
	CCM490LN-09	CSC3010	CTS08W

## SV SERIES: CCM90SV



Corn milling cutter HOLDER, Kr=90°

**NEW**

MODEL	kr		TEETH	DIMENSION					INSERT
				D	ap	H	L	d	
CCM90SV-2625L120Z25R-09	90°		2	12	25	40	58	120	25
CCM90SV-2732L135Z32R-09			2	14	32	52	70	135	32
CCM90SV-2632L135Z32R-11			2	12	32	52	70	135	32
CCM90SV-3640L135Z32R-11			3	18	40	52	75	135	32
CCM90SV-3740L180Z32R-11			3	21	40	60	85	180	32
CCM90SV-4650L145Z40R-11			4	24	50	52	75	145	40
CCM90SV-4950L170Z40R-11			4	36	50	76	100	170	40

◎STANDARD CUTTER WITHOUT INTERNAL COOLANT; INSERTS TO BE ORDERED SEPARATELY.

**NEW**

INSERT MODEL	EDGE LENGTH	DIMENSION				GRADE			
		D	S	AP	R	CT5320	CT7320	CT8320	CT9320
SVKT 09T308-M	09	9.525	3.97	8.5	0.8	●	●	●	
SVKT 110408-ML	11	11.0	4.5	10.0	0.8	●	●	●	

### ACCESSORY

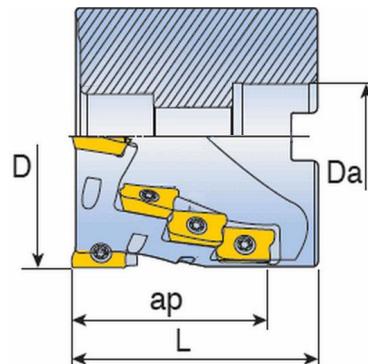
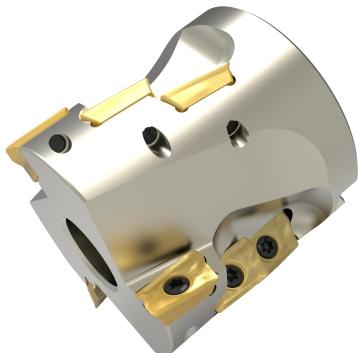
MODEL	SCREW	WRENCH
CCM90SV-**-11	CSC4090	CTS15W

B100

# AP17Corn TYPE milling series: CCM90AP



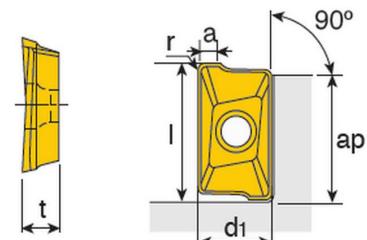
Corn milling cutter HOLDER



MODEL		TEETH	DIMENSION				CONNECTOR	Kg	INSERT
			D	L	ap	Da			
CCM90AP-2350H44A22R-17	2	6	50	60	44	22	A	0.5	APKT 1705
CCM90AP-3363H44A27R-17	3	9	63	63	44	27	A	0.9	
CCM90AP-4363H44A27R-17	4	12	63	63	44	27	A	0.9	
CCM90AP-4480H58A32R-17	4	16	80	75	58	32	A	1.9	
CCM90AP-56100H88A40R-17	5	30	100	110	88	40	A	4.8	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY



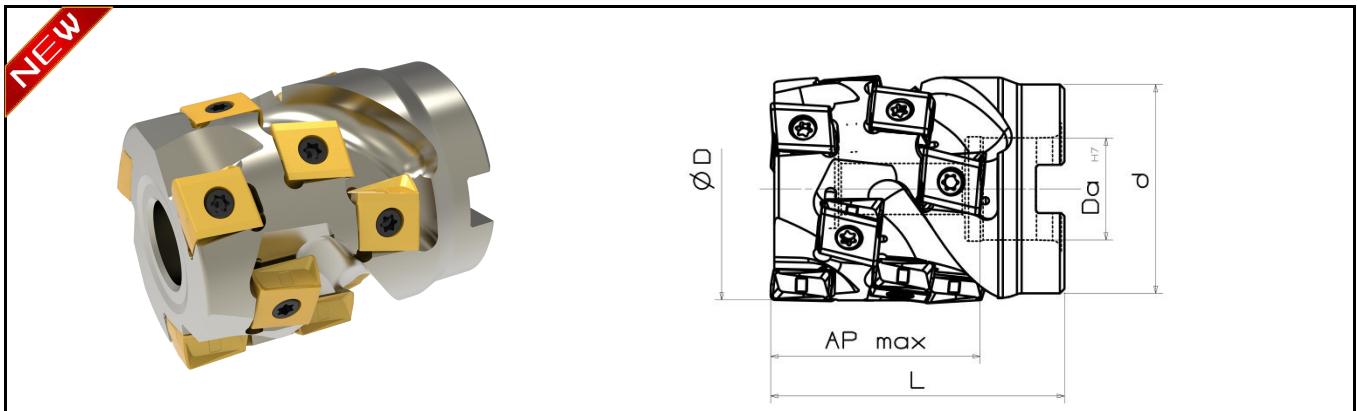
MODEL	EDGE LENGTH	DIMENSION						GRADE			
		d	ap	L	t	a	r	CT5320	CT7420	CT8320	CT9320
APKT 1705PER-EM	17	10.7	16.1	18.5	5.56	3.0	0.8	●	●		

ACCESSORY	MODEL	SCREW		WRENCH	
	CCM90AP	CSC4090		CTS15W	

## LN SERIES: CCM490LN



CORN TYPE MILL CUTTER HOLDER, Kr=90°



MODEL	kr		TEETH	DIMENSION					INSERT
				D	APmax	d	L	Da	
CCM490LN-3350A22R-12	90°		3	9	50	31.5	45	55	22
CCM490LN-3450A22R-12			3	12	50	42.0	45	65	22
CCM490LN-4463A27R-12			4	16	63	42.0	58	70	27
CCM490LN-4563A27R-12			4	20	63	52.5	58	80	27
CCM490LN-5580A32R-12			5	25	80	52.5	74	85	32
CCM490LN-54100A40R-16			5	20	100	57.0	94	90	40

◎STANDARD CUTTER WITHOUT INTERNAL COOLANT; INSERTS TO BE ORDERED SEPARATELY

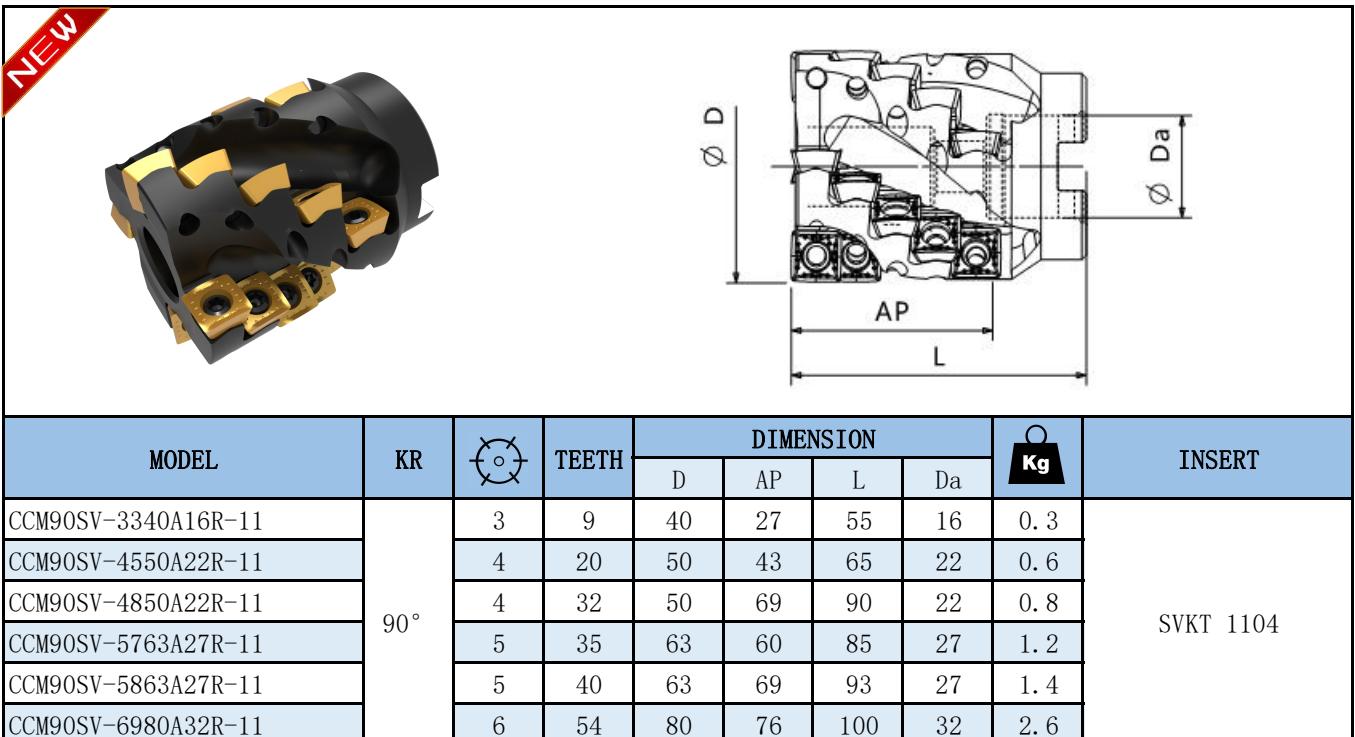
MODEL	EDGE LONG	KR (°)	DIMENSION					GRADE			
			L	H	S	R	APmax	CT5320	CT7320	CT8320	CT101
LNHU 120608-M	12	90	12.7	13.0	6.75	0.8	11.5	●	●	●	
LNHU 120608-AL	12		12.7	13.0	6.75	0.8	11.5				●
LNHU 160808-M	16		16.4	16.2	8.0	0.8	15.0	●	●	●	

ACCESSORY	MODEL	SCREW	WRENCH
		CCM490LN-12	CCS4013-P
B102	CCM490LN-16	CCS5016	CTS20W

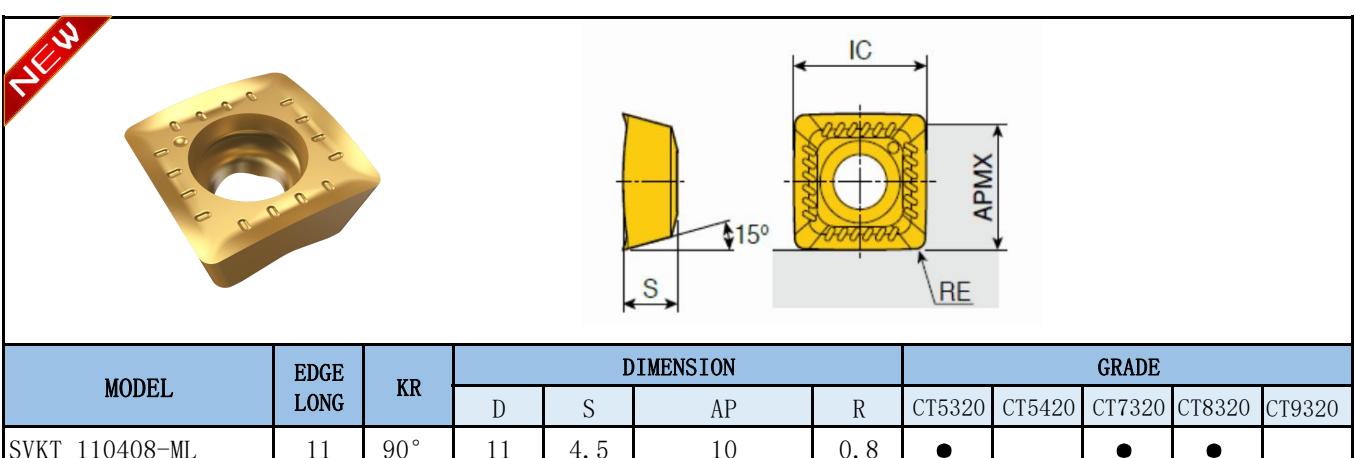
## **SV SERIES: CCM90SV**



## CORN TYPE MILL CUTTER HOLDER, Kr=90°



©STANDARD CUTTER WITHOUT INTERNAL COOLANT: INSERTS TO BE ORDERED SEPARATELY.



## ACCESSORY

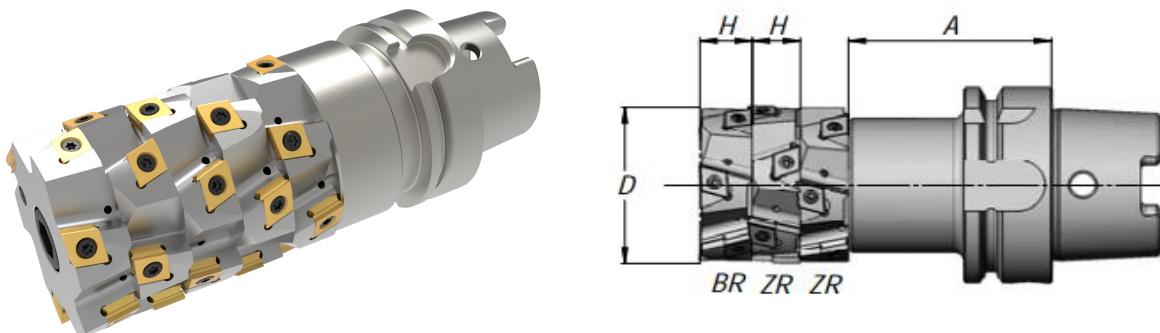
MODEL	SCREW	WRENCH
		
CCM90SV-**-11	CST4010	CTS15W

# ENCorn TYPE milling series: CCM90EN-H



CHANGABLE Corn milling cutter HOLDER

◎Different interface tool holders can be selected BT/SK/HSK

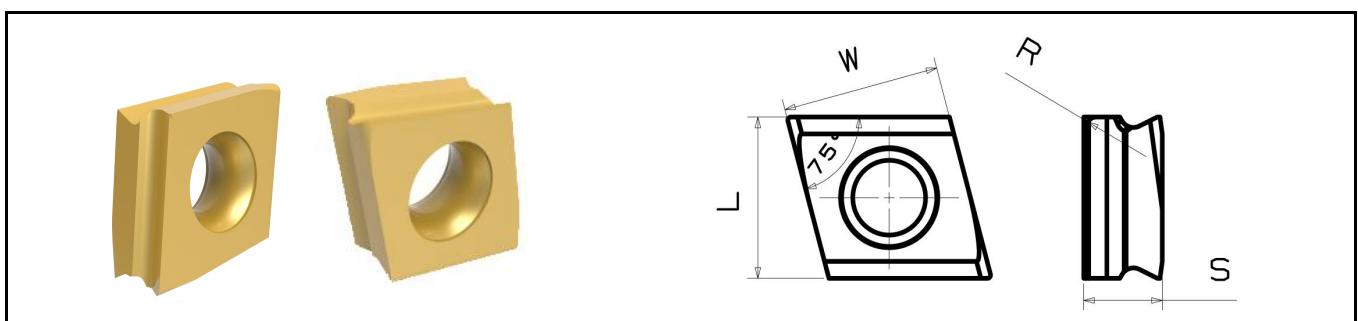
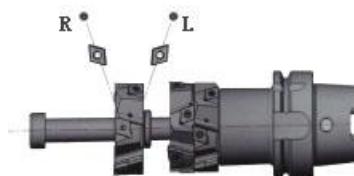


D	B R				Z R				INSERT
	MODEL	∅	TEETH	H	MODEL	∅	TEETH	H	
50	CSM90EN-650BR25-09	3	6	17.1	CSM90EN-650ZR25-09	3	6	16	ENGX 0904
63	CSM90EN-663BR25-09	3	6	17.1	CSM90EN-663ZR25-09	3	6	16	
80	CSM90EN-680BR32-12	3	6	23.2	CSM90EN-680ZR32-12	3	6	22	
100	CSM90EN-8100BR32-12	4	8	23.2	CSM90EN-8100ZR32-12	4	8	22	ENGX 1206

◎Standard shank with internal coolant, INSERTS TO BE ORDERED SEPARATELY

◎See page C69 for adapting standard toolholders, HOLDER CUSTOMIZED

◎this shank requires a left-hand blade and a right-hand blade

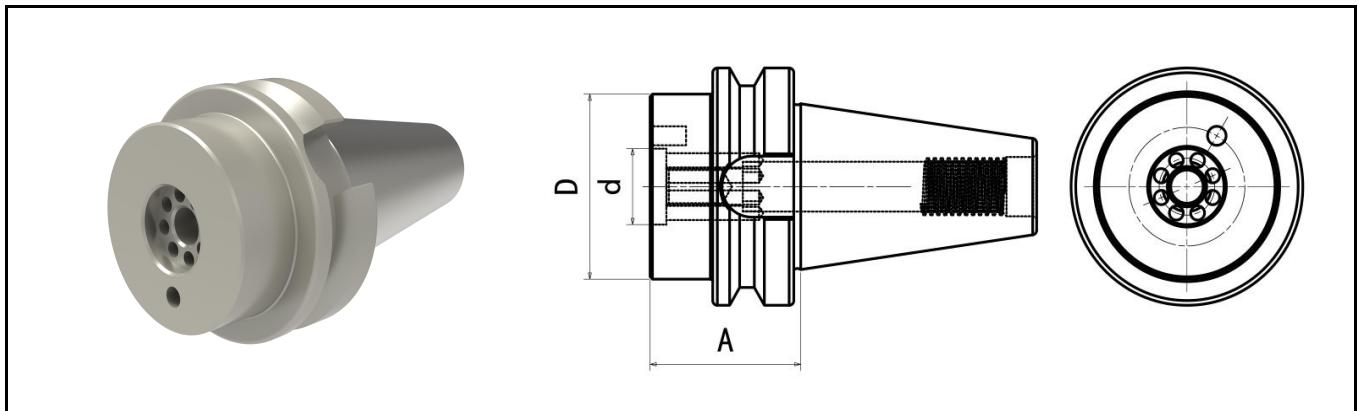


MODEL	GRADE CT5420	MODEL	GRADE CT101	EDGE LONG	DIMENSION			ACCESSORY	
					S	L=W	R	SCREW	WRENCH
ENGX 090406R	●	ENGX 090406R-AL	●	09	4.76	9.525	0.6	CSC4090	CTS15W
ENGX 090406L	●	ENGX 090406L-AL	●				0.6		
ENGX 090408R	●	ENGX 090408R-AL	●				0.8		
ENGX 090408L	●	ENGX 090408L-AL	●				0.8		
ENGX 120608R	●	ENGX 120608R-AL	●	12	6.35	12.7	0.8	CSG5016	CTS20W
ENGX 120608L	●	ENGX 120608L-AL	●				0.8		
ENGX 120610R	●	ENGX 120610R-AL	●				1.0		
ENGX 120610L	●	ENGX 120610L-AL	●				1.0		

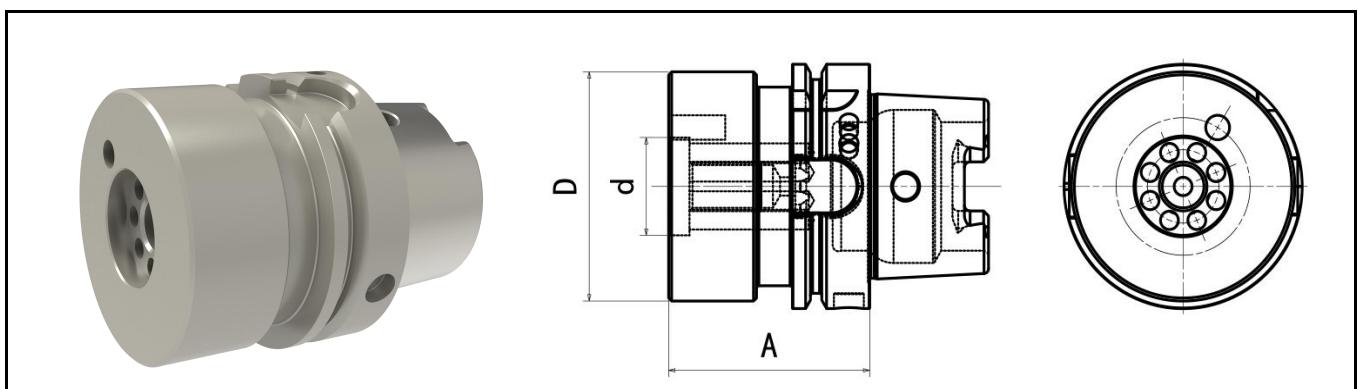
# ENCorn TYPE milling series: CCM90EN-H



CHANGABLE Corn milling cutter HOLDER



MODEL	SHANK TYPE	DIMENSION			MODEL	Shank Type	DIMENSION		
		D	A	d			D	A	d
BT40-D25M12-L50	BT40	58	50	25	BT50-D25M12-L65	BT50	58	65	25
BT40-D25M12-L75	BT40	58	75	25	BT50-D25M12-L90	BT50	58	90	25
BT40-D25M12-L100	BT40	58	100	25	BT50-D25M12-L110	BT50	58	110	25
BT40-D32M16-L50	BT40	75	50	32	BT50-D32M16-L65	BT50	75	65	32
BT40-D32M16-L75	BT40	75	75	32	BT50-D32M16-L90	BT50	75	90	32
BT40-D32M16-L100	BT40	75	100	32	BT50-D32M16-L110	BT50	75	110	32

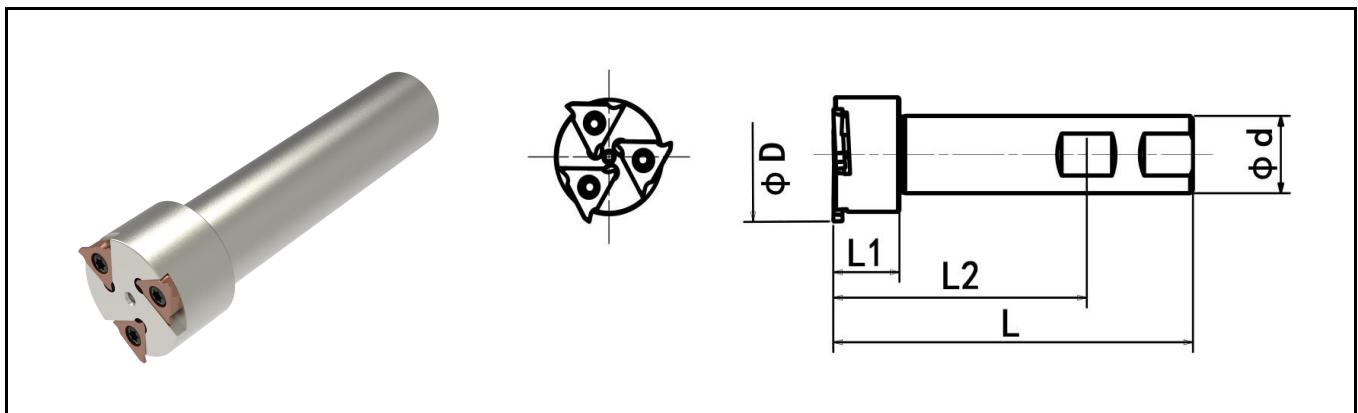


MODEL	Shank Type	DIMENSION			MODEL	Shank Type	DIMENSION		
		D	A	d			D	A	d
HSK63-D25M12-L70	HSK63	58	70	25	HSK100-D25M12-L70	HSK100	58	70	25
HSK63-D25M12-L110	HSK63	58	110	25	HSK100-D25M12-L110	HSK100	58	110	25
HSK63-D25M12-L130	HSK63	58	130	25	HSK100-D25M12-L130	HSK100	58	130	25
HSK63-D32M12-L70	HSK63	75	70	32	HSK100-D32M12-L70	HSK100	75	70	32
HSK63-D32M12-L110	HSK63	75	110	32	HSK100-D32M12-L110	HSK100	75	110	32
HSK63-D32M12-L130	HSK63	75	130	32	HSK100-D32M12-L130	HSK100	75	130	32

## 3CGF Shallow groove milling cutter shank SERIES: CE3CGF



Shallow groove milling cutter shank

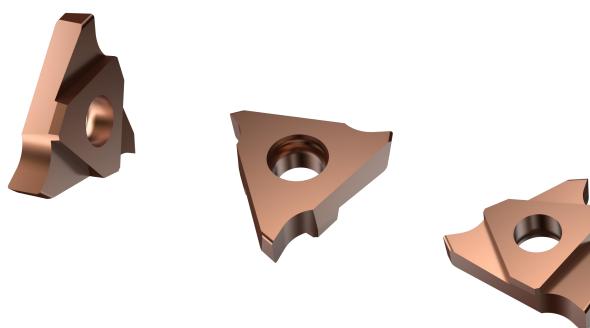


MODEL		DIMENSION MM					Grooving width (mm)	INSERTS
		D	d	L1	L2	L		
CE3CGF -125L125Z25R-16	1	25	25	40	93	125	1.10~3.00	3CGF 16L110~300
CE3CGF -339L125Z25R-16	3	39	25	23	93	125	1.10~3.00	
CE3CGF -344L125Z25R-22	3	44	25	23	93	125	1.25~4.80	3CGF 22L125~480

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS to be ordered separately

◎ Note that right-hand shanks are paired with left-hand blades



◎ WIDE RANGE: 1.1~4.8 mm

◎ MAX DEPTH: 5.0 mm

◎ Wide range of blade widths, suitable for all kinds of shallow grooves and spring grooves

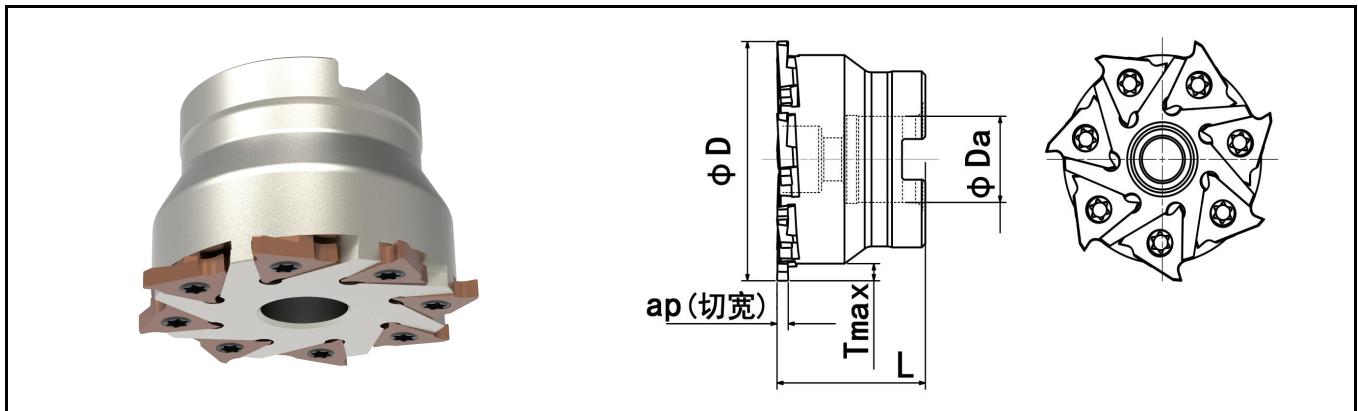
### ACCESSORY

MODEL	SCREWS	WRENCH
CE3CGF -16	CSG4013-P	CTS15W-P
CE3CGF -22	CSG5016	CTS20W

## 3CGF Shallow groove milling cutter shank SERIES: CSM3CGF



Shallow groove milling cutter HOLDER



MODEL		DIMENSION MM				LEFT/ RIGHT	CONNE CTOR	INSERTS
		D	Da	L	ap			
CSM3CGF -763A22R-16	7	63	22	40	1. 10~3. 00	RIGHT HAND	A	3CGF 16L110~300
CSM3CGF -980A27R-16	9	80	27	50				
CSM3CGF -11100B32R-16	11	100	32	50				
CSM3CGF -13125B40R-16	13	125	40	63				
CSM3CGF -763A22L-16	7	63	22	40		LEFT HAND	B	3CGF 16R110~300
CSM3CGF -980A27L-16	9	80	27	50				
CSM3CGF -11100B32L-16	11	100	32	50				
CSM3CGF -13125B40L-16	13	125	40	63				
CSM3CGF -663A22R-22	6	63	22	40	1. 25~4. 80	RIGHT HAND	A	3CGF 22L125~480
CSM3CGF -880A27R-22	8	80	27	50				
CSM3CGF -10100B32R-22	10	100	32	50				
CSM3CGF -12125B40R-22	12	125	40	63		LEFT HAND	B	3CGF 22R125~480
CSM3CGF -663A22L-22	6	63	22	40				
CSM3CGF -880A27L-22	8	80	27	50				
CSM3CGF -10100B32L-22	10	100	32	50				
CSM3CGF -12125B40L-22	12	125	40	63				

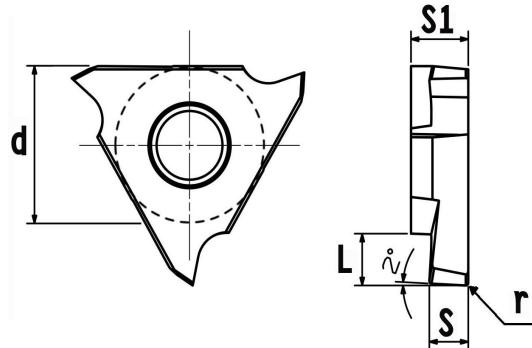
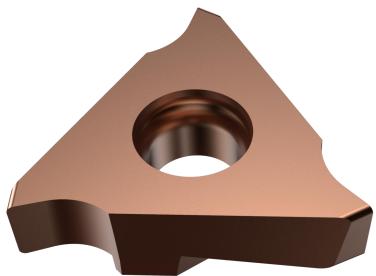
◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT, INSERTS TO BE ORDERED SEPARATELY

◎ RIGHT HAND CUTTER HOLDER COMPATIBLE WITH LEFT INSERTS, LEFT HANDCUTTER WITH RIGHT INSERTS.

### ACCESSORY

MODEL	SCREWS	WRENCH
CE3CGF -16	CSG4013-P	CTS15W-P
CE3CGF -22	CSG5016	CTS20W

## INSERTS

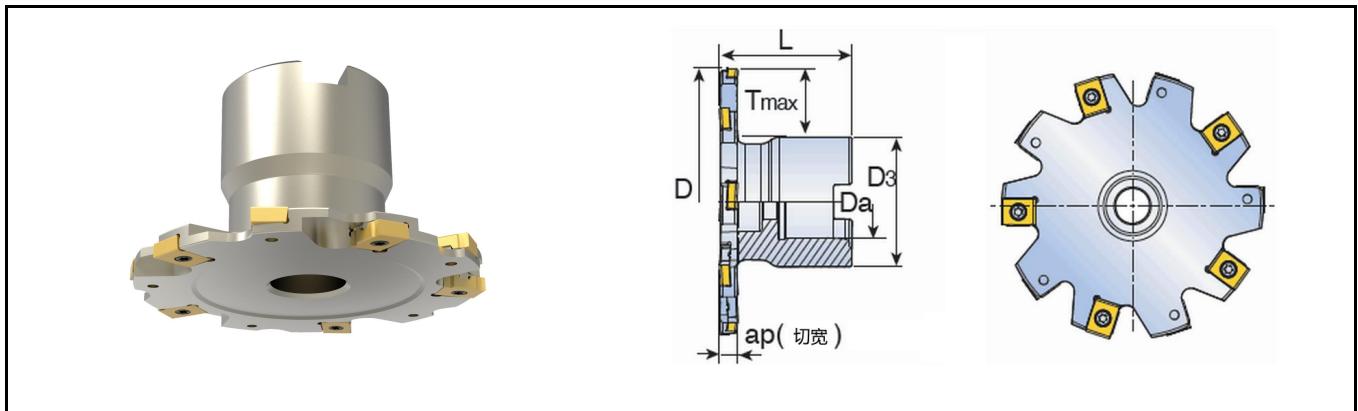


MODEL	DIMENSION MM					GRADE
	S	L	ød	S1	r	
3CGF 16L110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16L125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16L145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16L150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16L175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16L185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16L200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16L250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16L300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22L125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22L145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22L150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22L175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22L185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22L200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22L230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22L250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22L265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22L280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22L300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22L320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22L330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22L350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22L400-R04	4.0	5.0	12.7	4.76	0.4	●
3CGF 22L430-R04	4.3	5.0	12.7	4.76	0.4	●
3CGF 22L450-R04	4.5	5.0	12.7	4.76	0.4	●
3CGF 22L480-R04	4.8	5.0	12.7	5.06	0.4	●

## ZNV Vertical three-sided INSERT series: CSMZN...R



Three-sided edge milling cutter: Fixed flange type



MODEL		ap (mm)	DIMENSION MM					CONNECTOR	Kg	INSERTS
			D	Da	D3	L	Tmax			
CSMZN-1080W04A22R-023	5+5	4	80	22	40	50	20.0	A	0.4	ZNHT 023
CSMZN-12100W04A27R-023	6+6	4	100	27	48	50	26.0	A	0.6	
CSMZN-1080W05A22R-028	5+5	5	80	22	40	50	20.0	A	0.5	ZNHT 028
CSMZN-12100W05A27R-028	6+6	5	100	27	48	50	26.0	A	0.7	
CSMZN-1080W06A22R-033	5+5	6	80	22	40	50	20.0	A	0.6	ZNHT 033
CSMZN-12100W06A27R-033	6+6	6	100	27	48	50	26.0	A	0.7	
CSMZN-14125W06B40R-033	7+7	6	125	40	70	50	25.0	B	1.2	ZNHT 033
CSMZN-18160W06B40R-033	9+9	6	160	40	70	50	43.0	B	1.5	

◎ STANDARD CUTTER WITHOUT ]

◎ INSERTS TO BE ORDERED SEPARATELY

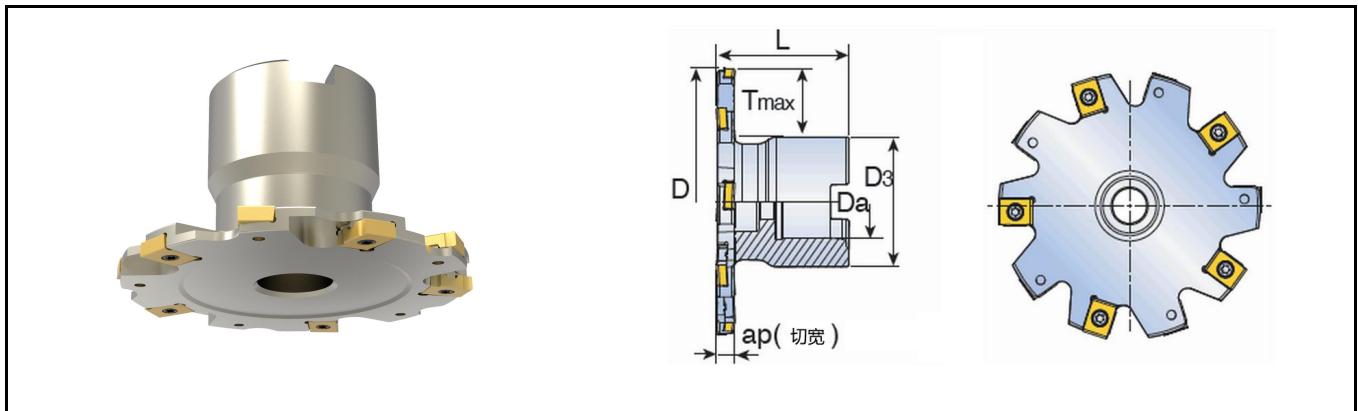
### ACCESSORY

MODEL	SCREWS	WRENCH
CSMZN-023	CSX2531	CTS08W
CSMZN-028	CSX2542	CTS08W
CSMZN-033	CSX2553	CTS08W

## ZN VERTICAL 3 SIDED INSERT BLADE CUTTER SERIES: CSMZN...R



Three-sided milling cutter head: fixed flange type



MODEL		ap (mm)	DIMENSION MM					CONNECTOR		INSERTS
			D	Da	D3	L	Tmax			
CSMZN-880W07A22R-038	4+4	7	80	22	40	50	20.0	A	0.5	ZNHT 038
CSMZN-10100W07A27R-038	5+5	7	100	27	48	50	25.5	A	0.7	
CSMZN-12125W07B40R-038	6+6	7	125	40	70	50	24.5	B	1.2	
CSMZN-16160W07B40R-038	8+8	7	160	40	70	50	42.0	B	1.5	
CSMZN-880W08A22R-043	4+4	8	80	22	40	50	20.0	A	0.5	
CSMZN-10100W08A27R-043	5+5	8	100	27	48	50	25.5	A	0.8	ZNHT 043
CSMZN-12125W08B40R-043	6+6	8	125	40	70	50	24.5	B	1.2	
CSMZN-16160W08B40R-043	8+8	8	160	40	70	50	42.0	B	1.6	
CSMZN-10100W09A27R-048	5+5	9	100	27	48	50	26.0	A	0.8	
CSMZN-12125W09B40R-048	6+6	9	125	40	70	50	24.5	B	1.3	ZNHT 048
CSMZN-16160W09B40R-048	8+8	9	160	40	70	50	42.0	B	1.7	
CSMZN-10100W10A27R-053	5+5	10	100	27	48	50	26.0	A	0.8	
CSMZN-12125W10B40R-053	6+6	10	125	40	70	50	24.5	B	1.4	ZNHT 053
CSMZN-16160W10B40R-053	8+8	10	160	40	70	50	42.0	B	1.9	

◎ STANDARD CUTTER WITHOUT ]

◎ INSERTS TO BE ORDERED SEPARATELY

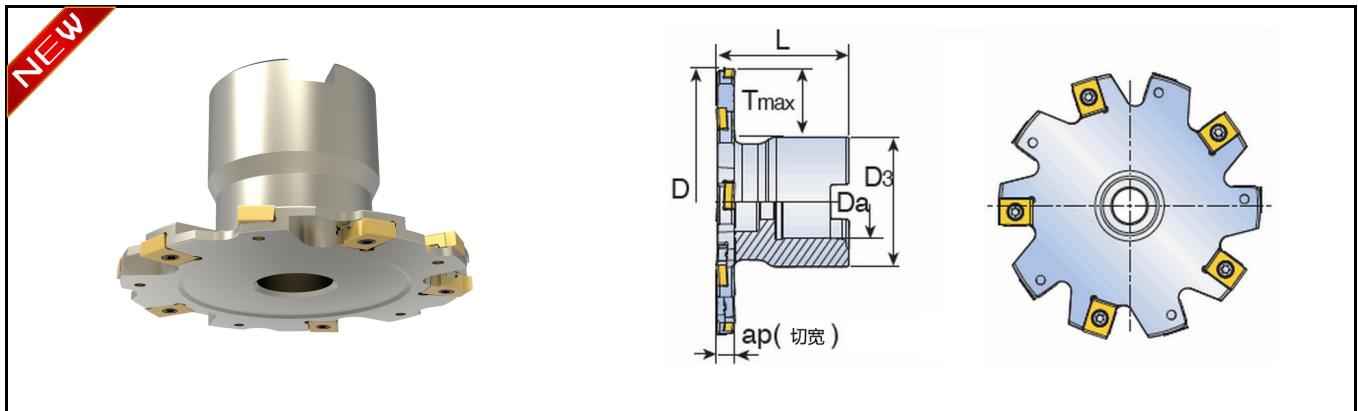
### ACCESSORY

MODEL	SCREWS	WRENCH	MODEL	SCREWS	WRENCH
CSMZN-038	CSX4051	CTS15W	CSMZN-048	CSX4070	CTS15W
CSMZN-043	CSX4061	CTS15W	CSMZN-053	CSX4080	CTS15W

**ZN VERTICAL 3 SIDED INSERT BLADE CUTTER SERIES: CSMZN...R**



THREE SIDED EDGE MILL CUTTER:FIXED FLANGE TYPE



MODEL		ap (mm)	DIMENSION MM					CONNECTOR	Kg	INSERTS
			D	Da	D3	L	Tmax			
CSMZN-8100W11A27R-058	4+4	11	100	27	48	50	26.0	A	0.8	ZNHT 058
CSMZN-10125W11B40R-058	5+5	11	125	40	70	50	24.5	B	1.4	
CSMZN-14160W11B40R-058	7+7	11	160	40	70	50	42.0	B	1.9	
CSMZN-8100W12A27R-063	4+4	12	100	27	48	50	26.0	A	0.8	ZNHT 063
CSMZN-10125W12B40R-063	5+5	12	125	40	70	50	24.5	B	1.4	
CSMZN-14160W12B40R-063	7+7	12	160	40	70	50	42.0	B	1.9	
CSMZN-8100W13A27R-068	4+4	13	100	27	48	50	26.0	A	0.8	ZNHT 068
CSMZN-10125W13B40R-068	5+5	13	125	40	70	50	24.5	B	1.4	
CSMZN-14160W13B40R-068	7+7	13	160	40	70	50	42.0	B	1.9	
CSMZN-8100W14A27R-073	4+4	14	100	27	48	50	26.0	A	0.8	ZNHT 073
CSMZN-10125W14B40R-073	5+5	14	125	40	70	50	24.5	B	1.4	
CSMZN-14160W14B40R-073	7+7	14	160	40	70	50	42.0	B	1.9	

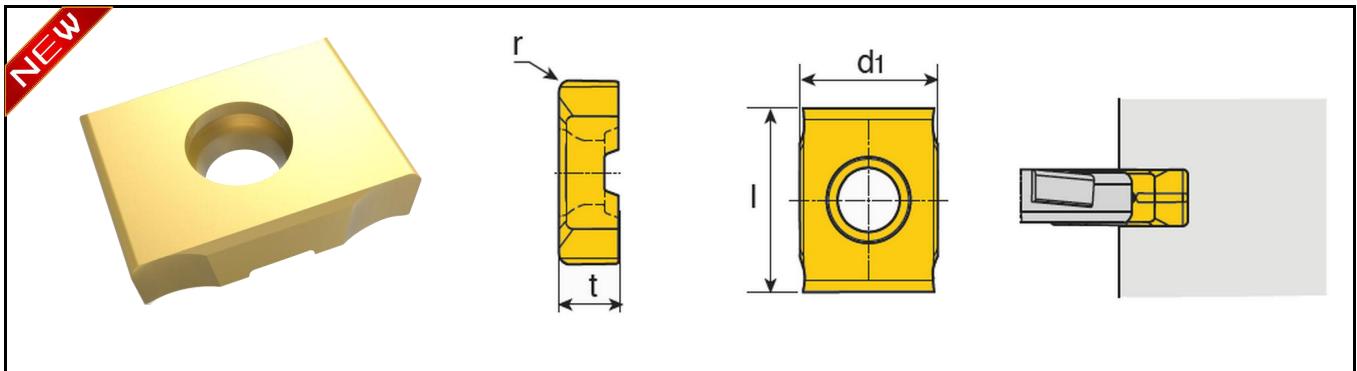
◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

**ACCESSORY**

MODEL	SCREWS	WRENCH	MODEL	SCREWS	WRENCH
CSMZN-058	CSY5012	CTS20W	CSMZN-068	CSY5012	CTS20W
CSMZN-063	CSY5012	CTS20W	CSMZN-073	CSY5012	CTS20W

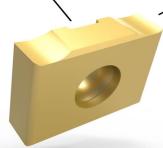
## INSERTS



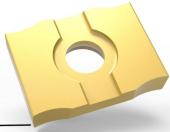
MODEL	EDGE LONG	DIMENSION MM				进给 (mm/齿)	GRADE CT5320
		l	d1	t	r		
ZNHT 023-04-ML	023	10	7.5	2.3	0.4	0.05~0.08	●
ZNHT 028-04-ML	028	10	7.5	2.8	0.4	0.05~0.08	●
ZNHT 033-04-ML	033	10	7.5	3.3	0.4	0.05~0.12	●
ZNHT 038-04-ML	038	13	10	3.8	0.4	0.05~0.12	●
ZNHT 043-04-ML	043	13	10	4.3	0.4	0.05~0.12	●
ZNHT 043-08-ML	043	13	10	4.3	0.8	0.05~0.12	●
ZNHT 048-04-ML	048	13	10	4.8	0.4	0.05~0.12	●
ZNHT 048-08-ML	048	13	10	4.8	0.8	0.05~0.12	●
ZNHT 053-04-ML	053	13	10	5.3	0.4	0.05~0.12	●
ZNHT 053-08-ML	053	13	10	5.3	0.8	0.05~0.12	●
ZNHT 058-04-ML	058	15	12	5.8	0.4	0.05~0.12	●
ZNHT 058-08-ML	058	15	12	5.8	0.8	0.05~0.12	●
ZNHT 063-04-ML	063	15	12	6.3	0.4	0.05~0.12	●
ZNHT 063-08-ML	063	15	12	6.3	0.8	0.05~0.12	●
ZNHT 068-08-ML	068	15	12	6.8	0.8	0.05~0.12	●
ZNHT 068-12-ML	068	15	12	6.8	1.2	0.05~0.12	●
ZNHT 073-08-ML	073	15	12	7.3	0.8	0.05~0.12	●
ZNHT 073-12-ML	073	15	12	7.3	1.2	0.05~0.12	●

桥形结构使夹紧力更强

正型前角使切削流畅



经济型4刃刀片



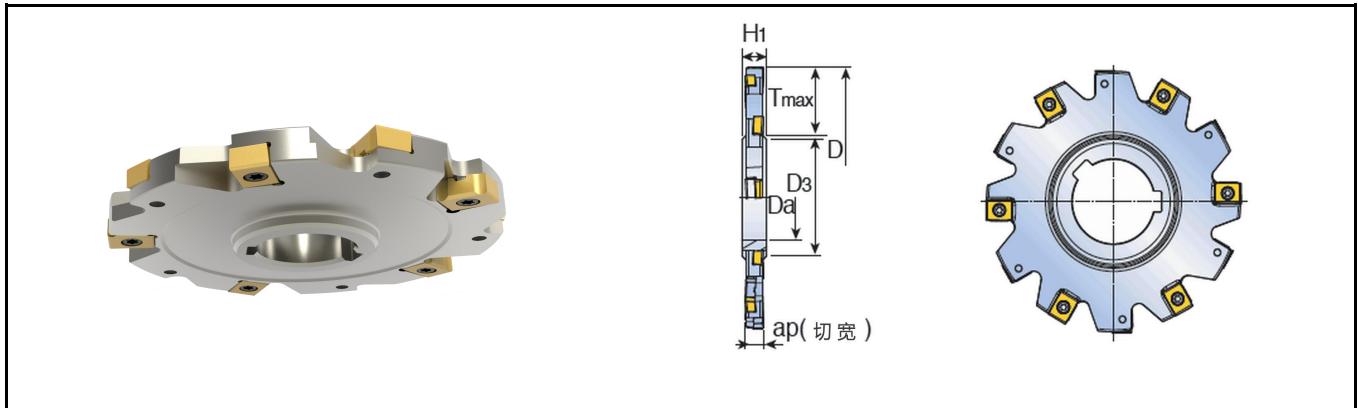
一款刀片左右方向皆可使用



# ICAL 3 SIDED INSERT BLADE CUTTER SERIES: CS



THREE SIDED EDGE MILL CUTTER: FIXED SINGLE INSERT TYPE



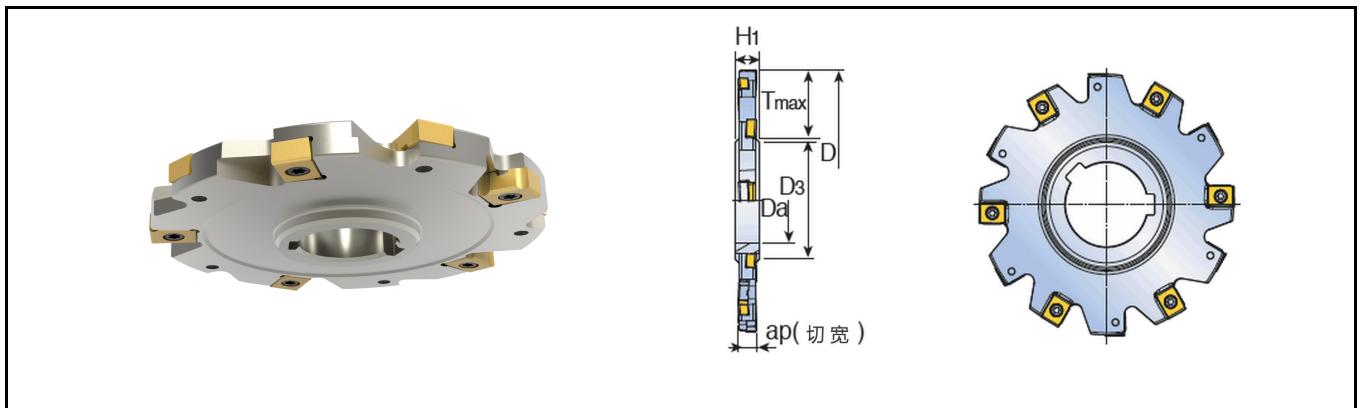
MODEL		ap (mm)	DIMENSION MM					Kg	INSERTS
			D	Da	D3	H1	Tmax		
CSMZN-863W04H22-023	4+4	4	63	22	34	8	12.0	0.1	ZNHT 023
CSMZN-1080W04H22-023	5+5	4	80	22	34	8	21.0	0.1	
CSMZN-12100W04H27-023	6+6	4	100	27	41	12	27.0	0.2	
CSMZN-14125W04H40-023	7+7	4	125	40	55	12	32.0	0.4	
CSMZN-863W05H22-028	4+4	5	63	22	34	8	13.0	0.1	
CSMZN-1080W05H22-028	5+5	5	80	22	34	8	21.0	0.2	ZNHT 028
CSMZN-12100W05H27-028	6+6	5	100	27	41	12	27.0	0.3	
CSMZN-14125W05H40-028	7+7	5	125	40	55	12	33.0	0.4	
CSMZN-18160W05H40-028	9+9	5	160	40	55	12	50.0	0.7	
CSMZN-863W06H22-033	4+4	6	63	22	34	8	13.0	0.1	
CSMZN-1080W06H22-033	5+5	6	80	22	34	8	21.5	0.2	ZNHT 033
CSMZN-12100W06H27-033	6+6	6	100	27	41	12	27.0	0.3	
CSMZN-14125W06H40-033	7+7	6	125	40	55	12	33.0	0.5	
CSMZN-18160W06H40-033	9+9	6	160	40	55	12	50.0	0.8	
CSMZN-20200W06H50-033	10+10	6	200	50	69	12	63.0	1.2	ZNHT 038
CSMZN-880W07H22-038	4+4	7	80	22	34	12	20.0	0.2	
CSMZN-10100W07H27-038	5+5	7	100	27	41	12	26.5	0.3	
CSMZN-12125W07H40-038	6+6	7	125	40	55	12	32.0	0.5	
CSMZN-16160W07H40-038	8+8	7	160	40	55	12	49.5	0.8	
CSMZN-18200W07H50-038	9+9	7	200	50	69	12	62.5	1.3	
CSMZN-24250W07H50-038	12+12	7	250	50	69	12	87.5	2.1	ZNHT 043
CSMZN-880W08H22-043	4+4	8	80	22	34	12	20.5	0.2	
CSMZN-10100W08H27-043	5+5	8	100	27	41	12	27.0	0.3	

◎STANDARD CUTTER WITHOUT INTERNAL COOLANT, INSERTS TO BE ORDERED SEPARATELY

# ICAL 3 SIDED INSERT BLADE CUTTER SERIES: CS



THREE SIDED EDGE MILL CUTTER: FIXED SINGLE INSERT TYPE



MODEL		ap (mm)	DIMENSION MM					Kg	INSERTS
			D	Da	D3	H1	Tmax		
CSMZN-12125W08H40-043	6+6	8	125	40	55	12	32.5	0.9	ZNHT 043
CSMZN-16160W08H40-043	8+8	8	160	40	55	12	50.0	0.9	
CSMZN-18200W08H50-043	9+9	8	200	50	69	12	63.0	1.4	
CSMZN-24250W08H50-043	12+12	8	250	50	69	12	88.0	2.3	
CSMZN-10100W09H27-048	5+5	9	100	27	41	12	27.5	0.4	ZNHT 048
CSMZN-12125W09H40-048	6+6	9	125	40	55	12	33.0	0.6	
CSMZN-16160W09H40-048	8+8	9	160	40	55	12	50.5	1.0	
CSMZN-18200W09H50-048	9+9	9	200	50	69	12	63.5	1.6	
CSMZN-24250W09H50-048	12+12	9	250	50	69	12	88.5	2.6	ZNHT 053
CSMZN-10100W10H27-053	5+5	10	100	27	41	12	28.0	0.4	
CSMZN-12125W10H40-053	6+6	10	125	40	55	12	33.5	0.6	
CSMZN-16160W10H40-053	8+8	10	160	40	55	12	51.0	1.1	
CSMZN-18200W10H50-053	9+9	10	200	50	69	12	64.0	1.8	
CSMZN-24250W10H50-053	12+12	10	250	50	69	12	89.0	2.9	

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT, INSERTS TO BE ORDERED SEPARATELY

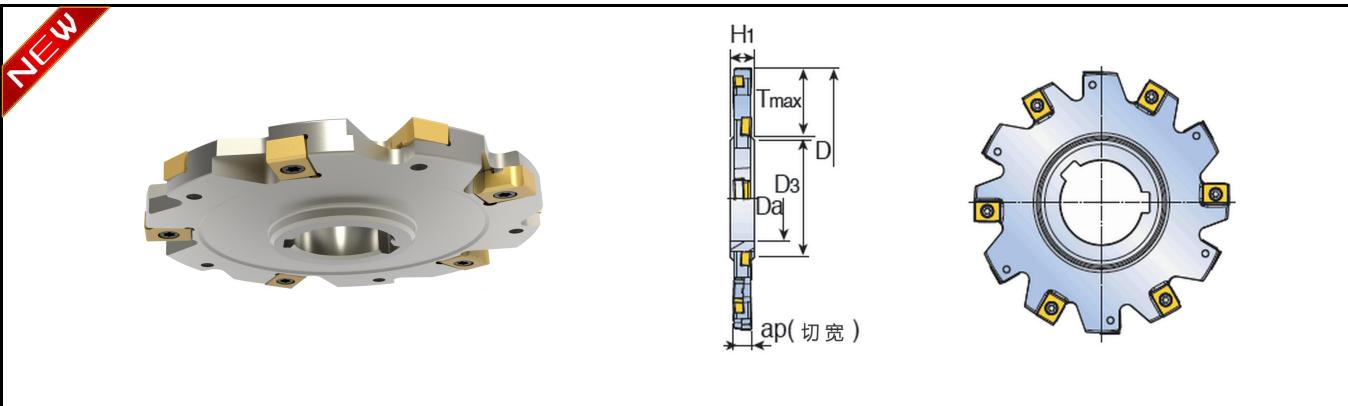
## ACCESSORY

MODEL	SCREWS	WRENCH	MODEL	SCREWS	WRENCH
CSMZN-023	CSX2531	CTS08W	CSMZN-038	CSX4051	CTS15W
CSMZN-028	CSX2542	CTS08W	CSMZN-043	CSX4061	CTS15W
CSMZN-033	CSX2553	CTS08W	CSMZN-048	CSX4070	CTS15W
			CSMZN-053	CSX4080	CTS15W

# ICAL 3 SIDED INSERT BLADE CUTTER SERIES: CS



THREE SIDED EDGE MILL CUTTER: FIXED SINGLE INSERT TYPE



MODEL		ap (mm)	DIMENSION MM					Kg	INSERTS
			D	Da	D3	H1	Tmax		
CSMZN-8100W11H27-058	4+4	11	100	27	41	16	28.0	0.4	ZNHT 058
CSMZN-10125W11H40-058	5+5	11	125	40	55	16	33.5	0.6	
CSMZN-14160W11H40-058	7+7	11	160	40	55	16	51.0	1.1	
CSMZN-16200W11H50-058	8+8	11	200	50	69	16	64.0	1.8	
CSMZN-22250W11H50-058	11+11	11	250	50	69	16	89.0	2.9	
CSMZN-8100W12H27-063	4+4	12	100	27	41	16	28.0	0.4	ZNHT 063
CSMZN-10125W12H40-063	5+5	12	125	40	55	16	33.5	0.6	
CSMZN-14160W12H40-063	7+7	12	160	40	55	16	51.0	1.1	
CSMZN-16200W12H50-063	8+8	12	200	50	69	16	64.0	1.8	
CSMZN-22250W12H50-063	11+11	12	250	50	69	16	89.0	2.9	
CSMZN-8100W13H27-068	4+4	13	100	27	41	16	28.0	0.4	ZNHT 068
CSMZN-10125W13H40-068	5+5	13	125	40	55	16	33.5	0.6	
CSMZN-14160W13H40-068	7+7	13	160	40	55	16	51.0	1.1	
CSMZN-16200W13H50-068	8+8	13	200	50	69	16	64.0	1.8	
CSMZN-22250W13H50-068	11+11	13	250	50	69	16	89.0	2.9	
CSMZN-8100W14H27-073	4+4	14	100	27	41	16	28.0	0.4	ZNHT 073
CSMZN-10125W14H40-073	5+5	14	125	40	55	16	33.5	0.6	
CSMZN-14160W14H40-073	7+7	14	160	40	55	16	51.0	1.1	
CSMZN-16200W14H50-073	8+8	14	200	50	69	16	64.0	1.8	
CSMZN-22250W14H50-073	11+11	14	250	50	69	16	89.0	2.9	

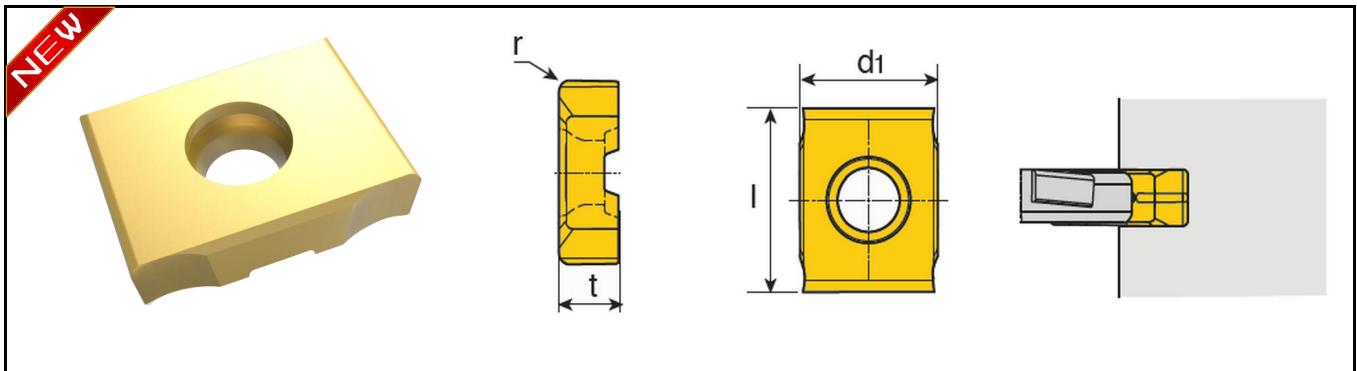
◎STANDARD CUTTER WITHOUT INTERNAL COOLANT, INSERTS TO BE ORDERED SEPARATELY

## ACCESSORY

MODEL	SCREWS	WRENCH
CSMZN-058/063	CSY5012	CTS20W
CSMZN-068/073		

B115

## INSERTS



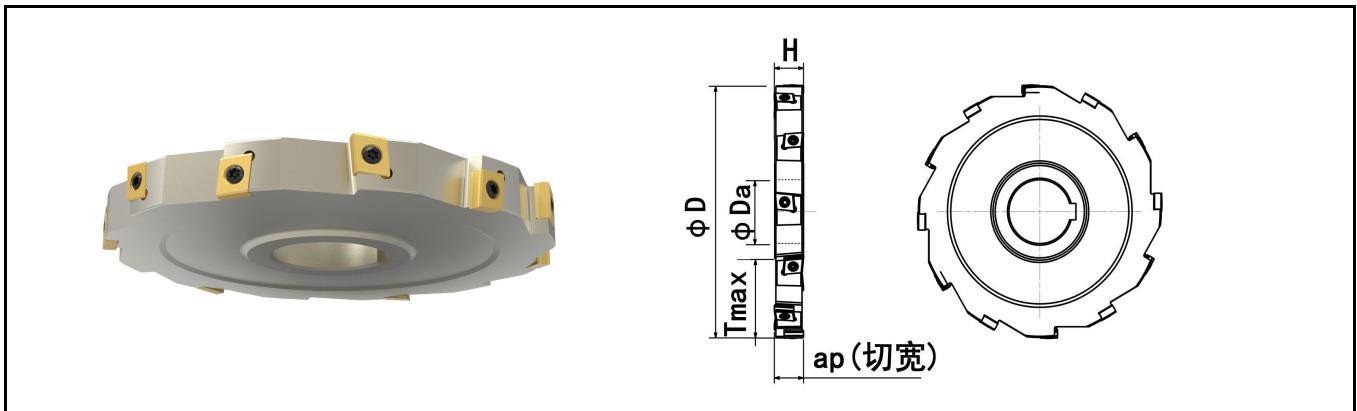
MODEL	EDGE LONG	DIMENSION MM				进给 (mm/齿)	GRADE CT5320
		l	d1	t	r		
ZNHT 023-04-ML	023	10	7.5	2.3	0.4	0.05~0.08	●
ZNHT 028-04-ML	028	10	7.5	2.8	0.4	0.05~0.08	●
ZNHT 033-04-ML	033	10	7.5	3.3	0.4	0.05~0.12	●
ZNHT 038-04-ML	038	13	10	3.8	0.4	0.05~0.12	●
ZNHT 043-04-ML	043	13	10	4.3	0.4	0.05~0.12	●
ZNHT 043-08-ML	043	13	10	4.3	0.8	0.05~0.12	●
ZNHT 048-04-ML	048	13	10	4.8	0.4	0.05~0.12	●
ZNHT 048-08-ML	048	13	10	4.8	0.8	0.05~0.12	●
ZNHT 053-04-ML	053	13	10	5.3	0.4	0.05~0.12	●
ZNHT 053-08-ML	053	13	10	5.3	0.8	0.05~0.12	●
ZNHT 058-04-ML	058	15	12	5.8	0.4	0.05~0.12	●
ZNHT 058-08-ML	058	15	12	5.8	0.8	0.05~0.12	●
ZNHT 063-04-ML	063	15	12	6.3	0.4	0.05~0.12	●
ZNHT 063-08-ML	063	15	12	6.3	0.8	0.05~0.12	●
ZNHT 068-08-ML	068	15	12	6.8	0.8	0.05~0.12	●
ZNHT 068-12-ML	068	15	12	6.8	1.2	0.05~0.12	●
ZNHT 073-08-ML	073	15	12	7.3	0.8	0.05~0.12	●
ZNHT 073-12-ML	073	15	12	7.3	1.2	0.05~0.12	●



# CN THREE SIDED MILL CUTTER: CSMCN-H



Single-piece three-sided milling cutter HOLDER



MODEL		DIMENSION MM					CONNECTOR	INSERTS
		ap	D	Da	H	T <sub>max</sub>		
CSMCN-663W15H22N-10	6	15	63	22	15	15	HUB	CNHX 1005
CSMCN-880W15H22N-10	8	15	80	22	15	24	HUB	
CSMCN-10100W15H27N-10	10	15	100	27	15	30	HUB	
CSMCN-12125W15H32N-10	12	15	125	32	15	40	HUB	
CSMCN-14160W15H40N-10	14	15	160	40	15	52	HUB	
CSMCN-16200W15H50N-10	16	15	200	50	15	65	HUB	
CSMCN-18250W15H60N-10	18	15	250	60	15	80	HUB	
CSMCN-663W20H22N-13	6	20	63	22	20	15	HUB	CNHX 1311
CSMCN-880W20H22N-13	8	20	80	22	20	24	HUB	
CSMCN-10100W20H27N-13	10	20	100	27	20	30	HUB	
CSMCN-12125W20H32N-13	12	20	125	32	20	40	HUB	
CSMCN-14160W20H40N-13	14	20	160	40	20	52	HUB	
CSMCN-16200W20H50N-13	16	20	200	50	20	65	HUB	
CSMCN-18250W20H60N-13	18	20	250	60	20	80	HUB	
CSMCN-663W25H22N-16	6	25	63	22	25	15	HUB	CNHX 1606
CSMCN-880W25H22N-16	8	25	80	22	25	24	HUB	
CSMCN-10100W25H27N-16	10	25	100	27	25	30	HUB	
CSMCN-12125W25H32N-16	12	25	125	32	25	40	HUB	
CSMCN-14160W25H40N-16	14	25	160	40	25	52	HUB	
CSMCN-16200W25H50N-16	16	25	200	50	25	65	HUB	
CSMCN-18250W25H60N-16	18	25	250	60	25	80	HUB	

◎ STANDARD CUTTER WITHOUT

◎ THIS HOLDER WITH 3 COMMON INSERTS, CN 10, CN 13, CN 16, YOU CAN CHOOSE AS YOUR REQUEST.

◎ CUT WIDTH RANGE 14~30mm, CUTTER MAX DIA  $\Phi$  700mm, CAN BE CUSTOMIZED IF YOU NEED.

◎ INSERTS TO BE ORDERED SEPARATELY

# MILLING CUTTER INSERTS



CN\*\*08/10/12/13/16

INSERTS	SHAPE				INTRODUCTION		INSERT PAGE			
INSERT MODEL	EDGE LONG	DIMENSION MM			FEED (mm/TEETH)	GRADE				
		1	d1	t		CT5320	CT5420	CT7320	CT7420	CT101
CNHX 100504-ML	10	—	—	—	0.4	0.1~0.3	●	●	●	●
CNHX 100508-ML	10	—	—	—	0.8	0.1~0.3	●	●	●	●
CNHX 100512-ML	10	—	—	—	1.2	0.1~0.3	●	●	●	●
CNHX 100516-ML	10	—	—	—	1.6	0.1~0.3	●	●	●	●
CNHX 121116	12	—	—	—	2.4	0.1~0.3	●	●	●	●
CNHX 121120	12	—	—	—	3.0	0.1~0.3	●	●	●	●
CNHX 131104-ML	13	12.7	11	5.4	0.4	0.1~0.35	●	●	●	●
CNHX 131108-ML	13	12.7	11	5.4	0.8	0.1~0.35	●	●	●	●
CNHX 131112-ML	13	12.7	11	5.4	1.2	0.1~0.35	●	●	●	●
CNHX 131116-ML	13	12.7	11	5.4	1.6	0.1~0.35	●	●	●	●
CNHX 131124-ML	13	12.7	11	5.4	2.4	0.1~0.35	●	●	●	●
CNHX 131130-ML	13	12.7	11	5.4	3.0	0.1~0.35	●	●	●	●
CNHX 160604-ML	16	16.0	12	6.4	0.4	0.1~0.4	●	●	●	●
CNHX 160608-ML	16	16.0	12	6.4	0.8	0.1~0.4	●	●	●	●
CNHX 160612-ML	16	16.0	12	6.4	1.2	0.1~0.4	●	●	●	●
CNHX 160616-ML	16	16.0	12	6.4	1.6	0.1~0.4	●	●	●	●
CNHX 160624-ML	16	16.0	12	6.4	2.4	0.1~0.4	●	●	●	●
CNHX 160630-ML	16	16.0	12	6.4	3.0	0.1~0.4	●	●	●	●

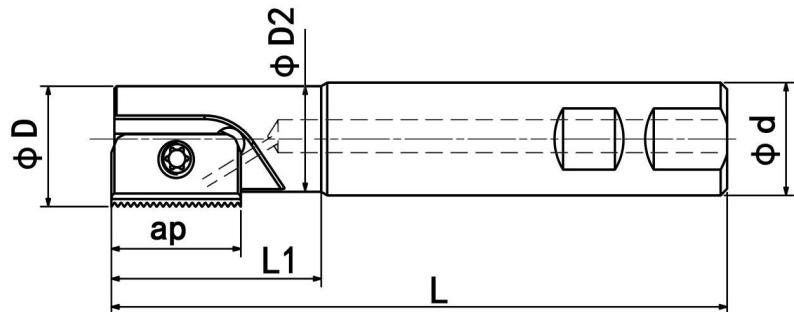
## ACCESSORY

MODEL	SCREWS	WRENCH
CSMCN-10	CSG4013-P	CTS15W-P
CSMCN-13	CSG4013-P	CTS15W-P
CSMCN-16	CSG5016	CTS20W

## Thread milling series: SR00



Thread Milling Shank (Single Insert)



MODEL		DIMENSION MM					INSERT ap (mm)
		D	D2	L1	L	d	
SR0009H12	1	9.5	7.5	14	85	20	TMT12
SR0010H12	1	9.9	7.6	16	85	20	TMT12
SR0012F14	1	12.0	8.9	20	75	20	TMT14
SR0014H14	1	14.5	11.2	25	85	20	TMT14
SR0017H14	1	17.0	13.4	30	85	20	TMT14
SR0018H21	1	18.0	14.4	30	85	20	TMT21
SR0021H21	1	21.0	16.5	40	94	20	TMT21
SR0029J30	1	29.0	22.4	50	110	25	TMT30
SR0048M40	1	48.0	35.0	78	153	40	TMT40

◎ STANDARD CUTTER WITH INTERNAL COOLANT

◎ ONLY COMPATIBLE WITH INSERTS: 12-18NPT, 12-18PTF, 12-19BSPT

◎ SR0018H21 NOT COMPATIBLE WITH: 2113.5ISO, 2117UN, 2118UN 21-11BSPT, 21-11.5NPT, 21-11.5NPTF

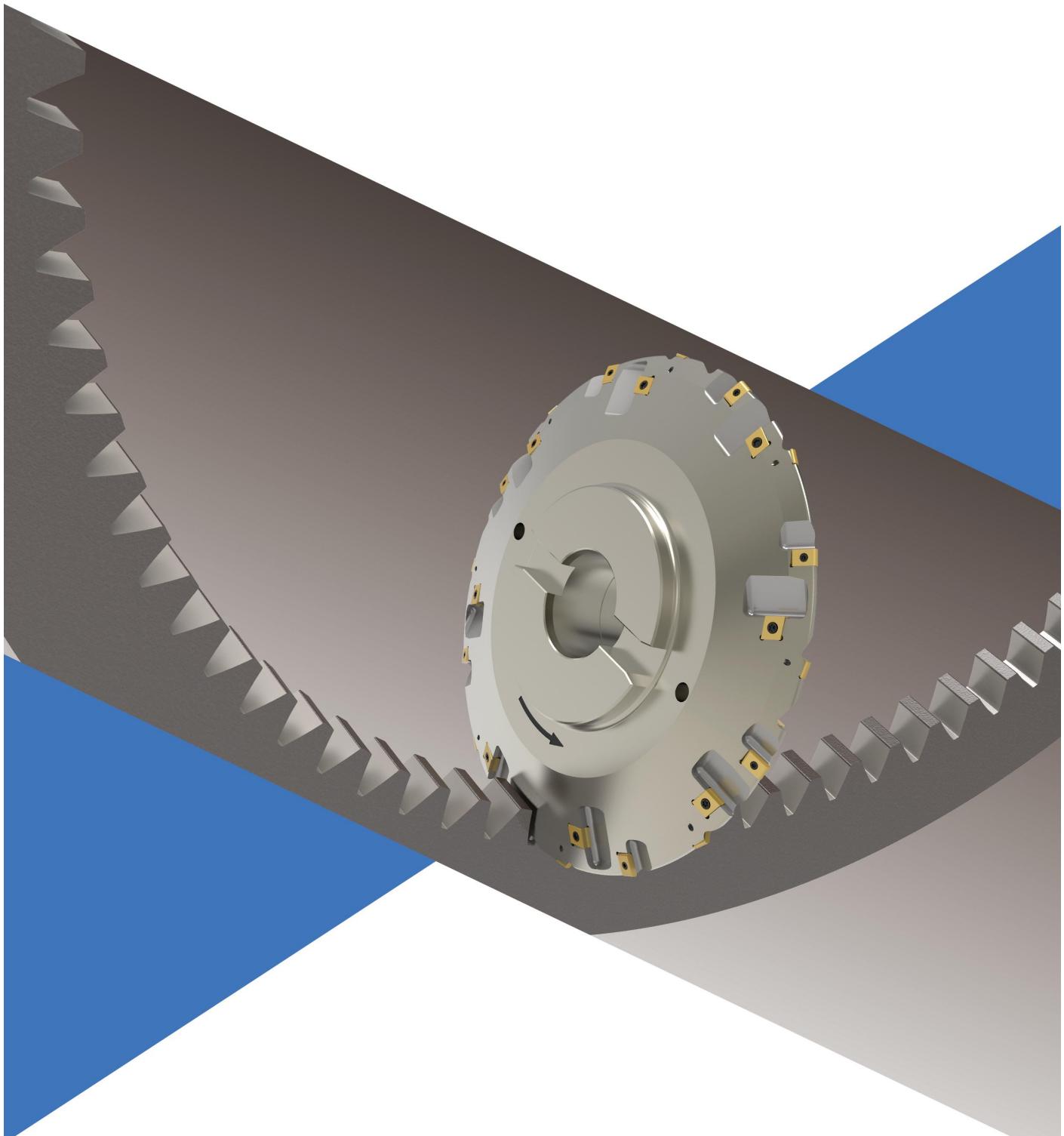
◎ INSERTS TO BE ORDERED SEPARATELY, COMPATIBLE WITH TAEGUTEC INSERTS

### ACCESSORY

MODEL	SCREWS	WRENCH
SR 12	S12	K12
SR 14	S14	K14
SR 21	S21	K21
SR 30	S30	K30
SR 40	S40	K40



GEAR MILLING CUTTER  
齿轮铣系列  
SERIES





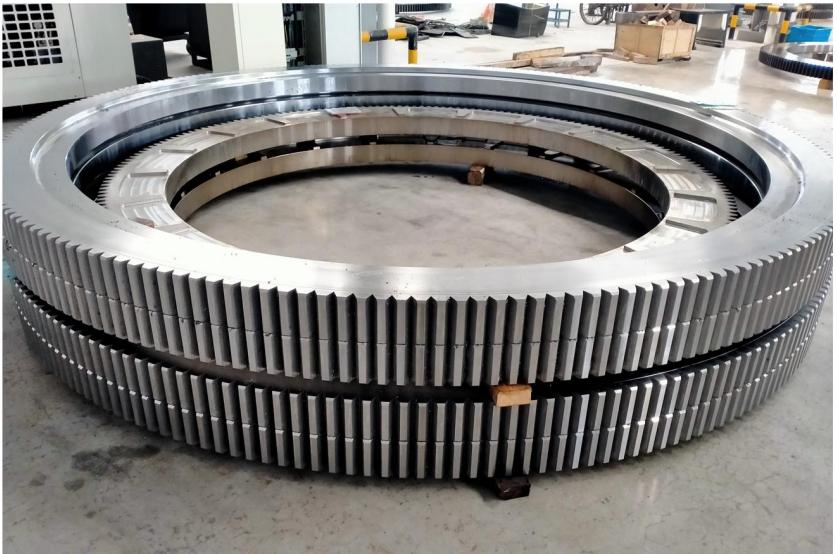
## Industry Application 行业应用

刀片式齿轮铣刀主要适用于加工各种大中型传动齿圈及齿条，如风电、工程机械、机床、建筑等行业中的基础传动零部件。

超尔研发并生产的齿轮铣刀盘及刀片，做工精良，质量稳定，经过客户的实际使用及检验：性能优越、结构可靠，刀具寿命好、性价比高，是客户替代进口的首选。

针对客户差异化的需求，可量身订制非标刀盘及刀片，提高生产效率，有效降低客户的生产成本，实现降本增效的目的。

超尔与您共话产品差异创新、探讨产品配套方案、携手合作共赢！



## Gear and rack processing case

齿轮齿条加工案例



粗铣齿轮刀盘



齿条刀盘



精铣2工位刀盘



精铣4工位刀盘

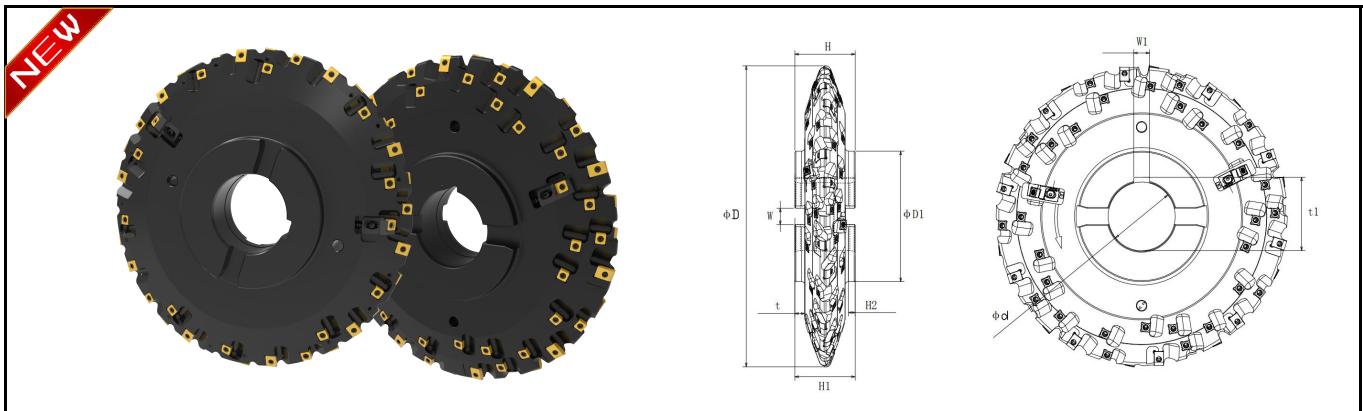
Chai Tools Gear and rack Series

超尔齿轮齿条系列

# Gear Rough Milling Series: CSM...A



Gear Rough Milling Cutter



MODEL		DIMENSIONS					MOULD	INSERTS
		D	d	H	zeff.	D1		
CSM-40400D90W80-M10A	40	400	90	80	8/4	190	10	16xC, 24xY/Z
CSM-56450D100W90-M10A	56	450	100	90	10/5	190		20xC, 36xY/Z
CSM-40400D90W80-M12A	40	400	90	80	8/4	190	12	16xD, 24xY/Z
CSM-56450D100W90-M12A	56	450	100	90	10/5	190		20xD, 36xY/Z
CSM-40400D90W80-M14A	40	400	90	80	8/4	190	14	16xE, 24xY/Z
CSM-56450D100W90-M14A	56	450	100	90	10/5	190		20xE, 36xY/Z
CSM-40400D90W80-M16A	40	400	90	80	8/4	190	16	16xF, 24xY/Z
CSM-56450D100W90-M16A	56	450	100	90	10/5	190		20xF, 36xY/Z
CSM-40400D90W80-M18A	40	400	90	80	8/4	190	18	16xG, 24xY/Z
CSM-56450D100W90-M18A	56	450	100	90	10/5	190		20xG, 36xY/Z
CSM-48400D90W80-M20A	48	400	90	80	8/4	190	20	16xH, 32xY/Z
CSM-60450D100W90-M20A	60	450	100	90	10/5	190		20xH, 40xY/Z
CSM-48400D90W80-M22A	48	400	90	80	8/4	190	22	16xI, 32xY/Z
CSM-60450D100W90-M22A	60	450	100	90	10/5	190		20xI, 40xY/Z
CSM-48400D90W80-M24A	48	400	90	80	8/4	190	24	16xJ, 32xY/Z
CSM-60450D100W90-M24A	60	450	100	90	10/5	190		20xJ, 40xY/Z

◎ ABOVE IS ONLY FOR REFERENCE.

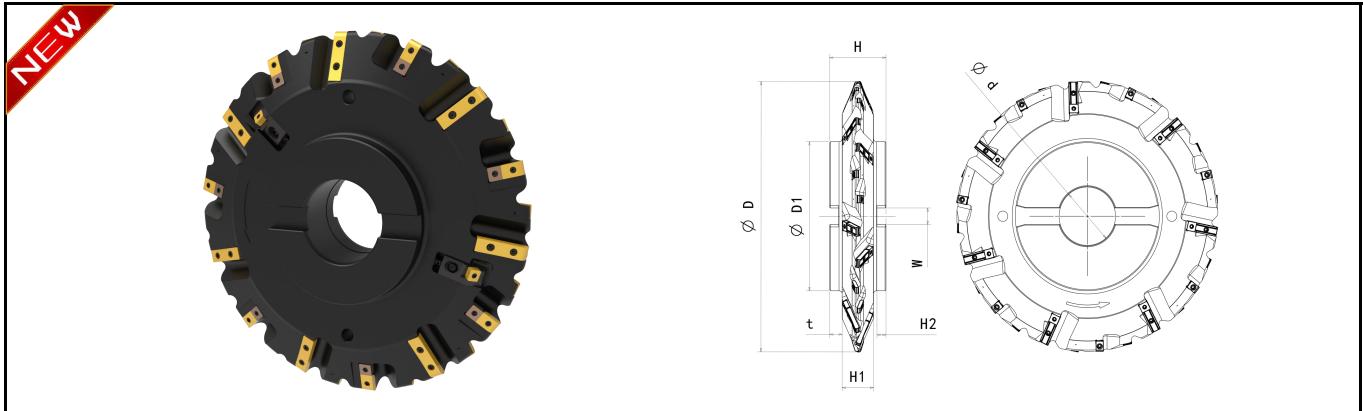
◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

## Gear two-station precision milling series: CSM...B



### Gear Two-Station Fine Milling Cutter



MODEL		DIMENSIONS					MOULD	INSERTS
		D	d	H	z <sub>eff.</sub>	D <sub>1</sub>		
CSM-28400D100W90-M10B	28	400	100	90	7/7	190	10	14xA, 14xC
CSM-32450D100W90-M10B	32	450	100	90	8/8	190		16xA, 16xC
CSM-28400D100W90-M12B	28	400	100	90	7/7	190	12	14xA, 14xD
CSM-32450D100W90-M12B	32	450	100	90	8/8	190		16xA, 16xD
CSM-28400D100W90-M14B	28	400	100	90	7/7	190	14	14xA, 14xE
CSM-32450D100W90-M14B	32	450	100	90	8/8	190		16xA, 16xE
CSM-28400D100W90-M16B	28	400	100	90	7/7	190	16	14xA, 14xF
CSM-32450D100W90-M16B	32	450	100	90	8/8	190		16xA, 16xF
CSM-28400D100W90-M18B	28	400	100	90	7/7	190	18	14xA, 14xG
CSM-32450D100W90-M18B	32	450	100	90	8/8	190		16xA, 16xG
CSM-28400D100W90-M20B	28	400	100	90	7/7	190	20	14xB, 14xH
CSM-32450D100W90-M20B	32	450	100	90	8/8	190		16xB, 16xH
CSM-28400D100W90-M22B	28	400	100	90	7/7	190	22	14xB, 14xI
CSM-32450D100W90-M22B	32	450	100	90	8/8	190		16xB, 16xI
CSM-28400D100W90-M24B	28	400	100	90	7/7	190	24	14xB, 14xJ
CSM-32450D100W90-M24B	32	450	100	90	8/8	190		16xB, 16xJ

◎ ABOVE IS ONLY FOR REFERENCE.

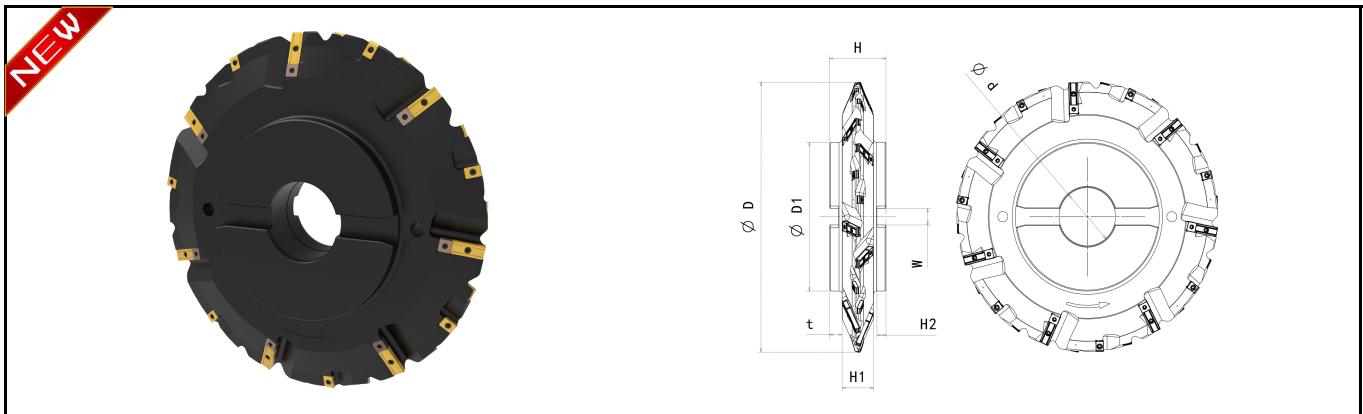
◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

## Gear Four-Station Fine Milling Series: CSM...C



### Gear Four-Station Fine Milling Cutter



MODEL		DIMENSIONS					MOULD	INSERTS
		D	d	H	z <sub>eff.</sub>	D <sub>1</sub>		
CSM-28400D100W90-M10C	28	400	100	90	7/7	190	10	14xA1, 14xC
CSM-32450D100W90-M10C	32	450	100	90	8/8	190		16xA1, 16xC
CSM-28400D100W90-M12C	28	400	100	90	7/7	190	12	14xA1, 14xD
CSM-32450D100W90-M12C	32	450	100	90	8/8	190		16xA1, 16xD
CSM-28400D100W90-M14C	28	400	100	90	7/7	190	14	14xA1, 14xE
CSM-32450D100W90-M14C	32	450	100	90	8/8	190		16xA1, 16xE
CSM-28400D100W90-M16C	28	400	100	90	7/7	190	16	14xA1, 14xF
CSM-32450D100W90-M16C	32	450	100	90	8/8	190		16xA1, 16xF
CSM-28400D100W90-M18C	28	400	100	90	7/7	190	18	14xA1, 14xG
CSM-32450D100W90-M18C	32	450	100	90	8/8	190		16xA1, 16xG

◎ ABOVE IS ONLY FOR REFERENCE.

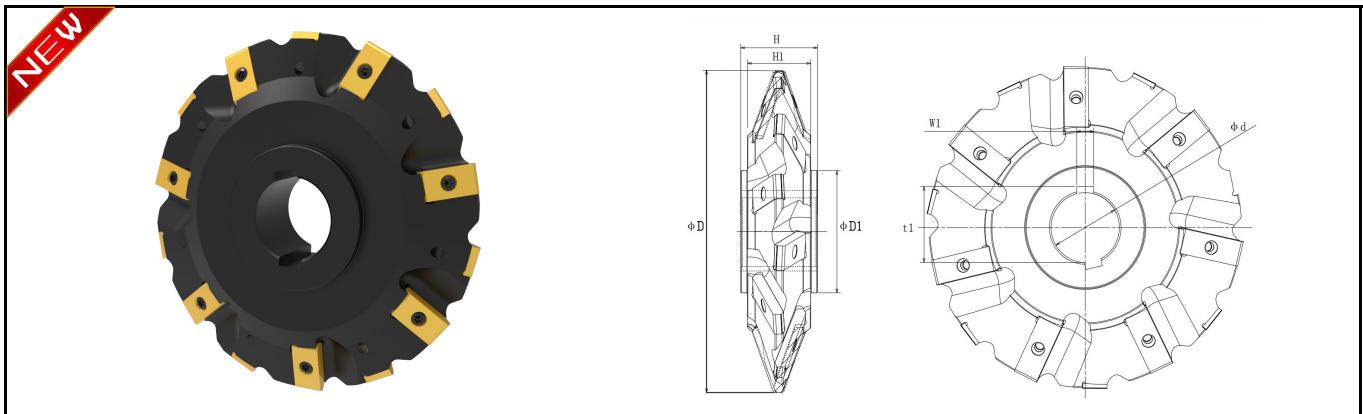
◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

◎ INSERTS TO BE ORDERED SEPARATELY

# GEAR Rack series: CSMLN...



## GEAR RACK MILL CUTTER



MODEL		DIMENSIONS		MOULD	INSERTS
		D	d		
CSMLN-14180D40-M8	14	180	40	8	CLX291406M08
CSMLN-22315D40-M8	22	315	40		
CSMLN-14180D40-M10	14	180	40	10	CLX291406M10
CSMLN-22315D40-M10	22	315	40		
CSMLN-14180D40-M12	14	180	40	12	CLX401406M12
CSMLN-22315D40-M12	22	315	40		
CSMLN-14180D40-M14	14	180	40	14	CLX401406M14
CSMLN-22315D40-M14	22	315	40		
CSMLN-14180D40-M16	14	180	40	16	CLX401406M16
CSMLN-22315D40-M16	22	315	40		
CSMLN-14180D40-M18	14	180	40	18	CLX401406M18
CSMLN-22315D40-M18	22	315	40		
CSMLN-14180D40-M20	14	180	40	20	CLX501406M20
CSMLN-22315D40-M20	22	315	40		
CSMLN-14180D40-M22	14	180	40	22	CLX601409M22
CSMLN-22315D40-M22	22	315	40		
CSMLN-14180D40-M24	14	180	40	24	CLX601409M24
CSMLN-22315D40-M24	22	315	40		

◎ ABOVE IS ONLY FOR REFERENCE.

◎ STANDARD CUTTER WITHOUT INTERNAL COOLANT

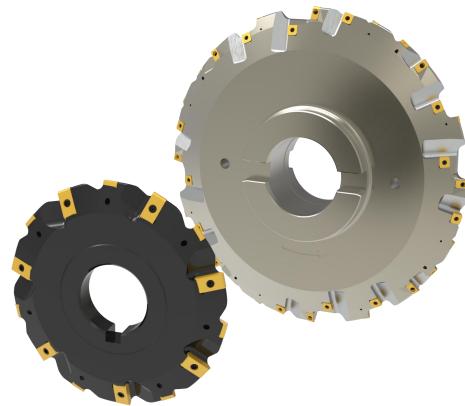
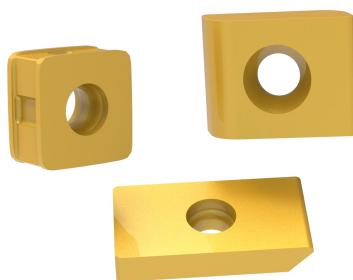
◎ INSERTS TO BE ORDERED SEPARATELY

# Gear Milling Series



Gear Milling Inserts

**NEW**



	INSERT CODE	MOULD	DIMENSIONS				
			L	H	W	R	HOLE
	C	10	19.05	14.3	4.8	3.8	5.4
	D	12	19.05	14.3	6.35	4.56	5.4
	E	14	19.05	14.3	6.35	5.32	5.4
	F	16	19.05	14.3	7.14	6.08	5.4
	G	18	19.05	14.3	7.14	6.84	5.4
	H	20	25.4	14.3	7.98	7.6	5.5
	I	22	25.4	14.3	7.98	7.6	5.5
	J	24	25.4	14.3	7.98	7.6	5.5

	INSERT	insert code	DIMENSIONS				
			L	H	W	CENTER HOLE	
	SNEA 1370	Y	13.02	13.02	7.0	4.4	
	CLX121206	Z	12.7	12.7	6.35	4.5	

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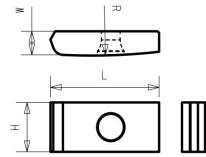
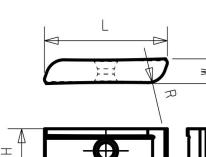
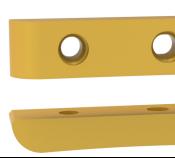
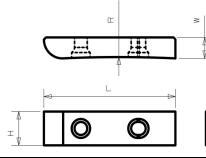
# Gear Milling Series

Gear Milling Inserts



**NEW**



	INSERT CODE	DIMENSIONS				
		L	H	W	CENTER	
		A	25.4	6.4	14.3	5.5
			28.3	5.2	14.3	5.5
			32	7	14.3	5.5
			38	7	14.3	5.5
			40.7	8	14.3	5.5
			42	8.5	14.3	5.5
		A1	25.4	6.4	14.3	5.5
			28.3	5.2	14.3	5.5
			32	7	14.3	5.5
			38	7	14.3	5.5
			40.7	8	14.3	5.5
			42	8.5	14.3	5.5
		B	54	14.3	7.8	5.7双
			57	14.3	8.8	5.7双

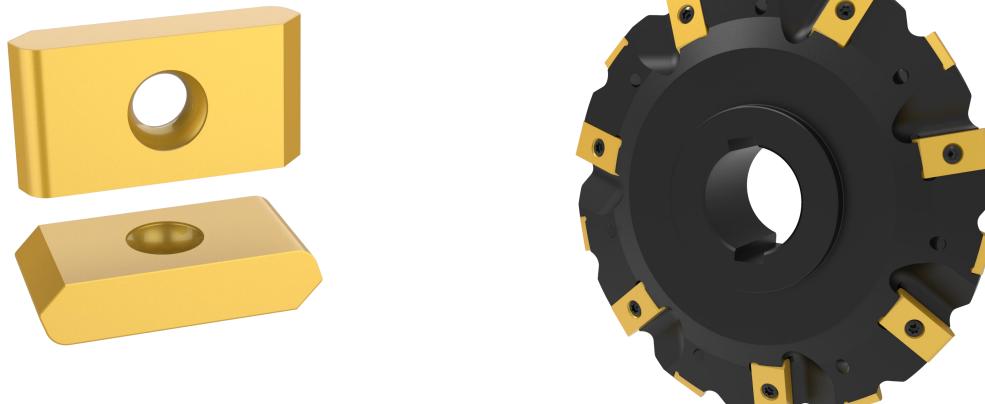
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## gear rack series

gear rack inserts



**NEW**



INSERT MODEL	MOULD	DIMENSIONS			
		L	H	W	CENTER
CLX301406	08/10	30	14.3	6	5.5
CLX401406	12	40	14.3	6	5.5
CLX501408	12/14/16/18	50	14.3	8	5.5d
CLX601409	22/24	60	14.3	9	5.5D

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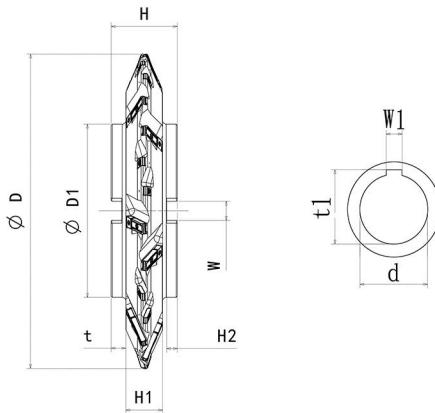
# 可转位齿轮铣刀询价参数

## ORDERING INFORMATION

---

### 刀具参数 TOOLS DATA

刀具外径/Outside diameter/D \_\_\_\_\_  
 孔径/Bore diameter/d \_\_\_\_\_  
 端面直径/Hub diameter/D1 \_\_\_\_\_  
 刀盘厚度/Cutter width/H \_\_\_\_\_  
 端面厚度/Hub width/H1 \_\_\_\_\_  
 键宽/Radial keyway width/W \_\_\_\_\_  
 键深/Radial keyway depth/t \_\_\_\_\_  
 轴宽/Axial keyway width/W1 \_\_\_\_\_  
 轴深/Axial keyway depth/t1 \_\_\_\_\_



### 齿轮参数 GEAR INFORMATION

齿轮类型/Gear Type      内齿轮/Internal  外齿轮/External  齿条/Rack   
 模数/Module/M \_\_\_\_\_  
 齿数/NO.of teeth/z \_\_\_\_\_  
 压力角/Pressure angle/a \_\_\_\_\_  
 螺旋角/Helix angle/β \_\_\_\_\_  
 齿顶变位系数/Addendum modification coefficient/Xn \_\_\_\_\_  
 齿顶圆直径/Tip diameter/Da \_\_\_\_\_  
 齿根圆直径/Root diameter/Df \_\_\_\_\_  
 齿根圆角/Root radius/Rf \_\_\_\_\_  
 成品公法线/Base tangent length over k/Wk \_\_\_\_\_  
 跨齿数/Number of measuring teeth/k \_\_\_\_\_  
 成品跨棒距/Dimension over balls/Md \_\_\_\_\_  
 量棒直径/Ball diameter/d \_\_\_\_\_  
 成品法向齿厚/Normal circular thickness of finishing/Sn \_\_\_\_\_  
 精度等级/Gear quality class \_\_\_\_\_  
 加工工艺/Process      粗铣/Roughing  半精铣/Semi-finishing  精铣/Finishing   
 粗加工齿侧留量/Side stock for roughing \_\_\_\_\_  
 粗加工齿顶留量/Tip stock for roughing \_\_\_\_\_

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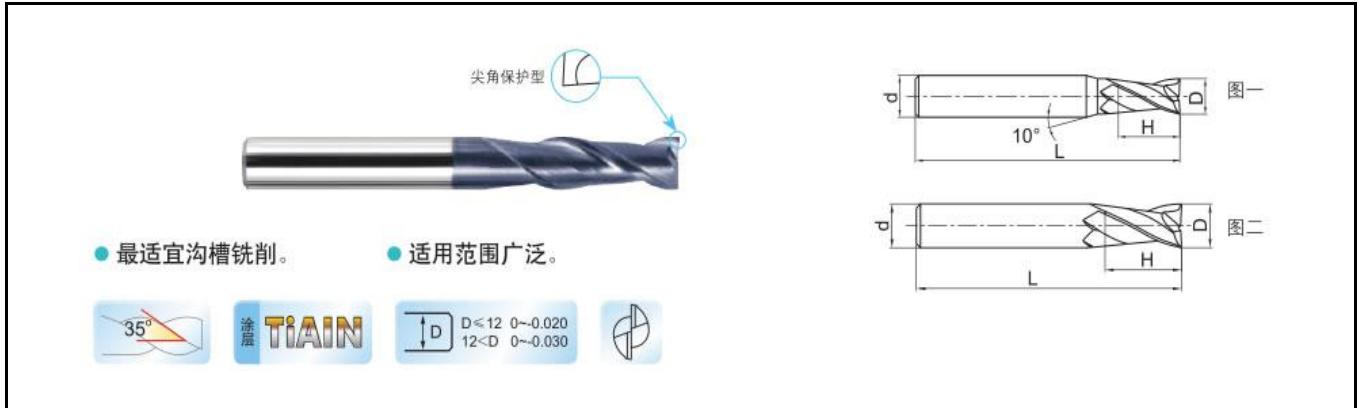
### 刀片要求(选填) INSERT REQUIREMENTS

长条刀片 (工位) /Long insert for side (No of Effective edge)  
 顶齿刀片/Insert for tip \_\_\_\_\_  
 侧齿刀片/Insert for side \_\_\_\_\_  
 刀垫/Shim \_\_\_\_\_  
 打标/Marking \_\_\_\_\_  
 螺钉/Screw \_\_\_\_\_

## CLF2



General purpose machining, two-flute straight shank flat head solid carbide end mill



MODEL		DIMENSION				PIC
		D	d	H	L	
CLF2-D010H003L50	2	1.0	4	3	50	PIC 1
CLF2-D015H004L50	2	1.5	4	4	50	PIC 1
CLF2-D020H006L50	2	2.0	4	6	50	PIC 1
CLF2-D025H008L50	2	2.5	4	8	50	PIC 1
CLF2-D030H008L50	2	3.0	4	8	50	PIC 1
CLF2-D040H011L50	2	4.0	4	11	50	PIC 2
CLF2-D010H003L50	2	1.0	6	3	50	PIC 1
CLF2-D015H004L50	2	1.5	6	4	50	PIC 1
CLF2-D020H006L50	2	2.0	6	6	50	PIC 1
CLF2-D025H008L50	2	2.5	6	8	50	PIC 1
CLF2-D030H008L50	2	3.0	6	8	50	PIC 1
CLF2-D035H010L50	2	3.5	6	10	50	PIC 1
CLF2-D040H011L50	2	4.0	6	11	50	PIC 1
CLF2-D045H011L50	2	4.5	6	11	50	PIC 1
CLF2-D050H013L50	2	5.0	6	13	50	PIC 1
CLF2-D055H016L50	2	5.5	6	16	50	PIC 1

### SUITABLE MATERIAL

◆ VERY SUITABLE

◇ SUITABLE

MATERIAL									
Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	cast iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy heat res. alloy
		~40HRC	~50HRC	~55HRC					
◆	◆	◆	◇		◇	◆			

## CLF2

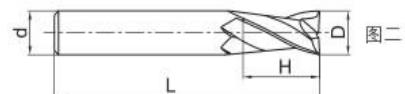
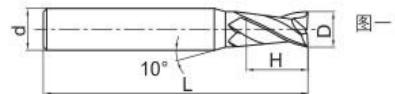


General purpose machining, two-flute straight shank flat head solid carbide end mill



● 最适宜沟槽铣削。

● 适用范围广泛。



MODEL	TEETH Z	DIMENSION				PIC
		D	d	H	L	
CLF2-D060H016L50	2	6.0	6	16	50	PIC 2
CLF2-D070H020L60	2	7.0	8	20	60	PIC 1
CLF2-D080H020L60	2	8.0	8	20	60	PIC 2
CLF2-D090H022L75	2	9.0	10	22	75	PIC 1
CLF2-D100H025L75	2	10.0	10	25	75	PIC 2
CLF2-D110H026L75	2	11.0	12	26	75	PIC 1
CLF2-D120H030L75	2	12.0	12	30	75	PIC 2
CLF2-D140H032L75	2	14.0	14	32	75	PIC 2
CLF2-D160H045L100	2	16.0	16	45	100	PIC 2
CLF2-D180H045L100	2	18.0	18	45	100	PIC 2
CLF2-D200H045L100	2	20.0	20	45	100	PIC 2

### SUITABLE MATERIAL

◆ VERY SUITABLE

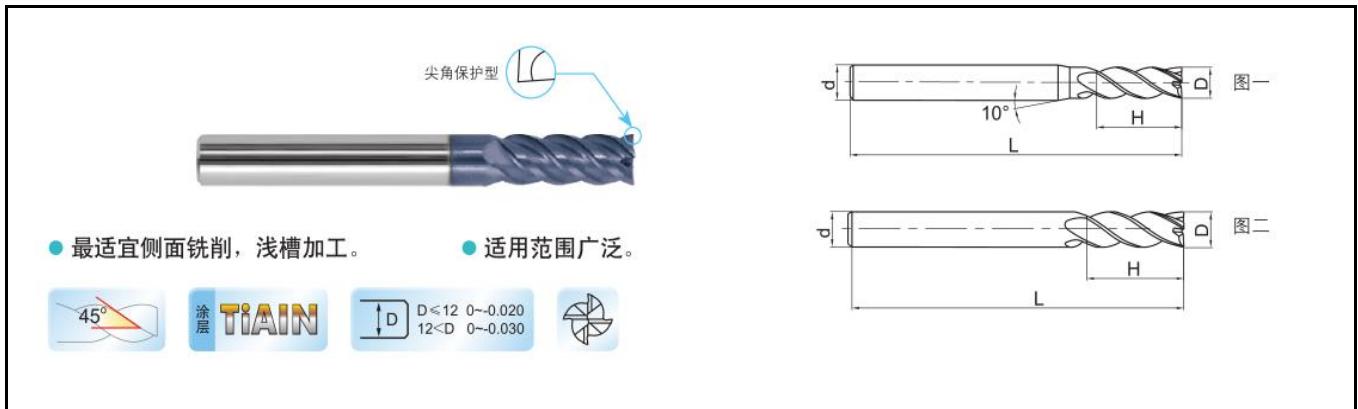
◇ SUITABLE

MATERIAL						
Carbon steel	steel alloy	Pre-hardened steel, hardened steel			SS	cast iron Ductile Iron
		~40HRC	~50HRC	~55HRC		
◆	◆	◆	◇		◇	◆

# CLF4



General purpose machining, four-blade straight shank flat head solid carbide end mill



MODEL	TEETH Z	DIMENSION				PIC
		D	d	H	L	
CLF4-D010H003L50	4	1.0	4	3	50	PIC 1
CLF4-D015H004L50	4	1.5	4	4	50	PIC 1
CLF4-D020H006L50	4	2.0	4	6	50	PIC 1
CLF4-D025H008L50	4	2.5	4	8	50	PIC 1
CLF4-D030H008L50	4	3.0	4	8	50	PIC 1
CLF4-D040H011L50	4	4.0	4	11	50	PIC 2
CLF4-D010H003L50	4	1.0	6	3	50	PIC 1
CLF4-D015H004L50	4	1.5	6	4	50	PIC 1
CLF4-D020H006L50	4	2.0	6	6	50	PIC 1
CLF4-D025H008L50	4	2.5	6	8	50	PIC 1
CLF4-D030H008L50	4	3.0	6	8	50	PIC 1
CLF4-D035H010L50	4	3.5	6	10	50	PIC 1
CLF4-D040H011L50	4	4.0	6	11	50	PIC 1
CLF4-D045H011L50	4	4.5	6	11	50	PIC 1
CLF4-D050H013L50	4	5.0	6	13	50	PIC 1
CLF4-D055H016L50	4	5.5	6	16	50	PIC 1

## MATERIAL

◆ VERY SUITABLE

◇ SUITABLE

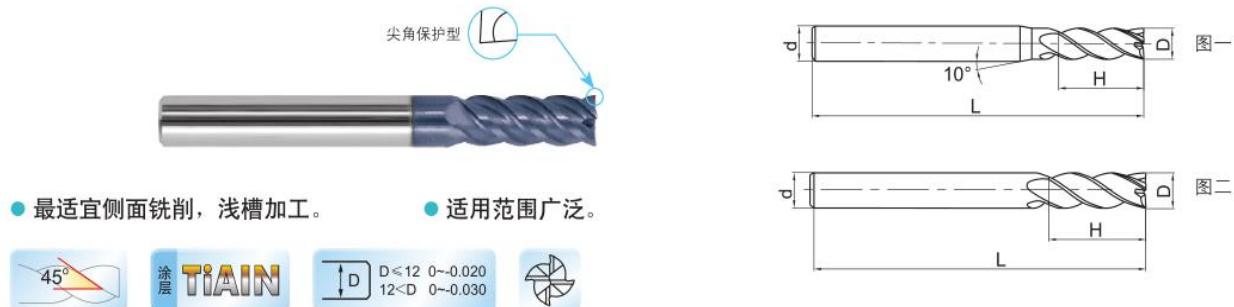
## MATERIAL

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◇		◇	◆				

## CLF4



General purpose machining, four-blade straight shank flat head solid carbide end mill



MODEL	TEETH Z	DIMENSION				PIC
		D	d	H	L	
CLF4-D060H016L50	4	6.0	6	16	50	PIC 2
CLF4-D070H020L60	4	7.0	8	20	60	PIC 1
CLF4-D080H020L60	4	8.0	8	20	60	PIC 2
CLF4-D090H022L75	4	9.0	10	22	75	PIC 1
CLF4-D010H025L75	4	10.0	10	25	75	PIC 2
CLF4-D011H026L75	4	11.0	12	26	75	PIC 1
CLF4-D012H030L75	4	12.0	12	30	75	PIC 2
CLF4-D014H032L75	4	14.0	14	32	75	PIC 2
CLF4-D016H045L100	4	16.0	16	45	100	PIC 2
CLF4-D018H045L100	4	18.0	18	45	100	PIC 2
CLF4-D020H045L100	4	20.0	20	45	100	PIC 2

### SUITABLE MATERIAL

◆ VERY SUITABLE

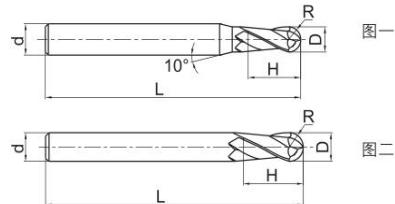
◇ SUITABLE

Processed material											
Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron		COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC		Ductile Iron					
◆	◆	◆	◇		◇	◆					

## CLB2



General purpose machining, two-flute straight shank ball nose solid carbide end mill



● 适用于仿形铣削，可作高速加工。 ● 适用范围广泛。



MODEL	TEETH Z	DIMENSION					PIC
		D	R	d	H	L	
CLB2-D010H002L50	2	1.0	0.5	4	2	50	PIC 1
CLB2-D015H003L50	2	1.5	0.75	4	3	50	PIC 1
CLB2-D020H004L50	2	2.0	1.0	4	4	50	PIC 1
CLB2-D025H005L50	2	2.5	1.25	4	5	50	PIC 1
CLB2-D030H006L50	2	3.0	1.5	4	6	50	PIC 1
CLB2-D040H008L50	2	4.0	2.0	4	8	50	PIC 2
CLB2-D010H002L50	2	1.0	0.5	6	2	50	PIC 1
CLB2-D015H003L50	2	1.5	0.75	6	3	50	PIC 1
CLB2-D020H004L50	2	2.0	1.0	6	4	50	PIC 1
CLB2-D025H005L50	2	2.5	1.25	6	5	50	PIC 1
CLB2-D030H006L50	2	3.0	1.5	6	6	50	PIC 1
CLB2-D035H008L50	2	3.5	1.75	6	8	50	PIC 1
CLB2-D040H008L50	2	4.0	2.0	6	8	50	PIC 1
CLB2-D050H010L50	2	5.0	2.5	6	10	50	PIC 1
CLB2-D055H012L50	2	5.5	2.75	6	12	50	PIC 1
CLB2-D060H012L50	2	6.0	3.0	6	12	50	PIC 2

### Worked material

◆ VERY SUITABLE

◇ SUITABLE

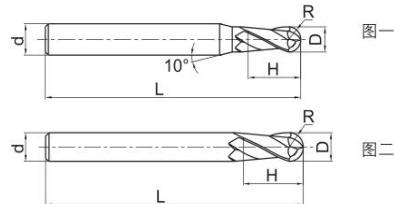
### Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◇		◇	◆				

## CLB2



General purpose machining, two-flute straight shank ball nose solid carbide end mill



● 适用于仿形铣削，可作高速加工。 ● 适用范围广泛。



MODEL	TEETH Z	DIMENSION					PIC
		D	R	d	H	L	
CLB2-D070H014L60	2	7.0	3.5	8	14	60	PIC 1
CLB2-D080H016L60	2	8.0	4.0	8	16	60	PIC 2
CLB2-D090H018L75	2	9.0	4.5	10	18	75	PIC 1
CLB2-D100H020L75	2	10.0	5.0	10	20	75	PIC 2
CLB2-D120H024L75	2	12.0	6.0	12	24	75	PIC 2
CLB2-D140H028L75	2	14.0	7.0	14	28	75	PIC 2
CLB2-D160H032L100	2	16.0	8.0	16	32	100	PIC 2
CLB2-D200H040L100	2	20.0	10.0	20	40	100	PIC 2

### material

◆ VERY SUITABLE

◇ SUITABLE

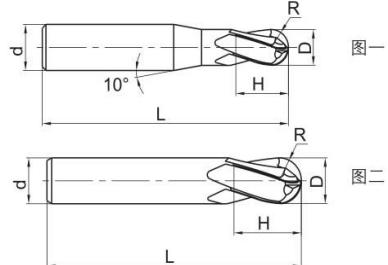
### Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◇		◇	◆				

# CLB4



General purpose machining, four-flute straight shank ball nose solid carbide end mill



- 四刃球头铣刀可实现较高的进给速度，实现较高的切削加工效率。



涂层 TiAIN

D≤12 0~0.020  
12<D 0~0.030

R ±0.01



MODEL	TEETH Z	DIMENSION					PIC
		D	R	d	H	L	
CLB4-D030H006L50	4	3.0	1.5	6	6	50	PIC 1
CLB4-D040H008L50	4	4.0	2.0	6	8	50	PIC 1
CLB4-D050H010L50	4	5.0	2.5	6	10	50	PIC 1
CLB4-D060H012L50	4	6.0	3.0	6	12	50	PIC 2
CLB4-D080H016L60	4	8.0	4.0	8	16	60	PIC 2
CLB4-D100H020L75	4	10.0	5.0	10	20	75	PIC 2
CLB4-D120H024L75	4	12.0	6.0	12	24	75	PIC 2
CLB4-D140H028L75	4	14.0	7.0	14	28	75	PIC 2
CLB4-D160H032L100	4	16.0	8.0	16	32	100	PIC 2
CLB4-D180H036L100	4	18.0	9.0	18	36	100	PIC 2
CLB4-D200H040L100	4	20.0	10.0	20	40	100	PIC 2

## MATERIAL

◆ VERY SUITABLE

◇ SUITABLE

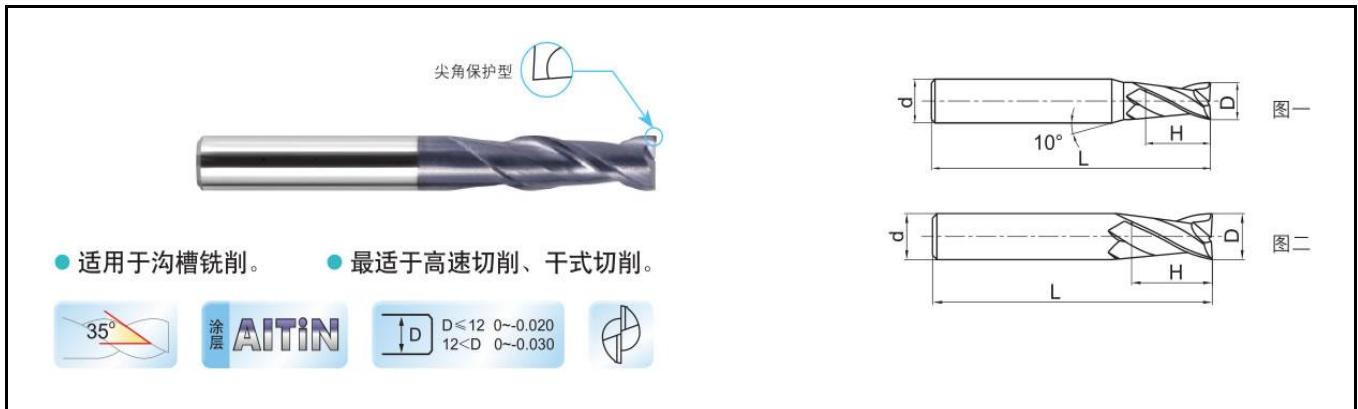
## Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◇		◇	◆				

## CHF2



High hardness steel machining, two-blade straight shank flat head solid carbide end mill



MODEL	TEETH Z	DIMENSION				PIC
		D	d	H	L	
CHF2-D010H003L50	2	1.0	4	3	50	PIC 1
CHF2-D015H004L50	2	1.5	4	4	50	PIC 1
CHF2-D020H006L50	2	2.0	4	6	50	PIC 1
CHF2-D025H008L50	2	2.5	4	8	50	PIC 1
CHF2-D030H008L50	2	3.0	4	8	50	PIC 1
CHF2-D040H011L50	2	4.0	4	11	50	PIC 2
CHF2-D010H003L50	2	1.0	6	3	50	PIC 1
CHF2-D015H004L50	2	1.5	6	4	50	PIC 1
CHF2-D020H006L50	2	2.0	6	6	50	PIC 1
CHF2-D025H008L50	2	2.5	6	8	50	PIC 1
CHF2-D030H008L50	2	3.0	6	8	50	PIC 1
CHF2-D035H010L50	2	3.5	6	10	50	PIC 1
CHF2-D040H011L50	2	4.0	6	11	50	PIC 1
CHF2-D045H011L50	2	4.5	6	11	50	PIC 1
CHF2-D050H013L50	2	5.0	6	13	50	PIC 1
CHF2-D055H016L50	2	5.5	6	16	50	PIC 1

Used material SUIT

◆ VERY SUITABLE

◇ SUITABLE

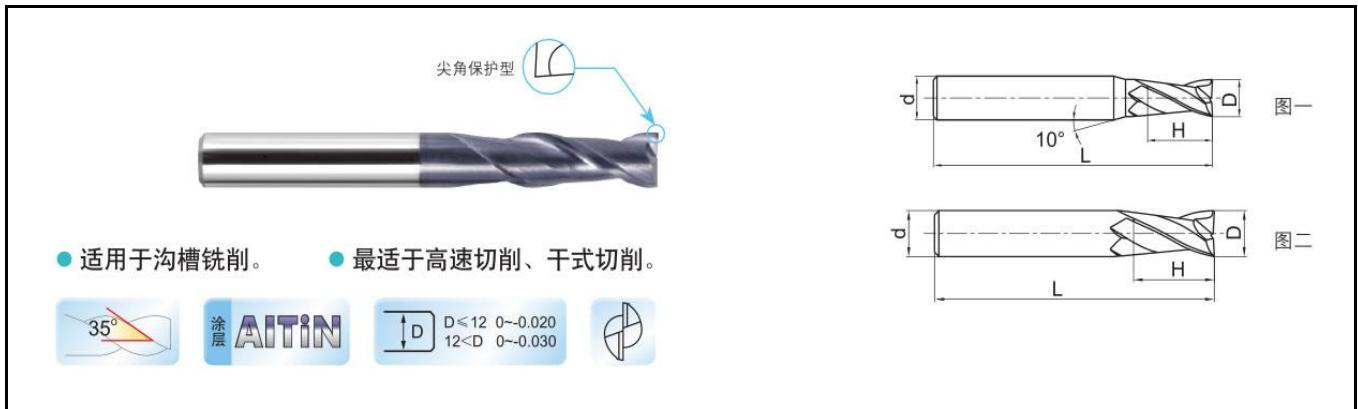
### Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
		◇	◆			◇				

## CHF2



High hardness steel machining, two-blade straight shank flat head solid carbide end mill



MODEL	TEETH Z	DIMENSION				PIC
		D	d	H	L	
CHF2-D060H016L50	2	6.0	6	16	50	PIC 2
CHF2-D070H020L60	2	7.0	8	20	60	PIC 1
CHF2-D080H020L60	2	8.0	8	20	60	PIC 2
CHF2-D090H022L75	2	9.0	10	22	75	PIC 1
CHF2-D100H025L75	2	10.0	10	25	75	PIC 2
CHF2-D110H026L75	2	11.0	12	26	75	PIC 1
CHF2-D120H030L75	2	12.0	12	30	75	PIC 2
CHF2-D140H032L100	2	14.0	14	32	100	PIC 2
CHF2-D160H045L100	2	16.0	16	45	100	PIC 2
CHF2-D180H045L100	2	18.0	18	45	100	PIC 2
CHF2-D200H045L100	2	20.0	20	45	100	PIC 2

### Used material SUIT

◆ VERY SUITABLE

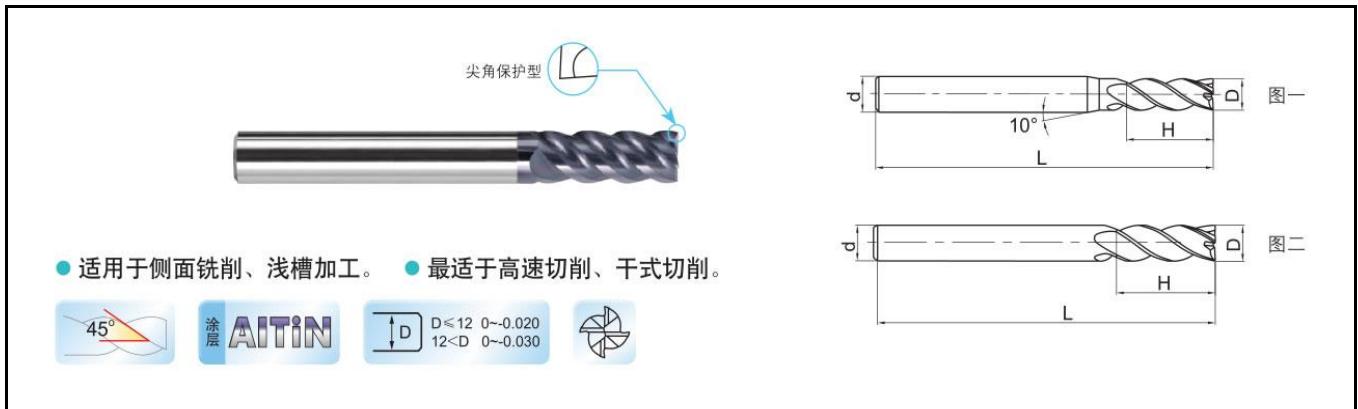
◇ SUITABLE

Processed material										
Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
		◇		◆		◇				

# CHF4



High hardness steel machining, four-blade straight shank  
flat head solid carbide end mill



● 适用于侧面铣削、浅槽加工。 ● 最适于高速切削、干式切削。

MODEL	TEETH Z	DIMENSION				PIC
		D	d	H	L	
CHF4-D010H003L50	4	1.0	4	3	50	PIC 1
CHF4-D015H004L50	4	1.5	4	4	50	PIC 1
CHF4-D020H006L50	4	2.0	4	6	50	PIC 1
CHF4-D025H008L50	4	2.5	4	8	50	PIC 1
CHF4-D030H008L50	4	3.0	4	8	50	PIC 1
CHF4-D040H011L50	4	4.0	4	11	50	PIC 2
CHF4-D010H003L50	4	1.0	6	3	50	PIC 1
CHF4-D015H004L50	4	1.5	6	4	50	PIC 1
CHF4-D020H006L50	4	2.0	6	6	50	PIC 1
CHF4-D025H008L50	4	2.5	6	8	50	PIC 1
CHF4-D030H008L50	4	3.0	6	8	50	PIC 1
CHF4-D035H010L50	4	3.5	6	10	50	PIC 1
CHF4-D040H011L50	4	4.0	6	11	50	PIC 1
CHF4-D045H011L50	4	4.5	6	11	50	PIC 1
CHF4-D050H013L50	4	5.0	6	13	50	PIC 1
CHF4-D055H016L50	4	5.5	6	16	50	PIC 1

## material

◆ VERY SUITABLE

◇ SUITABLE

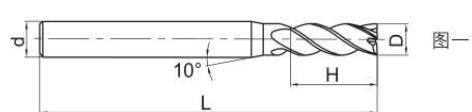
## Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
		◇	◆			◇				

# CHF4



High hardness steel machining, four-blade straight shank flat head solid carbide end mill

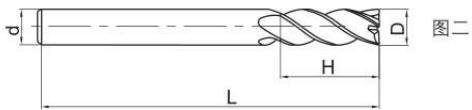


● 适用于侧面铣削、浅槽加工。 ● 最适于高速切削、干式切削。



涂层  
AITiN

D  
D≤12 0~0.020  
12<D 0~0.030



MODEL	TEETH Z	DIMENSION				PIC
		D	d	H	L	
CHF4-D060H016L50	4	6.0	6	16	50	PIC 2
CHF4-D070H020L60	4	7.0	8	20	60	PIC 1
CHF4-D080H020L60	4	8.0	8	20	60	PIC 2
CHF4-D090H022L75	4	9.0	10	22	75	PIC 1
CHF4-D100H025L75	4	10.0	10	25	75	PIC 2
CHF4-D110H026L75	4	11.0	12	26	75	PIC 1
CHF4-D120H030L75	4	12.0	12	30	75	PIC 2
CHF4-D140H032L75	4	14.0	14	32	75	PIC 2
CHF4-D160H045L100	4	16.0	16	45	100	PIC 2
CHF4-D180H045L100	4	18.0	18	45	100	PIC 2
CHF4-D200H045L100	4	20.0	20	45	100	PIC 2

## material

◆ VERY SUITABLE

◇ SUITABLE

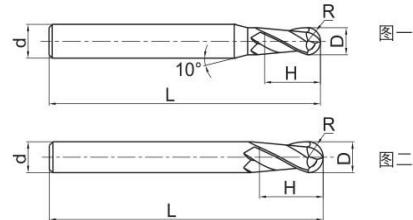
## Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
		◇		◆		◇				

## CHB2



High hardness steel machining, two-edged straight shank ball nose solid carbide end mill



- 适用于仿形铣削。
- 最适于高速切削、干式切削。



MODEL	TEETH Z	DIMENSION					PIC
		D	R	d	H	L	
CHB2-D010H002L50	2	1.0	0.5	4	2	50	PIC 1
CHB2-D015H003L50	2	1.5	0.75	4	3	50	PIC 1
CHB2-D020H004L50	2	2.0	1.0	4	4	50	PIC 1
CHB2-D025H005L50	2	2.5	1.25	4	5	50	PIC 1
CHB2-D030H006L50	2	3.0	1.5	4	6	50	PIC 1
CHB2-D040H008L50	2	4.0	2.0	4	8	50	PIC 2
CHB2-D010H002L50	2	1.0	0.5	6	2	50	PIC 1
CHB2-D015H003L50	2	1.5	0.75	6	3	50	PIC 1
CHB2-D020H004L50	2	2.0	1.0	6	4	50	PIC 1
CHB2-D025H005L50	2	2.5	1.25	6	5	50	PIC 1
CHB2-D030H006L50	2	3.0	1.5	6	6	50	PIC 1
CHB2-D035H008L50	2	3.5	1.75	6	8	50	PIC 1
CHB2-D040H008L50	2	4.0	2.0	6	8	50	PIC 1
CHB2-D050H010L50	2	5.0	2.5	6	10	50	PIC 1
CHB2-D055H012L50	2	5.5	2.75	6	12	50	PIC 1
CHB2-D060H012L50	2	6.0	3.0	6	12	50	PIC 2

Used material SUIT:

◆ VERY SUITABLE

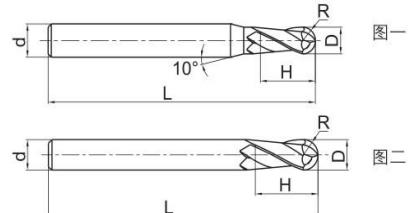
◇ SUITABLE

### Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
		◇	◆			◇				

## CHB2

High hardness steel machining, two-edged straight shank ball nose solid carbide end mill



● 适用于仿形铣削。 ● 最适于高速切削、干式切削。



MODEL	TEETH Z	DIMENSION					PIC
		D	R	d	H	L	
CHB2-D070H014L60	2	7.0	3.5	8	14	60	PIC 1
CHB2-D080H016L60	2	8.0	4.0	8	16	60	PIC 2
CHB2-D090H018L75	2	9.0	4.5	10	18	75	PIC 1
CHB2-D100H020L75	2	10.0	5.0	10	20	75	PIC 2
CHB2-D120H024L75	2	12.0	6.0	12	24	75	PIC 2
CHB2-D140H028L75	2	14.0	7.0	14	28	75	PIC 2
CHB2-D160H032L100	2	16.0	8.0	16	32	100	PIC 2
CHB2-D200H040L100	2	20.0	10.0	20	40	100	PIC 2

### material

◆ VERY SUITABLE

◇ SUITABLE

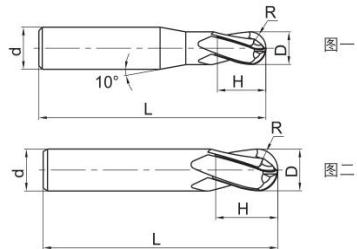
### Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
		◇		◆		◇				

# CHB4



High hardness steel machining, four-blade straight shank ball nose solid carbide end mill



- 四刃球头铣刀可实现较高的进给速度，提高加工效率，在高硬度材料加工中实现较长的使用寿命。



涂层  
AITin

D ≤ 12 0~0.020  
12 < D 0~0.030

R ± 0.01



MODEL	TEETH Z	DIMENSION							PIC
		D	R	d	H	L			
CHB4-D030H006L50	4	3.0	1.5	6	6	50			PIC 1
CHB4-D040H008L50	4	4.0	2.0	6	8	50			PIC 1
CHB4-D050H010L50	4	5.0	2.5	6	10	50			PIC 1
CHB4-D060H012L50	4	6.0	3.0	6	12	50			PIC 2
CHB4-D080H016L60	4	8.0	4.0	8	16	60			PIC 2
CHB4-D100H020L75	4	10.0	5.0	10	20	75			PIC 2
CHB4-D120H024L75	4	12.0	6.0	12	24	75			PIC 2
CHB4-D140H028L75	4	14.0	7.0	14	28	75			PIC 2
CHB4-D160H032L100	4	16.0	8.0	16	32	100			PIC 2
CHB4-D180H036L100	4	18.0	9.0	18	36	100			PIC 2
CHB4-D200H040L100	4	20.0	10.0	20	40	100			PIC 2

## material

◆ VERY SUITABLE

◇ SUITABLE

## Processed material

Carbon steel	ALLOY	Pre-hardened steel, hardened steel			SS	CAST iron Ductile Iron	COOPER ALLOY	ALU ALLOY	Titan alloy	Heat res. alloy
		~40HRC	~50HRC	~55HRC						
		◇		◆		◇				

高  
端  
刀  
具  
国  
产  
化

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双螺旋内冷孔设计，冷却液精准喷射刀尖；  
刀体硬度 HRC 52 以上；  
刀片设计、材质俱佳，易切削、强耐磨；  
螺旋槽空间增加 30%，排屑顺畅。



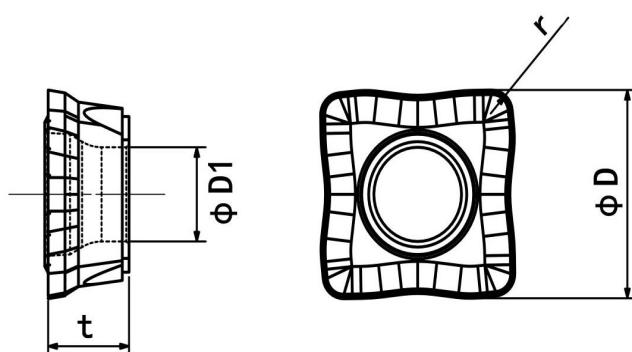
 Chai Tools

# XOMX / SPMG



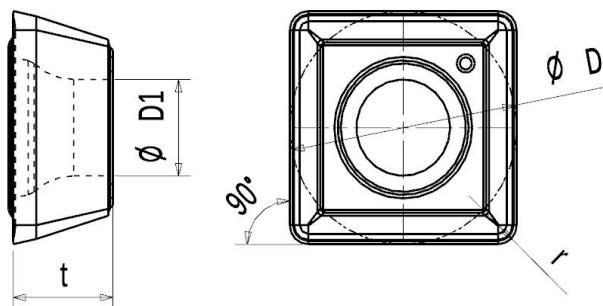
Drilling inserts

## XOMX inserts



inserts model	dimensions				screw	grade
	D	t	r	D1		
XOMX 050204	4.9	2.38	0.4	2.25	CSG2049-P	CT5320
XOMX 060204	5.7	2.38	0.4	2.60	CSG2252-P	
XOMX 070306	6.8	2.80	0.6	2.60	CSG2252-P	
XOMX 08T306	7.9	3.97	0.6	2.85	CSG2565-P	
XOMX 09T308	9.2	3.97	0.8	3.80	CSG3585-P	
XOMX 11T308	11.0	3.97	0.8	3.80	CSG3585-P	
XOMX 130408	12.8	4.40	0.8	4.40	CSG4011-P	
XOMX 150510	15.0	4.80	1.0	5.40	CSG5012-P	

## SPMG inserts

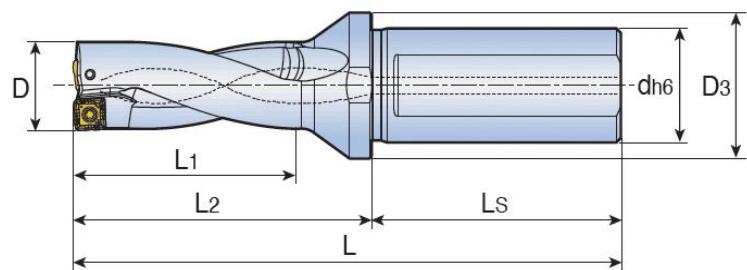


inserts model	dimensions				screw	grade
	D	t	r	D1		
SPMG 050204-PM	5.00	2.38	0.4	2.25	CSG2049-P	CT5420
SPMG 060204-PM	6.00	2.38	0.4	2.61	CSG2252-P	
SPMG 07T308-PM	7.94	3.97	0.8	2.85	CSG2565-P	
SPMG 090408-PM	9.80	4.30	0.8	4.05	CSG3585-P	
SPMG 110408-PM	11.5	4.80	0.8	4.45	CSG4011-P	

## XOP 2. . -T2



Drilling tool series: indexable drill shank

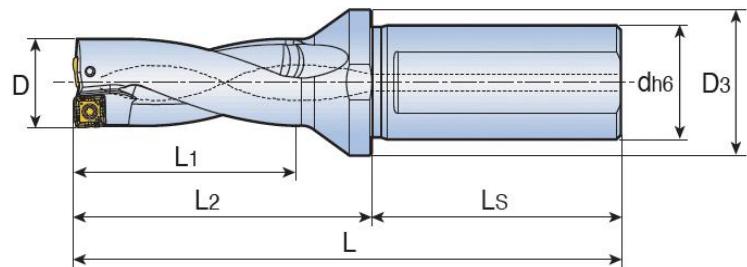


◎drilling depth: 2xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 2140-20T2-05	14.0	20	25	96	28	46	50	XOMX 05
XOP 2145-20T2-05	14.5	20	25	99	30	49	50	
XOP 2150-20T2-05	15.0	20	25	99	30	49	50	
XOP 2155-20T2-05	15.5	20	25	102	32	52	50	
XOP 2160-20T2-05	16.0	20	25	102	32	52	50	
XOP 2165-25T2-06	16.5	25	32	110	34	54	56	XOMX 06
XOP 2170-25T2-06	17.0	25	32	110	34	54	56	
XOP 2175-25T2-06	17.5	25	32	113	36	57	56	
XOP 2180-25T2-06	18.0	25	32	113	36	57	56	
XOP 2185-25T2-06	18.5	25	32	115	38	59	56	
XOP 2190-25T2-06	19.0	25	32	115	38	59	56	XOMX 07
XOP 2195-25T2-07	19.5	25	32	119	40	63	56	
XOP 2200-25T2-07	20.0	25	32	119	40	63	56	
XOP 2205-25T2-07	20.5	25	32	121	42	65	56	
XOP 2210-25T2-07	21.0	25	32	121	42	65	56	
XOP 2215-25T2-07	21.5	25	32	123	44	67	56	XOMX 08
XOP 2220-25T2-07	22.0	25	32	123	44	67	56	
XOP 2225-25T2-08	22.5	25	32	124	46	68	56	
XOP 2230-25T2-08	23.0	25	32	124	46	68	56	
XOP 2230-32T2-08	23.0	32	40	128	46	68	60	
XOP 2235-25T2-08	23.5	25	32	126	48	70	56	
XOP 2235-32T2-08	23.5	32	40	130	48	70	60	
XOP 2240-25T2-08	24.0	25	32	126	48	70	56	

## XOP 2. . -T2

Indexable drill shank



◎drilling depth: 2xD(diameter)

product model	dimensions							compatibl einserts
	D	d	D3	L	L1	L2	Ls	
XOP 2240-32T2-08	24.0	32	40	130	48	70	60	XOMX 08
XOP 2245-25T2-08	24.5	25	32	128	50	72	56	
XOP 2245-32T2-08	24.5	32	40	132	50	72	60	
XOP 2250-25T2-08	25.0	25	32	128	50	72	56	
XOP 2250-32T2-08	25.0	32	40	132	50	72	60	
XOP 2255-25T2-08	25.5	25	32	129	52	73	56	
XOP 2255-32T2-08	25.5	32	40	133	52	73	60	
XOP 2260-25T2-08	26.0	25	32	129	52	73	56	
XOP 2260-32T2-08	26.0	32	40	133	52	73	60	
XOP 2265-32T2-09	26.5	32	40	137	54	77	60	
XOP 2270-25T2-09	27.0	25	40	133	54	77	56	
XOP 2270-32T2-09	27.0	32	40	137	54	77	60	
XOP 2275-32T2-09	27.5	32	40	139	56	79	60	
XOP 2280-25T2-09	28.0	25	40	135	56	79	56	XOMX 09
XOP 2280-32T2-09	28.0	32	40	139	56	79	60	
XOP 2285-32T2-09	28.5	32	40	141	58	81	60	
XOP 2290-25T2-09	29.0	25	40	137	58	81	56	
XOP 2290-32T2-09	29.0	32	40	141	58	81	60	
XOP 2295-32T2-09	29.5	32	40	143	60	83	60	
XOP 2300-32T2-09	30.0	32	40	143	60	83	60	
XOP 2305-32T2-09	30.5	32	40	145	62	85	60	
XOP 2310-32T2-09	31.0	32	40	145	62	85	60	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

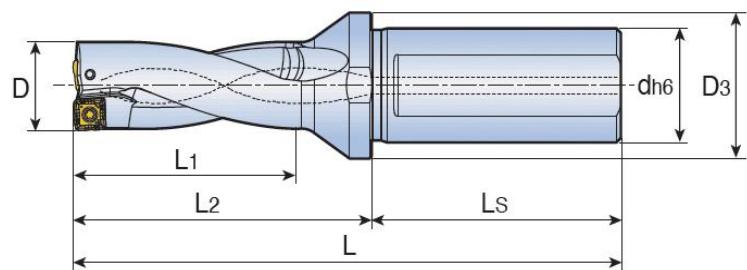
◎There is no threaded interface at the end of the standard shank

◎cooling hole plug for lathe To be ordered separately

# XOP 2. . -T2



Indexable drill shank

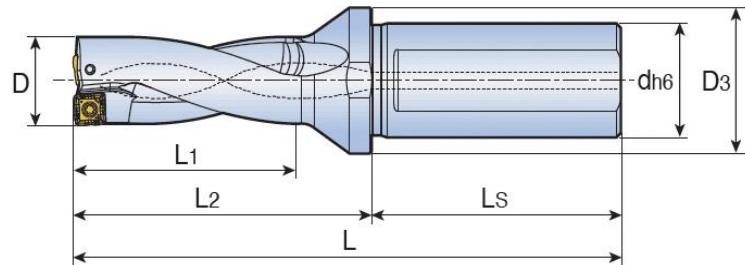


◎drilling depth: 2xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 2320-32T2-11	32.0	32	40	147	64	87	60	XOMX 11
XOP 2320-40T2-11	32.0	40	50	157	64	87	70	
XOP 2330-32T2-11	33.0	32	40	149	66	89	60	
XOP 2330-40T2-11	33.0	40	50	159	66	89	70	
XOP 2340-32T2-11	34.0	32	40	151	68	91	60	
XOP 2340-40T2-11	34.0	40	50	161	68	91	70	
XOP 2350-32T2-11	35.0	32	40	153	70	93	60	
XOP 2350-40T2-11	35.0	40	50	163	70	93	70	
XOP 2360-32T2-11	36.0	32	40	155	72	95	60	
XOP 2360-40T2-11	36.0	40	50	165	72	95	70	
XOP 2370-32T2-13	37.0	32	50	162	74	102	60	
XOP 2370-40T2-13	37.0	40	50	172	74	102	70	
XOP 2380-32T2-13	38.0	32	50	164	76	104	60	XOMX 13
XOP 2380-40T2-13	38.0	40	50	174	76	104	70	
XOP 2390-32T2-13	39.0	32	50	166	78	106	60	
XOP 2390-40T2-13	39.0	40	50	176	78	106	70	
XOP 2400-32T2-13	40.0	32	50	168	80	108	60	
XOP 2400-40T2-13	40.0	40	50	178	80	108	70	
XOP 2410-40T2-13	41.0	40	50	180	82	110	70	
XOP 2420-40T2-13	42.0	40	50	182	84	112	70	
XOP 2430-40T2-13	43.0	40	50	184	86	114	70	

## XOP 2. . -T2

Indexable drill shank



◎drilling depth: 2xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 2440-40T2-15	44.0	40	60	193	88	123	70	
XOP 2450-40T2-15	45.0	40	60	195	90	125	70	
XOP 2460-40T2-15	46.0	40	60	197	92	127	70	
XOP 2470-40T2-15	47.0	40	60	199	94	129	70	
XOP 2480-40T2-15	48.0	40	60	201	96	131	70	
XOP 2490-40T2-15	49.0	40	60	203	98	133	70	
XOP 2500-40T2-15	50.0	40	60	205	100	135	70	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

◎There is no threaded interface at the end of the standard shank

◎cooling hole plug for lathe To be ordered separately

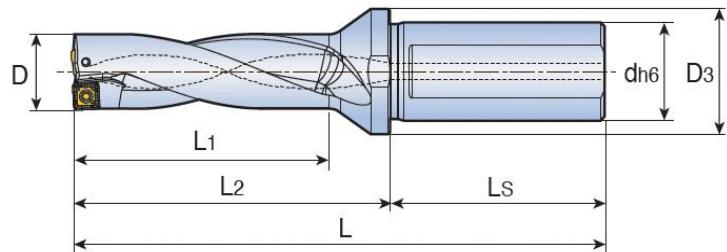
### accessory

product model	screw	wrench	cooling hole plug	备注
XOP 2140-2160	CSG2049-P	CTS06W-P	CSL 20	
XOP 2165-2220	CSG2252-P	CTS07W-P	CSL 25	
XOP 2225-2260	CSG2565-P	CTS08W-P	CSL 25/CSL 32	
XOP 2265-2360	CSG3585-P	CTS10W-P	CSL 25/CSL 32	
XOP 2370-2430	CSG4011-P	CTS15W-P	CSL 32/CSL 40	
XOP 2440-2550	CSG5012-P	CTS20W-P	CSL 32/CSL 40	

◎:cooling hole plug for lathe , to be ordred separately  
◎:cooling hole plug for lathe model according to shank dia, if diameter 32mm, then cooling hole plug for lathe model CSL 32

## XOP 3. . -T2

Indexable drill shank



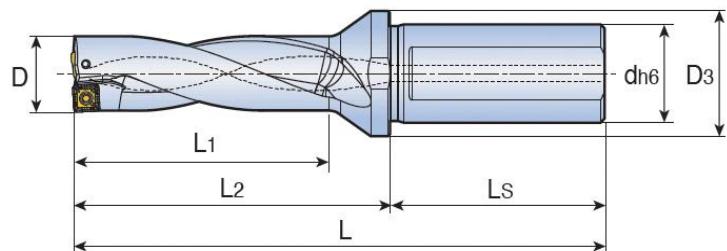
◎drilling depth: 3xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 3140-20T2-05	14.0	20	25	110	42	60	50	XOMX 05
XOP 3145-20T2-05	14.5	20	25	114	45	64	50	
XOP 3150-20T2-05	15.0	20	25	114	45	64	50	
XOP 3155-20T2-05	15.5	20	25	118	48	68	50	
XOP 3160-20T2-05	16.0	20	25	118	48	68	50	
XOP 3165-25T2-06	16.5	25	32	127	51	71	56	XOMX 06
XOP 3167-25T2-06 *	16.7	25	32	127	50.1	71	56	
XOP 3170-25T2-06	17.0	25	32	131	51	71	56	
XOP 3175-25T2-06	17.5	25	32	131	54	75	56	
XOP 3180-25T2-06	18.0	25	32	134	54	75	56	
XOP 3185-25T2-06	18.5	25	32	134	57	78	56	XOMX 07
XOP 3190-25T2-06	19.0	25	32	139	57	78	56	
XOP 3195-25T2-07	19.5	25	32	139	60	83	56	
XOP 3200-25T2-07	20.0	25	32	142	60	83	56	
XOP 3205-25T2-07	20.5	25	32	142	63	86	56	
XOP 3210-25T2-07	21.0	25	32	145	63	86	56	XOMX 08
XOP 3215-25T2-07	21.5	25	32	145	66	89	56	
XOP 3220-25T2-07	22.0	25	32	145	66	89	56	
XOP 3222-25T2-07 *	22.2	25	32	147	66.6	89	56	
XOP 3225-25T2-08	22.5	25	32	147	69	91	56	
XOP 3230-25T2-08	23.0	25	32	151	69	91	56	
XOP 3230-32T2-08	23.0	32	40	150	69	91	60	

# XOP 3. . -T2



Indexable drill shank



◎drilling depth: 3xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 3235-25T2-08	23.5	25	32	150	72	94	56	XOMX 08
XOP 3235-32T2-08	23.5	32	40	150	72	94	60	
XOP 3240-25T2-08	24.0	25	32	150	72	94	56	
XOP 3240-32T2-08	24.0	32	40	154	72	94	60	
XOP 3245-25T2-08	24.5	25	32	153	75	97	56	
XOP 3245-32T2-08	24.5	32	40	157	75	97	60	
XOP 3250-25T2-08	25.0	25	32	153	75	97	56	
XOP 3250-32T2-08	25.0	32	40	157	75	97	60	
XOP 3254-25T2-08 *	25.4	25	32	153	76.2	97	56	
XOP 3255-25T2-08	25.5	25	32	155	78	99	56	
XOP 3255-32T2-08	25.5	32	40	159	78	99	60	
XOP 3260-25T2-08	26.0	25	32	155	78	99	56	
XOP 3260-32T2-08	26.0	32	32	159	78	99	60	
XOP 3265-25T2-09	26.5	25	40	160	81	104	56	XOMX 09
XOP 3265-32T2-09	26.5	32	40	164	81	104	60	
XOP 3270-25T2-09	27.0	25	40	160	81	104	56	
XOP 3270-32T2-09	27.0	32	40	164	81	104	60	
XOP 3275-25T2-09	27.5	25	40	163	84	107	56	
XOP 3275-32T2-09	27.5	32	40	167	84	107	60	
XOP 3280-25T2-09	28.0	25	40	163	84	107	56	
XOP 3280-32T2-09	28.0	32	40	167	84	107	60	
XOP 3285-25T2-09	28.5	25	40	166	87	110	56	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

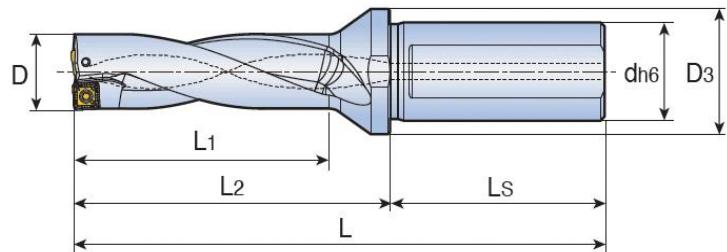
◎ “\*” mark is inch system

◎There is no threaded interface at the end of the standard shank

◎cooling hole plug for lathe To be ordered separately

# XOP 3. . -T2

Indexable drill shank

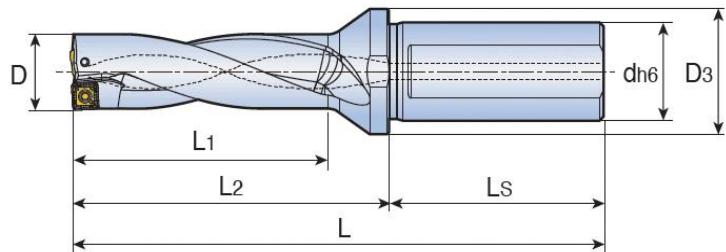


◎drilling depth: 3xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 3285-32T2-09	28.5	32	40	170	87	110	60	XOMX 09
XOP 3290-25T2-09	29.0	25	40	166	87	110	56	
XOP 3290-32T2-09	29.0	32	40	170	87	110	60	
XOP 3295-32T2-09	29.5	32	40	173	90	113	60	
XOP 3300-32T2-09	30.0	32	40	173	90	113	60	
XOP 3305-32T2-09	30.5	32	40	176	93	116	60	
XOP 3310-32T2-09	31.0	32	40	176	93	116	60	
XOP 3320-32T2-11	32.0	32	40	179	96	119	60	XOMX 11
XOP 3320-40T2-11	32.0	40	50	189	96	119	70	
XOP 3330-32T2-11	33.0	32	40	182	99	122	60	
XOP 3330-40T2-11	33.0	40	50	192	99	122	70	
XOP 3340-32T2-11	34.0	32	40	185	102	125	60	
XOP 3340-40T2-11	34.0	40	50	195	102	125	70	
XOP 3350-32T2-11	35.0	32	40	188	105	128	60	
XOP 3350-40T2-11	35.0	40	50	198	105	128	70	XOMX 13
XOP 3360-32T2-11	36.0	32	40	191	108	131	60	
XOP 3360-40T2-11	36.0	40	50	201	108	131	70	
XOP 3370-32T2-13	37.0	32	50	199	111	139	60	
XOP 3370-40T2-13	37.0	40	50	209	111	139	70	
XOP 3380-32T2-13	38.0	32	50	202	114	142	60	
XOP 3380-40T2-13	38.0	40	50	212	114	142	70	
XOP 3390-32T2-13	39.0	32	50	205	117	145	60	
XOP 3390-40T2-13	39.0	40	50	215	117	145	70	
XOP 3400-32T2-13	40.0	32	50	208	120	148	60	
XOP 3400-40T2-13	40.0	40	40	218	120	148	70	

## XOP 3. . -T2

Indexable drill shank



◎drilling depth: 3xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 3410-40T2-13	41.0	40	50	221	123	151	70	
XOP 3420-40T2-13	42.0	40	50	224	126	154	70	XOMX 13
XOP 3430-40T2-13	43.0	40	50	227	129	157	70	
XOP 3440-40T2-15	44.0	40	60	237	132	167	70	
XOP 3450-40T2-15	45.0	40	60	240	135	170	70	
XOP 3460-40T2-15	46.0	40	60	243	138	173	70	
XOP 3470-40T2-15	47.0	40	60	246	141	176	70	XOMX 15
XOP 3480-40T2-15	48.0	40	60	249	144	179	70	
XOP 3490-40T2-15	49.0	40	60	252	147	182	70	
XOP 3500-40T2-15	50.0	40	60	255	150	185	70	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

◎There is no threaded interface at the end of the standard

◎cooling hole plug for lat

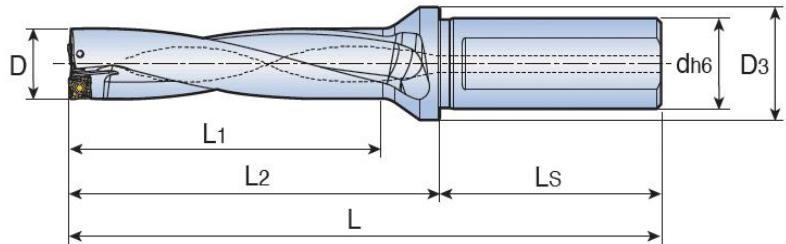
### accessory

product model	screw	wrench	cooling hole plug	备注
XOP 3140-4160	CSG2049-P	CTS06W-P	CSL 20	
XOP 3165-4220	CSG2252-P	CTS07W-P	CSL 25	
XOP 3225-4260	CSG2565-P	CTS08W-P	CSL 25/CSL 32	
XOP 3265-4360	CSG3585-P	CTS10W-P	CSL 25/CSL 32	
XOP 3370-4430	CSG4011-P	CTS15W-P	CSL 32/CSL 40	
XOP 3440-4508	CSG5012-P	CTS20W-P	CSL 32/CSL 40	

◎:cooling hole plug  
for lathe , to be  
ordred separately  
◎:cooling hole plug  
for lathe model  
according to shank dia,  
if diameter 32mm, then  
cooling hole plug for  
lathe modelCSL 32

## XOP 4. . -T2

Indexable drill shank



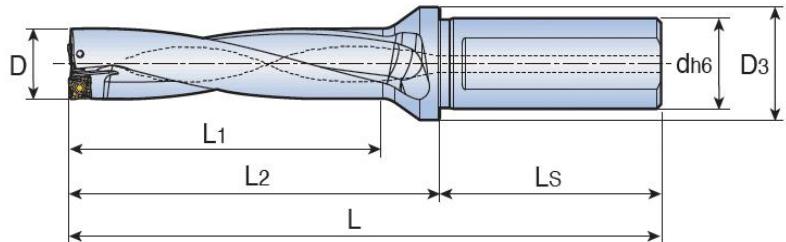
◎drilling depth: 4xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 4140-20T2-05	14.0	20	25	124	56	74	50	XOMX 05
XOP 4145-20T2-05	14.5	20	25	129	60	79	50	
XOP 4150-20T2-05	15.0	20	25	129	60	79	50	
XOP 4155-20T2-05	15.5	20	25	134	64	84	50	
XOP 4160-20T2-05	16.0	20	25	134	64	84	50	
XOP 4165-25T2-06	16.5	25	32	144	68	88	56	XOMX 06
XOP 4170-25T2-06	17.0	25	32	144	68	88	56	
XOP 4175-25T2-06	17.5	25	32	149	72	93	56	
XOP 4180-25T2-06	18.0	25	32	149	72	93	56	
XOP 4185-25T2-06	18.5	25	32	153	76	97	56	
XOP 4190-25T2-06	19.0	25	32	153	76	97	56	XOMX 07
XOP 4195-25T2-07	19.5	25	32	159	80	103	56	
XOP 4200-25T2-07	20.0	25	32	159	80	103	56	
XOP 4205-25T2-07	20.5	25	32	163	84	107	56	
XOP 4210-25T2-07	21.0	25	32	163	84	107	56	
XOP 4215-25T2-07	21.5	25	32	167	88	111	56	XOMX 08
XOP 4220-25T2-07	22.0	25	32	167	88	111	56	
XOP 4225-25T2-08	22.5	25	32	170	92	114	56	
XOP 4230-25T2-08	23.0	25	32	170	92	114	56	
XOP 4230-32T2-08	23.0	32	40	174	92	114	60	
XOP 4235-25T2-08	23.5	25	32	174	96	118	56	
XOP 4235-32T2-08	23.5	32	40	178	96	118	60	
XOP 4240-25T2-08	24.0	25	32	174	96	118	56	
XOP 4240-32T2-08	24.0	32	40	178	96	118	60	
XOP 4245-25T2-08	24.5	25	32	178	100	122	56	

## XOP 4. . -T2



Indexable drill shank



◎drilling depth: 4xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 4245-32T2-08	24.5	32	40	182	100	122	60	XOMX 08
XOP 4250-25T2-08	25.0	25	32	178	100	122	56	
XOP 4250-32T2-08	25.0	32	40	182	100	122	60	
XOP 4254-25T2-08 *	25.4	25	32	178	101.6	122	56	
XOP 4255-25T2-08	25.5	25	32	181	104	125	56	
XOP 4255-32T2-08	25.5	32	40	185	104	125	60	
XOP 4260-25T2-08	26.0	25	32	181	104	125	56	
XOP 4260-32T2-08	26.0	32	40	185	104	125	60	
XOP 4265-25T2-09	26.5	25	40	187	108	131	56	XOMX 09
XOP 4265-32T2-09	26.5	32	40	191	108	131	60	
XOP 4270-25T2-09	27.0	25	40	187	108	131	56	
XOP 4270-32T2-09	27.0	32	40	191	108	131	60	
XOP 4275-25T2-09	27.5	25	40	191	112	135	56	
XOP 4275-32T2-09	27.5	32	40	195	112	135	60	
XOP 4280-25T2-09	28.0	25	40	191	112	135	56	
XOP 4280-32T2-09	28.0	32	40	195	112	135	60	
XOP 4285-25T2-09	28.5	25	40	195	116	139	56	
XOP 4285-32T2-09	28.5	32	40	199	116	139	60	
XOP 4286-32T2-09 *	28.6	32	40	199	114.4	139	60	
XOP 4290-25T2-09	29.0	25	40	195	116	139	56	
XOP 4290-32T2-09	29.0	32	40	199	116	139	60	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

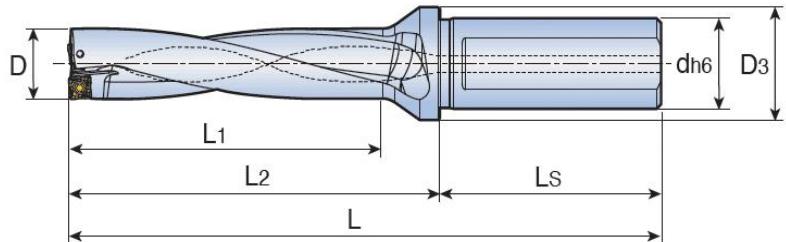
◎ “\*” mark is inch system

◎There is no threaded interface at the end of the standard

◎cooling hole plug for lat

## XOP 4. . -T2

Indexable drill shank



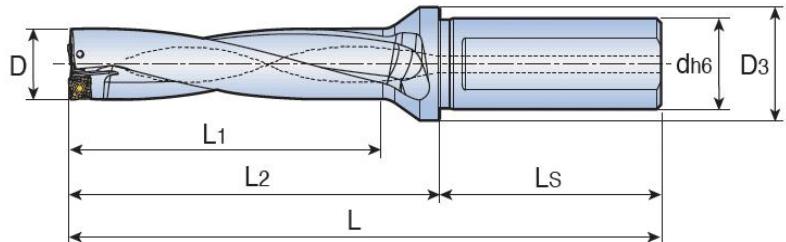
◎drilling depth: 4xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 4295-32T2-09	29.5	32	40	203	120	143	60	XOMX 09
XOP 4300-32T2-09	30.0	32	40	203	120	143	60	
XOP 4305-32T2-09	30.5	32	40	207	124	147	60	
XOP 4310-32T2-09	31.0	32	40	207	124	147	60	
XOP 4318-32T2-11 *	31.8	32	40	211	127.2	151	60	XOMX 11
XOP 4320-32T2-11	32.0	32	40	211	128	151	60	
XOP 4320-40T2-11	32.0	40	50	221	128	151	70	
XOP 4330-32T2-11	33.0	32	40	215	132	155	60	
XOP 4330-40T2-11	33.0	40	50	225	132	155	70	
XOP 4340-32T2-11	34.0	32	40	219	136	159	60	
XOP 4340-40T2-11	34.0	40	50	229	136	159	70	
XOP 4349-40T2-11 *	34.9	40	50	233	139.6	163	70	
XOP 4350-32T2-11	35.0	32	40	223	140	163	60	
XOP 4350-40T2-11	35.0	40	50	233	140	163	70	
XOP 4360-32T2-11	36.0	32	40	227	144	167	60	XOMX 13
XOP 4360-40T2-11	36.0	40	50	237	144	167	70	
XOP 4370-32T2-13	37.0	32	50	236	148	176	60	
XOP 4370-40T2-13	37.0	40	50	246	148	176	70	
XOP 4371-40T2-13 *	37.1	40	50	246	148.4	176	70	
XOP 4380-32T2-13	38.0	32	50	240	152	180	60	
XOP 4380-40T2-13	38.0	40	50	250	152	180	70	
XOP 4381-40T2-13 *	38.1	40	50	250	152.4	180	70	
XOP 4390-32T2-13	39.0	32	50	244	156	184	60	

## XOP 4. . -T2



Indexable drill shank



◎drilling depth: 4xD(diameter)

product model	DIMENSION							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 4390-40T2-13	39.0	40	50	254	156	184	70	XOMX 13
XOP 4400-32T2-13	40.0	32	50	248	160	188	60	
XOP 4400-40T2-13	40.0	40	50	258	160	188	70	
XOP 4410-40T2-13	41.0	40	50	262	164	192	70	
XOP 4413-40T2-13 *	41.3	40	50	262	165.2	192	70	
XOP 4420-40T2-13	42.0	40	50	266	168	196	70	
XOP 4429-40T2-13	42.9	40	50	270	171.6	200	70	
XOP 4430-40T2-13	43.0	40	50	270	172	200	70	
XOP 4440-40T2-13	44.0	40	50	281	176	211	70	
XOP 4445-40T2-15	44.5	40	60	285	178	215	70	
XOP 4450-40T2-15	45.0	40	60	285	180	215	70	XOMX 15
XOP 4460-40T2-15	46.0	40	60	289	184	219	70	
XOP 4470-40T2-15	47.0	40	60	293	188	223	70	
XOP 4476-40T2-15 *	47.6	40	60	297	190.4	227	70	
XOP 4480-40T2-15	48.0	40	60	297	192	227	70	
XOP 4490-40T2-15	49.0	40	60	301	196	231	70	
XOP 4500-40T2-15	50.0	40	60	305	200	235	70	
XOP 4508-40T2-15 *	50.8	40	60	309	203.2	239	70	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

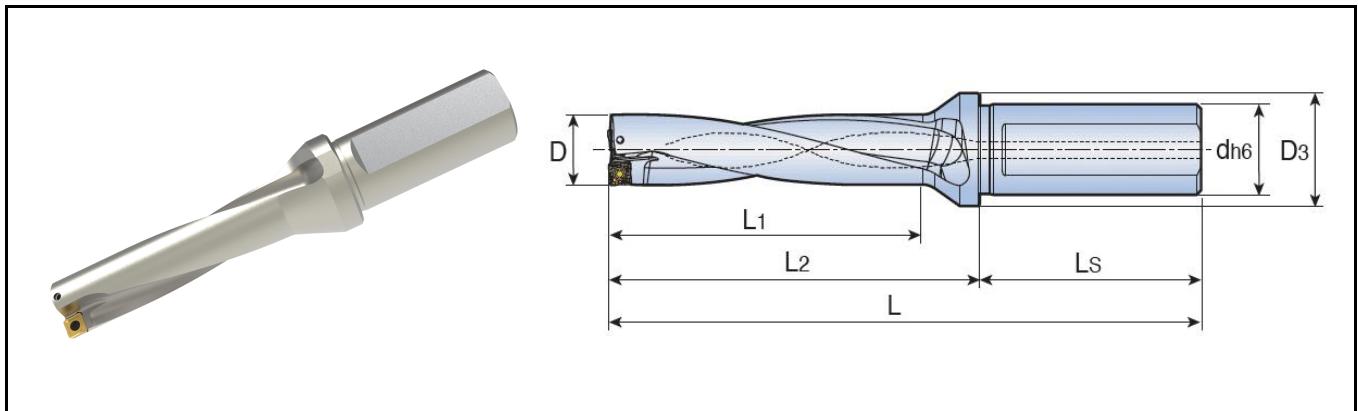
◎ “\*” mark is inch system

◎There is no threaded interface at the end of the standard shank

◎cooling hole plug for lathe To be ordered separately

## XOP 4. . -T2

Indexable drill shank



◎drilling depth: 4xD(diameter)

### accessory

product model	screw	wrench	cooling hole plug
XOP 4140-4160	CSG2049-P	CTS06W-P	CSL 20
XOP 4165-4220	CSG2252-P	CTS07W-P	CSL 25
XOP 4225-4260	CSG2565-P	CTS08W-P	CSL 25/CSL 32
XOP 4265-4360	CSG3585-P	CTS10W-P	CSL 25/CSL 32
XOP 4370-4430	CSG4011-P	CTS15W-P	CSL 32/CSL 40
XOP 4440-4508	CSG5012-P	CTS20W-P	CSL 32/CSL 40

◎ :\*车床作业时，内部冷却液软管连接用的插栓，即cooling hole plug for lathe，可单独购买

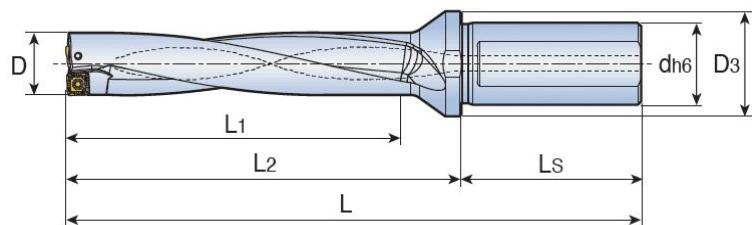
◎ :\*cooling hole plug for lathe model根据柄部diameter大小选择，例柄部diameter为:



# XOP 5. . -T2



Indexable drill shank



◎drilling depth: 5xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 5140-20T2-05	14.0	20	25	138	70	88	50	XOMX 05
XOP 5145-20T2-05	14.5	20	25	144	75	94	50	
XOP 5150-20T2-05	15.0	20	25	144	75	94	50	
XOP 5155-20T2-05	15.5	20	25	150	80	100	50	
XOP 5160-20T2-05	16.0	20	25	150	80	100	50	
XOP 5165-25T2-06	16.5	25	32	161	85	105	56	XOMX 06
XOP 5170-25T2-06	17.0	25	32	161	85	105	56	
XOP 5175-25T2-06	17.5	25	32	167	90	111	56	
XOP 5180-25T2-06	18.0	25	32	167	90	111	56	
XOP 5185-25T2-06	18.5	25	32	172	95	116	56	
XOP 5190-25T2-06	19.0	25	32	172	95	116	56	XOMX 07
XOP 5195-25T2-07	19.5	25	32	179	100	123	56	
XOP 5200-25T2-07	20.0	25	32	179	100	123	56	
XOP 5205-25T2-07	20.5	25	32	184	105	128	56	
XOP 5210-25T2-07	21.0	25	32	184	105	128	56	
XOP 5215-25T2-07	21.5	25	32	189	110	133	56	XOMX 08
XOP 5220-25T2-07	22.0	25	32	189	110	133	56	
XOP 5222-25T2-07 *	22.2	25	32	189	111	133	56	
XOP 5225-25T2-08	22.5	25	32	193	115	137	56	
XOP 5230-25T2-08	23.0	25	32	193	115	137	56	
XOP 5230-32T2-08	23.0	32	40	197	115	137	60	
XOP 5235-25T2-08	23.5	25	32	198	120	142	56	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

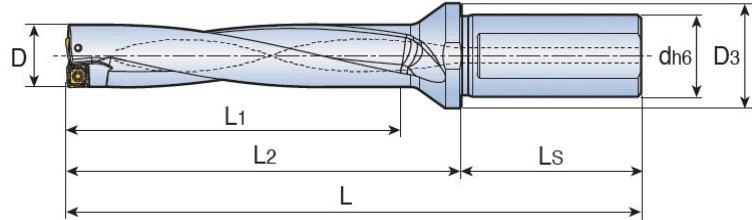
◎ “\*” mark is inch system

◎There is no threaded interface at the end of the standard shank

◎cooling hole plug for lathe To be ordered separately

## XOP 5. . -T2

Indexable drill shank



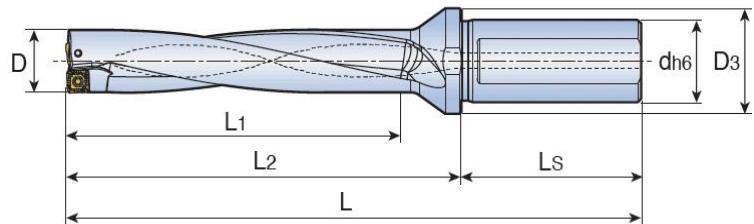
◎drilling depth: 5xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 5235-32T2-08	23.5	32	40	202	120	142	60	XOMX 08
XOP 5240-25T2-08	24.0	25	32	198	120	142	56	
XOP 5240-32T2-08	24.0	32	40	202	120	142	60	
XOP 5245-25T2-08	24.5	25	32	203	125	147	56	
XOP 5245-32T2-08	24.5	32	40	207	125	147	60	
XOP 5250-25T2-08	25.0	25	32	203	125	147	56	
XOP 5250-32T2-08	25.0	32	40	207	125	147	60	
XOP 5255-25T2-08	25.5	25	32	207	130	151	56	
XOP 5255-32T2-08	25.5	32	40	211	130	151	60	
XOP 5260-25T2-08	26.0	25	32	207	130	151	56	
XOP 5260-32T2-08	26.0	32	40	211	130	151	60	
XOP 5265-32T2-09	26.5	32	40	218	135	158	60	
XOP 5270-25T2-09	27.0	25	40	214	135	158	56	
XOP 5270-32T2-09	27.0	32	40	218	135	158	60	XOMX 09
XOP 5275-32T2-09	27.5	32	40	223	140	163	60	
XOP 5280-25T2-09	28.0	25	40	219	140	163	56	
XOP 5280-32T2-09	28.0	32	40	223	140	163	60	
XOP 5282-32T2-09 *	28.2	32	40	223	141	163	60	
XOP 5285-32T2-09	28.5	32	40	228	145	168	60	
XOP 5290-25T2-09	29.0	25	40	224	145	168	56	
XOP 5290-32T2-09	29.0	32	40	228	145	168	60	
XOP 5295-32T2-09	29.5	32	40	233	150	173	60	
XOP 5300-32T2-09	30.0	32	40	233	150	173	60	
XOP 5305-32T2-09	30.5	32	40	238	155	178	60	
XOP 5310-32T2-09	31.0	32	40	238	155	178	60	

# XOP 5. . -T2



Indexable drill shank



◎drilling depth: 5xD (diameter)

product model	dimension							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 5320-32T2-11	32.0	32	40	243	160	183	60	XOMX 11
XOP 5320-40T2-11	32.0	40	50	253	160	183	70	
XOP 5330-32T2-11	33.0	32	40	248	165	188	60	
XOP 5330-40T2-11	33.0	40	50	258	165	188	70	
XOP 5340-32T2-11	34.0	32	40	253	170	193	60	
XOP 5340-40T2-11	34.0	40	50	263	170	193	70	
XOP 5350-32T2-11	35.0	32	40	258	175	198	60	
XOP 5350-40T2-11	35.0	40	50	268	175	198	70	
XOP 5360-32T2-11	36.0	32	40	263	180	203	60	
XOP 5360-40T2-11	36.0	40	50	273	180	203	70	
XOP 5370-32T2-13	37.0	32	50	273	185	213	60	XOMX 13
XOP 5370-40T2-13	37.0	40	50	283	185	213	70	
XOP 5380-32T2-13	38.0	32	50	278	190	218	60	
XOP 5380-40T2-13	38.0	40	50	288	190	218	70	
XOP 5390-32T2-13	39.0	32	50	283	195	223	60	
XOP 5390-40T2-13	39.0	40	50	293	195	223	70	
XOP 5400-32T2-13	40.0	32	50	288	200	228	60	
XOP 5400-40T2-13	40.0	40	50	298	200	228	70	
XOP 5410-40T2-13	41.0	40	50	303	205	233	70	
XOP 5420-40T2-13	42.0	40	50	308	210	238	70	
XOP 5430-40T2-13	43.0	40	50	313	215	243	70	XOMX 15
XOP 5440-40T2-15	44.0	40	60	325	220	255	70	
XOP 5450-40T2-15	45.0	40	60	330	225	260	70	

◎Standard shank with internal coolant

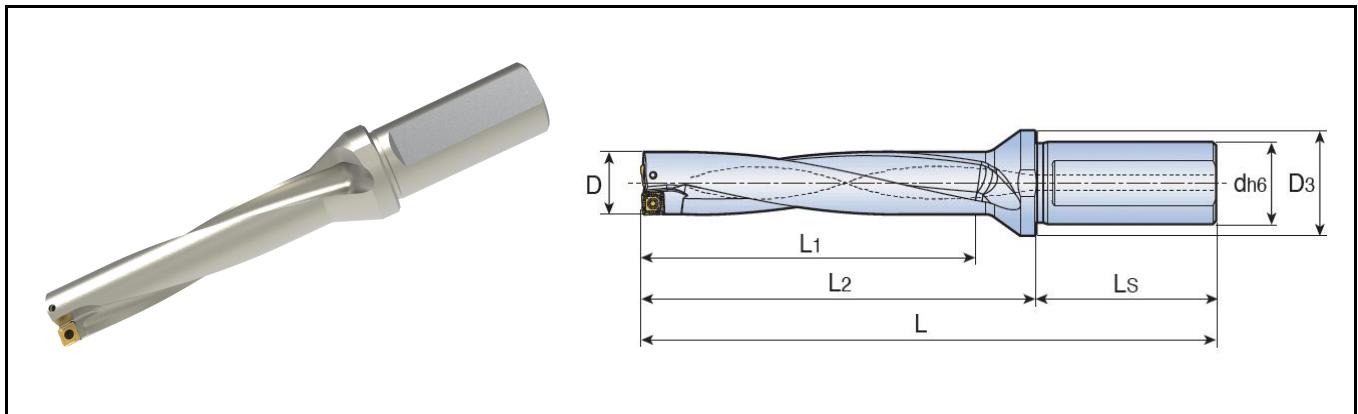
◎insertsTo be ordered separately

◎There is no threaded interface at the end of the standard shank

◎cooling hole plug for lathe To be ordered separately

## XOP 5. . -T2

Indexable drill shank



◎drilling depth: 5xD(diameter)

product model	dimensions							compatible inserts
	D	d	D3	L	L1	L2	Ls	
XOP 5460-40T2-15	46.0	40	60	335	230	265	70	
XOP 5470-40T2-15	47.0	40	60	340	235	270	70	
XOP 5480-40T2-15	48.0	40	60	345	240	275	70	
XOP 5490-40T2-15	49.0	40	60	350	245	280	70	
XOP 5500-40T2-15	50.0	40	60	355	250	285	70	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

◎There is no threaded interface at the end of the standard

◎cooling hole plug for lathe

### accessory

product model	screw	wrench	cooling hole plug
XOP 5140-5160	CSG2049-P	CTS06W-P	CSL 20
XOP 5165-5220	CSG2252-P	CTS07W-P	CSL 25
XOP 5225-5260	CSG2565-P	CTS08W-P	CSL 25/CSL 32
XOP 5265-5360	CSG3585-P	CTS10W-P	CSL 25/CSL 32
XOP 5370-5430	CSG4011-P	CTS15W-P	CSL 32/CSL 40
XOP 5440-5500	CSG5012-P	CTS20W-P	CSL 32/CSL 40

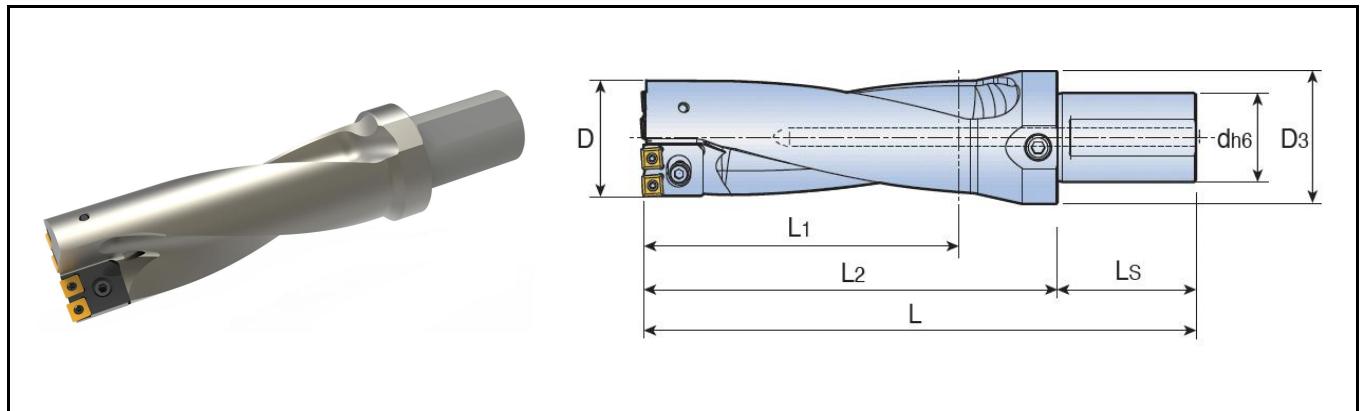
◎:cooling hole plug for lathe , to be ordred separately

◎:cooling hole plug for lathe model according to shank dia, if diameter 32mm, then cooling hole plug for lathe modelCSL 32

# CDR25. . -T2



Indexable cartridge drill shank



◎drilling depth: 2.5xD(diameter)

product model	dimensions							SETTING PLATE	inserts
	D	d	D3	L	L1	L2	Ls		
CDR 2551-53-50T2-07CA-T	51	50	75	250	133	170	80		SPMG 07
	52	50	75	250	133	170	80	TDP-0701	
	53	50	75	250	133	170	80	TDP-0702	
CDR 2554-56-50T2-07CA-T	54	50	75	260	140	180	80		SPMG 07
	55	50	75	260	140	180	80	TDP-0701	
	56	50	75	260	140	180	80	TDP-0702	
CDR 2557-62-50T2-09CA-T	57	50	75	281	155	201	80		SPMG 09
	58	50	75	281	155	201	80	TDP-0901	
	59	50	75	281	155	201	80	TDP-0902	
	60	50	75	281	155	201	80	TDP-0903	
	61	50	75	281	155	201	80	TDP-0904	
	62	50	75	281	155	201	80	TDP-0905	
CDR 2563-66-50T2-09CA-T	63	50	75	295	165	215	80		SPMG 09
	64	50	75	295	165	215	80	TDP-0901	
	65	50	75	295	165	215	80	TDP-0902	
	66	50	75	295	165	215	80	TDP-0903	
CDR 2567-73-50T2-11CA-T	67	50	75	320	183	240	80		SPMG 11
	68	50	75	320	183	240	80	TDP-1101	
	69	50	75	320	183	240	80	TDP-1102	
	70	50	75	320	183	240	80	TDP-1103	
	71	50	75	320	183	240	80	TDP-1104	
	72	50	75	320	183	240	80	TDP-1105	
	73	50	75	320	183	240	80	TDP-1106	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

# CDR25. . -T2

Indexable clamp drill shank



## cutter clamp accessory

clamp model	clamp screw	washer	adj. screw	wrench
CDR 07CA-P1-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C1-T	CLA0401607	CQP4380		
CDR 07CA-P2-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C2-T	CLA0401607	CQP4380		
CDR 09CA-P1-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C1-T	CLA0501608	CQP5510		
CDR 09CA-P2-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C2-T	CLA0501608	CQP5510		
CDR 11CA-P1-T	CLA0602010	CQP6412	CSC3080	CTS10W
CDR 11CA-C1-T	CLA0602010	CQP6412		

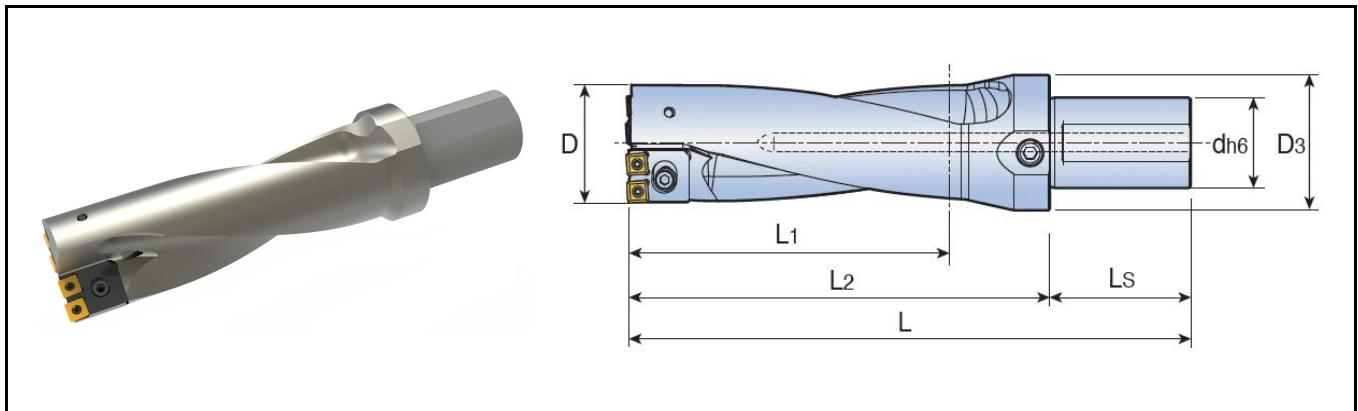
## accessory

product model	screw	wrench	EXTER. EDGE SHANK	CENTAL SHANK
CDR 2551	CSG2565-P	CTS08W-P	CDR 07CA-P1-T	CDR 07CA-C1-T
CDR 2554	CSG2565-P	CTS08W-P	CDR 07CA-P2-T	CDR 07CA-C2-T
CDR 2557	CSG3585-P	CTS10W-P	CDR 09CA-P1-T	CDR 09CA-C1-T
CDR 2563	CSG4011-P	CTS15W-P	CDR 09CA-P2-T	CDR 09CA-C2-T
CDR 2567	CSG4011-P	CTS15W-P	CDR 11CA-P1-T	CDR 11CA-C1-T

# CDR35. . -T2



Indexable cutter clamp drill shank



◎drilling depth: 3.5xD(diameter)

product model	DIMENSION							SETTING PLATE	inserts model
	D	d	D3	L	L1	L2	Ls		
CDR 3551-53-50T2-07CA-T	51	50	75	303	186	223	80		SPMG 07
	52	50	75	303	186	223	80	CDR-0701	
	53	50	75	303	186	223	80	CDR-0702	
CDR 3554-56-50T2-07CA-T	54	50	75	316	196	236	80		SPMG 07
	55	50	75	316	196	236	80	CDR-0701	
	56	50	75	316	196	236	80	CDR-0702	
CDR 3557-62-50T2-09CA-T	57	50	75	343	217	263	80		SPMG 09
	58	50	75	343	217	263	80	CDR-0901	
	59	50	75	343	217	263	80	CDR-0902	
	60	50	75	343	217	263	80	CDR-0903	
	61	50	75	343	217	263	80	CDR-0904	
	62	50	75	343	217	263	80	CDR-0905	
CDR 3563-66-50T2-09CA-T	63	50	75	361	231	281	80		SPMG 09
	64	50	75	361	231	281	80	CDR-0901	
	65	50	75	361	231	281	80	CDR-0902	
	66	50	75	361	231	281	80	CDR-0903	
CDR 3567-73-50T2-11CA-T	67	50	75	393	256	313	80		SPMG 11
	68	50	75	393	256	313	80	CDR-1101	
	69	50	75	393	256	313	80	CDR-1102	
	70	50	75	393	256	313	80	CDR-1103	
	71	50	75	393	256	313	80	CDR-1104	
	72	50	75	393	256	313	80	CDR-1105	
	73	50	75	393	256	313	80	CDR-1106	

◎Standard shank with internal coolant

◎insertsTo be ordered separately

# CDR35. . -T2



Indexable cutter clamp drill shank

cutter clamp accessory

clamp model	utter clamp 锁紧scre	垫圈	SETTING PLATEscrew	
CDR 07CA-P1-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C1-T	CLA0401607	CQP4380		
CDR 07CA-P2-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C2-T	CLA0401607	CQP4380		
CDR 09CA-P1-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C1-T	CLA0501608	CQP5510		
CDR 09CA-P2-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C2-T	CLA0501608	CQP5510		
CDR 11CA-P1-T	CLA0602010	CQP6412	CSC3080	CTS10W
CDR 11CA-C1-T	CLA0602010	CQP6412		

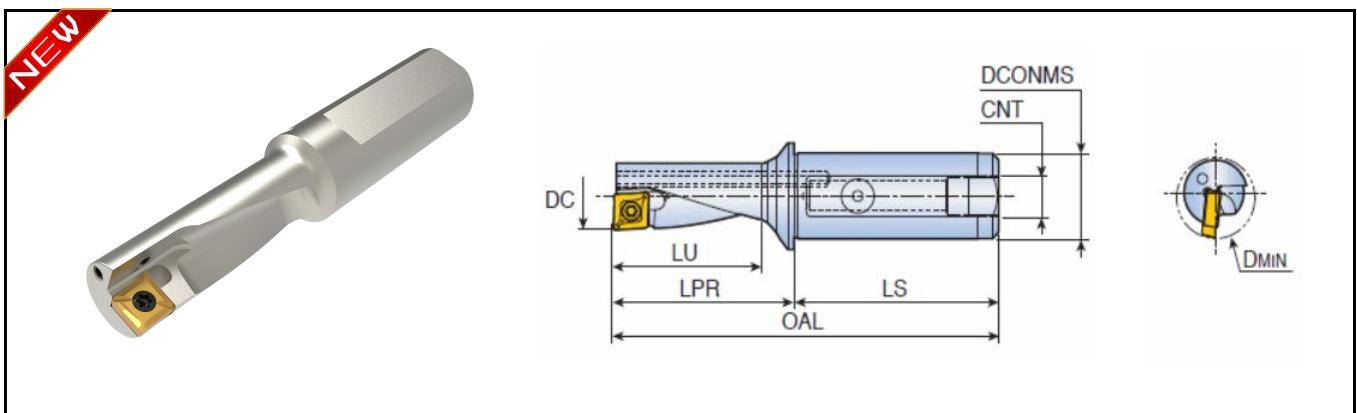
accessory

product model	screw	wrench	outer edgecutter	中心cutter clamp
CDR 3551	CSG2565-P	CTS08W-P	CDR 07CA-P1-T	CDR 07CA-C1-T
CDR 3554	CSG2565-P	CTS08W-P	CDR 07CA-P2-T	CDR 07CA-C2-T
CDR 3557	CSG3585-P	CTS10W-P	CDR 09CA-P1-T	CDR 09CA-C1-T
CDR 3563	CSG3585-P	CTS10W-P	CDR 09CA-P2-T	CDR 09CA-C2-T
CDR 3567	CSG4011-P	CTS15W-P	CDR 11CA-P1-T	CDR 11CA-C1-T

# XCP. . -T1



## MUTIL FUNCTION HOLDER



◎drilling depth: 3xD(diameter)

product model	dimensions								compatible inserts
	DC	DCONMS	WF	LU	LPR	LS	Dmin	CNT	
XCP 3120-16T1-06	12	16	8.5	27.0	33.0	45	14.5	G1/8	XCMT 06
XCP 3140-16T1-07	14	16	9.5	31.5	38.5	45	16.5	G1/8	XCMT 07
XCP 3160-20T1-08	16	20	11.1	36.0	44.0	50	19.0	G1/8	XCMT 08
XCP 3200-25T1-10	20	25	13.2	45.0	55.0	56	23.5	G1/8	XCMT 10
XCP 3250-32T1-13	25	32	16.5	56.2	69.0	61	29.0	G1/8	XCMT 13
XCP 3320-40T1-17	32	40	20.5	72.0	86.0	74	36.5	G1/8	XCMT 17

◎Standard shank with internal coolant

◎insertsTo be ordered separately

## accessory

product model	screw	wrench	
XCP 3120	CSG2252-P	CTS07W-P	
XCP 3140	CSG2565-P	CTS08W-P	
XCP 3160	CSG3085-P	CTS10W-P	
XCP 3200	CSG3585-P	CTS10W-P	
XCP 3250	CSC4511	CTS15W	
XCP 3320	CSG5012-P	CTS20W-P	

# XCP. . -T1



MUTIL FUNCTION HOLDER

**NEW**

inserts model	dimensions				turning		drilling	grade		
	IC	L	S	RE	DEPTH mm	FEED mm/rev	FEED mm/rev	CT5320		
XCMT 060204	6.4	6.4	2.38	0.4	0.3-2.5	0.03-0.20	0.03-0.12 0.05-0.22 0.06-0.25 0.06-0.30 0.06-0.33 0.03-0.13	●		
XCMT 070304	7.5	7.5	3.18	0.4	0.4-2.8	0.05-0.22				
XCMT 080304	8.4	8.4	3.18	0.4	0.4-3.2	0.06-0.25				
XCMT 10T304	10.5	10.5	3.97	0.4	0.5-3.5	0.06-0.30				
XCMT 10T308				0.8						
XCMT 130404	13.4	13.4	4.76	0.4	0.6-4.3	0.08-0.33				
XCMT 130408				0.8						
XCMT 170508	17.4	17.4	5.56	0.8	0.7-5.3	0.10-0.38				



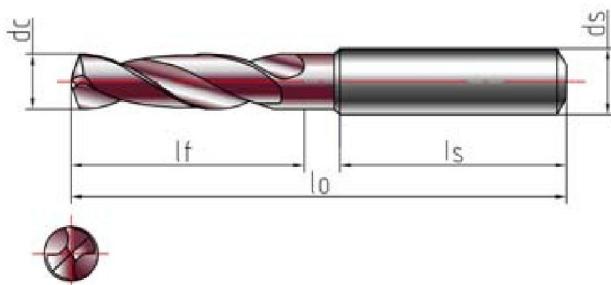
Chai Tools

# 超尔整硬钻

## 专业更高效



## Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle: 140°

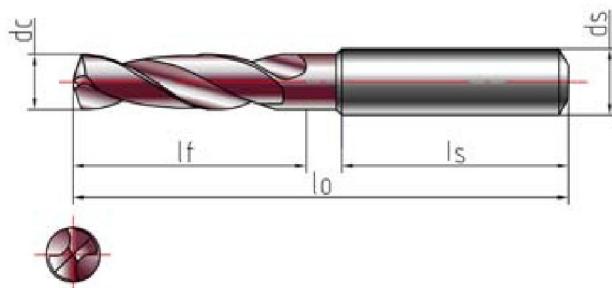
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D033-3D	3.3	20	6	36	62	M4x0.7	—
CH-D034-3D	3.4	20	6	36	62	N0.8-32UNC	—
CH-D035-3D	3.5	20	6	36	62	M4x0.5 N0.8-36UNC	—
CH-D036-3D	3.6	20	6	36	62	—	—
CH-D037-3D	3.7	20	6	36	62	—	M4x0.7
CH-D038-3D	3.8	24	6	36	66	—	M4x0.5
CH-D039-3D	3.9	24	6	36	66	N0.10-24UNC	—
CH-D040-3D	4.0	24	6	36	66	—	—
CH-D041-3D	4.1	24	6	36	66	N0.10-32UNF	—
CH-D042-3D	4.2	24	6	36	66	M5x0.8	—
CH-D043-3D	4.3	24	6	36	66	—	—
CH-D044-3D	4.4	24	6	36	66	—	—
CH-D045-3D	4.5	24	6	36	66	M5x0.5 N0.12-24UNC	—
CH-D046-3D	4.6	24	6	36	66	N0.12-28UNF	M5x0.8
CH-D047-3D	4.7	24	6	36	66	N0.12-32UNEF	—
CH-D048-3D	4.8	28	6	36	66	—	—
CH-D049-3D	4.9	28	6	36	66	—	—
CH-D050-3D	5.0	28	6	36	66	M6x1	—
CH-D051-3D	5.1	28	6	36	66	1/4-20UNC	—
CH-D052-3D	5.2	28	6	36	66	—	—
CH-D053-3D	5.3	28	6	36	66	M6x0.75	—

◎Standard drill without internal coolant

# CH...3D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle 118°

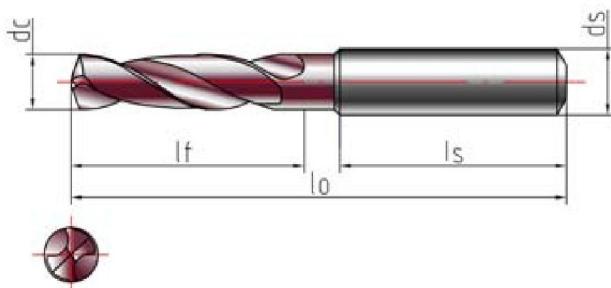
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D054-3D	5.4	28	6	36	66	—	—
CH-D055-3D	5.5	28	6	36	66	1/4-28UNF	M6x1
CH-D056-3D	5.6	28	6	36	66	1/4-32UNEF	—
CH-D057-3D	5.7	28	6	36	66	—	—
CH-D058-3D	5.8	28	6	36	66	—	—
CH-D059-3D	5.9	28	6	36	66	—	—
CH-D060-3D	6.0	28	6	36	66	—	—
CH-D061-3D	6.1	34	8	36	79	—	—
CH-D062-3D	6.2	34	8	36	79	—	—
CH-D063-3D	6.3	34	8	36	79	—	—
CH-D064-3D	6.4	34	8	36	79	—	—
CH-D065-3D	6.5	34	8	36	79	—	—
CH-D066-3D	6.6	34	8	36	79	5/16-18UNC	—
CH-D067-3D	6.7	34	8	36	79	—	—
CH-D068-3D	6.8	34	8	36	79	M8x1.25	—
CH-D069-3D	6.9	34	8	36	79	5/16-24UNF	—
CH-D070-3D	7.0	34	8	36	79	M8x1	—
CH-D071-3D	7.1	41	8	36	79	5/16-32UNEF	—
CH-D072-3D	7.2	41	8	36	79	—	—
CH-D073-3D	7.3	41	8	36	79	M8x0.75	—
CH-D074-3D	7.4	41	8	36	79	—	M8x1.25
CH-D075-3D	7.5	41	8	36	79	—	—

◎Standard drill without internal coolant

# CH...3D



## Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

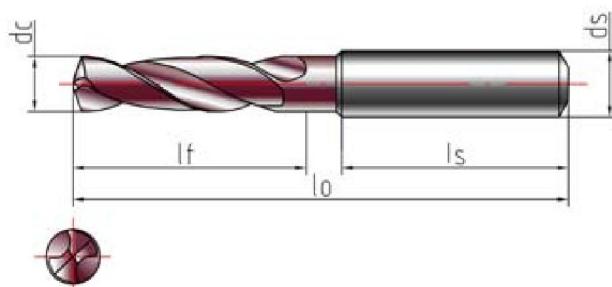
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D076-3D	7.6	41	8	36	79	—	—
CH-D077-3D	7.7	41	8	36	79	—	—
CH-D078-3D	7.8	41	8	36	79	—	—
CH-D079-3D	7.9	41	8	36	79	—	—
CH-D080-3D	8.0	41	8	36	79	3/8-16UNC	—
CH-D081-3D	8.1	47	10	40	89	—	—
CH-D082-3D	8.2	47	10	40	89	—	—
CH-D083-3D	8.3	47	10	40	89	—	—
CH-D084-3D	8.4	47	10	40	89	—	—
CH-D085-3D	8.5	47	10	40	89	M10x1.5 3/8-24UNF	—
CH-D086-3D	8.6	47	10	40	89	—	—
CH-D087-3D	8.7	47	10	40	89	3/8-32UNEF	—
CH-D088-3D	8.8	47	10	40	89	M10x1.25	—
CH-D089-3D	8.9	47	10	40	89	—	—
CH-D090-3D	9.0	47	10	40	89	M10x1	—
CH-D091-3D	9.1	47	10	40	89	—	—
CH-D092-3D	9.2	47	10	40	89	—	—
CH-D093-3D	9.3	47	10	40	89	M10x0.75	M10x1.5
CH-D094-3D	9.4	47	10	40	89	7/16-14UNC	—
CH-D095-3D	9.5	47	10	40	89	—	—
CH-D097-3D	9.7	47	10	40	89	—	—
CH-D098-3D	9.8	47	10	40	89	—	—

◎Standard drill without internal coolant

# CH...3D



Solid carbide twist drill



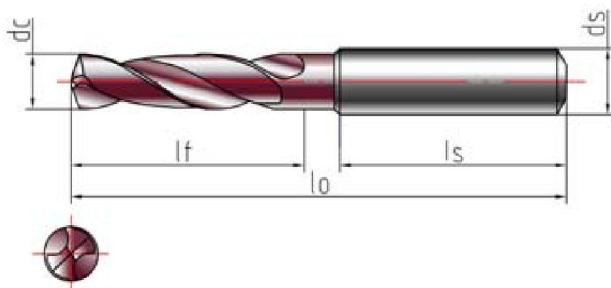
Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle 30°

PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D099-3D	9.9	47	10	40	89	7/16-20UNF	—
CH-D100-3D	10.0	47	10	40	89	—	—
CH-D101-3D	10.1	55	12	45	102	—	—
CH-D102-3D	10.2	55	12	45	102	7/16-28UNEF	—
CH-D103-3D	10.3	55	12	45	102	M12x1.75	—
CH-D104-3D	10.4	55	12	45	102	—	—
CH-D105-3D	10.5	55	12	45	102	—	—
CH-D106-3D	10.6	55	12	45	102	—	—
CH-D107-3D	10.7	55	12	45	102	—	—
CH-D108-3D	10.8	55	12	45	102	—	—
CH-D109-3D	10.9	55	12	45	102	1/2-13UNC	—
CH-D110-3D	11.0	55	12	45	102	M12x1	—
CH-D111-3D	11.1	55	12	45	102	—	—
CH-D112-3D	11.2	55	12	45	102	—	M12x1.75
CH-D113-3D	11.3	55	12	45	102	—	—
CH-D114-3D	11.4	55	12	45	102	—	—
CH-D115-3D	11.5	55	12	45	102	1/2-20UNF	—
CH-D116-3D	11.6	55	12	45	102	—	—
CH-D117-3D	11.7	55	12	45	102	—	—
CH-D118-3D	11.8	55	12	45	102	1/2-28UNEF	—
CH-D119-3D	11.9	55	12	45	102	—	—
CH-D120-3D	12.0	55	12	45	102	M14x2	—

◎Standard drill without internal coolant

## Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

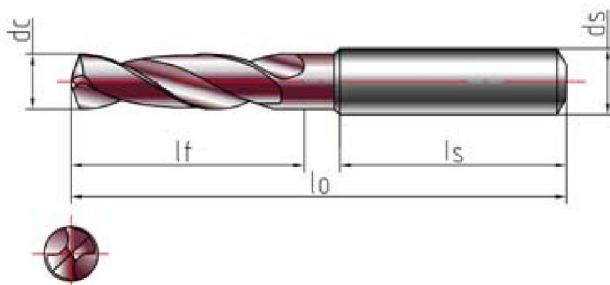
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D121-3D	12.1	60	14	45	107	—	—
CH-D122-3D	12.2	60	14	45	107	9/16-12UNC	—
CH-D123-3D	12.3	60	14	45	107	—	—
CH-D124-3D	12.4	60	14	45	107	—	—
CH-D125-3D	12.5	60	14	45	107	M14x1.5	—
CH-D126-3D	12.6	60	14	45	107	—	—
CH-D127-3D	12.7	60	14	45	107	—	—
CH-D128-3D	12.8	60	14	45	107	—	—
CH-D129-3D	12.9	60	14	45	107	9/16-18UNF	—
CH-D130-3D	13.0	60	14	45	107	M14x1	M14x2
CH-D131-3D	13.1	60	14	45	107	—	—
CH-D132-3D	13.2	60	14	45	107	9/16-24UNEF	—
CH-D133-3D	13.3	60	14	45	107	—	—
CH-D134-3D	13.4	60	14	45	107	—	—
CH-D135-3D	13.5	60	14	45	107	—	—
CH-D136-3D	13.6	60	14	45	107	5/8-11UNC	—
CH-D137-3D	13.7	60	14	45	107	—	—
CH-D138-3D	13.8	60	14	45	107	—	—
CH-D139-3D	13.9	60	14	45	107	—	—
CH-D140-3D	14.0	60	14	45	107	M16x2	—
CH-D141-3D	14.1	65	16	48	115	—	—
CH-D142-3D	14.2	65	16	48	115	—	—
CH-D143-3D	14.3	65	16	48	115	—	—

◎Standard drill without internal coolant

# CH...3D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

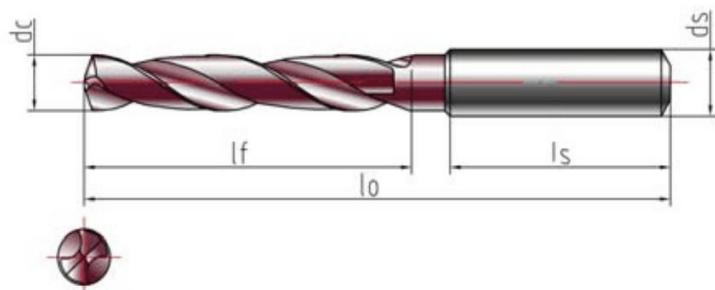
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D144-3D	14.4	65	16	48	115	—	—
CH-D145-3D	14.5	65	16	48	115	M16x1.5	—
CH-D145-3D	14.5	65	16	48	115	5/8-18UNF	—
CH-D146-3D	14.6	65	16	48	115	—	—
CH-D147-3D	14.7	65	16	48	115	—	—
CH-D148-3D	14.8	65	16	48	115	5/8-24UNEF	—
CH-D149-3D	14.9	65	16	48	115	—	—
CH-D150-3D	15.0	65	16	48	115	M16x1	M16x2
CH-D151-3D	15.1	65	16	48	115	—	—
CH-D152-3D	15.2	65	16	48	115	—	—
CH-D153-3D	15.3	65	16	48	115	—	—
CH-D154-3D	15.4	65	16	48	115	—	—
CH-D155-3D	15.5	65	16	48	115	M18x2.5	—
CH-D156-3D	15.6	65	16	48	115	—	—
CH-D157-3D	15.7	65	16	48	115	—	—
CH-D158-3D	15.8	65	16	48	115	—	—
CH-D159-3D	15.9	65	16	48	115	—	—
CH-D160-3D	16.0	65	16	48	115	M18x2	—

◎Standard drill without internal coolant

# CH...5D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

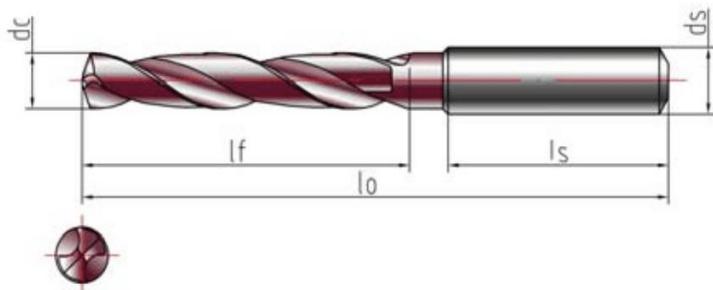
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D033-5D	3.3	28	6	36	66	M4×0.7	—
CH-D034-5D	3.4	28	6	36	66	No. 8-32UNC	—
CH-D035-5D	3.5	28	6	36	66	M4×0.5 No. 8-36UNF	—
CH-D036-5D	3.6	28	6	36	66	—	—
CH-D037-5D	3.7	28	6	36	66	—	M4×0.7
CH-D038-5D	3.8	36	6	36	74	—	M4×0.5
CH-D039-5D	3.9	36	6	36	74	No. 10-24UNC	—
CH-D040-5D	4.0	36	6	36	74	—	—
CH-D041-5D	4.1	36	6	36	74	No. 10-32UNF	—
CH-D042-5D	4.2	36	6	36	74	M5×0.8	—
CH-D043-5D	4.3	36	6	36	74	—	—
CH-D044-5D	4.4	36	6	36	74	—	—
CH-D045-5D	4.5	36	6	36	74	M5×0.5 No. 12-24UNC	—
CH-D046-5D	4.6	36	6	36	74	No. 12-28UNF	M5×0.8
CH-D047-5D	4.7	36	6	36	74	No. 12-32UNEF	—
CH-D048-5D	4.8	44	6	36	82	—	—
CH-D049-5D	4.9	44	6	36	82	—	—
CH-D050-5D	5.0	44	6	36	82	M6×1	—
CH-D051-5D	5.1	44	6	36	82	1/4-20UNC	—
CH-D052-5D	5.2	44	6	36	82	—	—
CH-D053-5D	5.3	44	6	36	82	M6×0.75	—

◎Standard drill without internal coolant

# CH...5D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

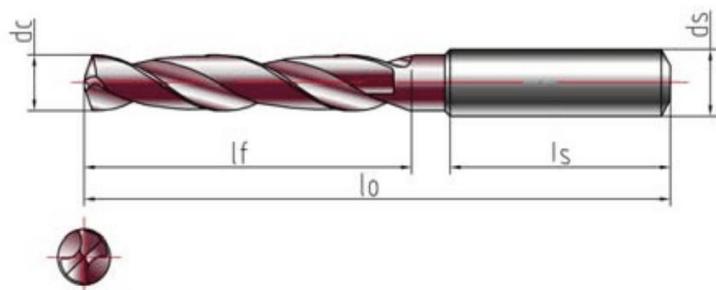
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D054-5D	5.4	44	6	36	82	—	—
CH-D055-5D	5.5	44	6	36	82	1/4-28UNF	M6×1
CH-D056-5D	5.6	44	6	36	82	1/4-32UNEF	—
CH-D057-5D	5.7	44	6	36	82	—	—
CH-D058-5D	5.8	44	6	36	82	—	—
CH-D059-5D	5.9	44	6	36	82	—	—
CH-D060-5D	6.0	44	6	36	82	—	—
CH-D061-5D	6.1	53	8	36	91	—	—
CH-D062-5D	6.2	53	8	36	91	—	—
CH-D063-5D	6.3	53	8	36	91	—	—
CH-D064-5D	6.4	53	8	36	91	—	—
CH-D065-5D	6.5	53	8	36	91	—	—
CH-D066-5D	6.6	53	8	36	91	5/16-18UNC	—
CH-D067-5D	6.7	53	8	36	91	—	—
CH-D068-5D	6.8	53	8	36	91	M8×1.25	—
CH-D069-5D	6.9	53	8	36	91	5/16-24UNEF	—
CH-D070-5D	7.0	53	8	36	91	M8×1	—
CH-D071-5D	7.1	53	8	36	91	5/16-32UNEF	—
CH-D072-5D	7.2	53	8	36	91	—	—
CH-D073-5D	7.3	53	8	36	91	M8×0.75	—
CH-D074-5D	7.4	53	8	36	91	—	M8×1.25
CH-D075-5D	7.5	53	8	36	91	—	—
CH-D076-5D	7.6	53	8	36	91	—	—

◎Standard drill without internal coolant

# CH...5D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

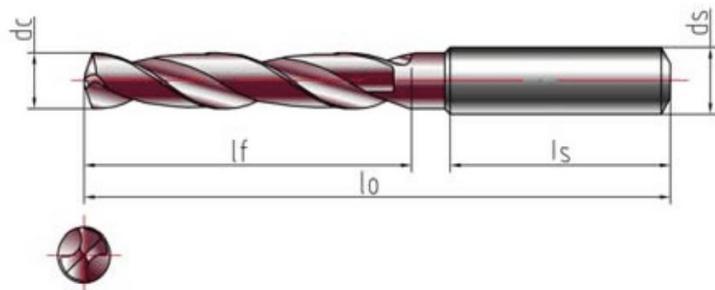
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D077-5D	7.7	53	8	36	91	—	—
CH-D078-5D	7.8	53	8	36	91	—	—
CH-D079-5D	7.9	53	8	36	91	—	—
CH-D080-5D	8.0	53	8	36	91	3/8-16UNC	—
CH-D081-5D	8.1	61	10	40	103	—	—
CH-D082-5D	8.2	61	10	40	103	—	—
CH-D083-5D	8.3	61	10	40	103	—	—
CH-D084-5D	8.4	61	10	40	103	—	—
CH-D085-5D	8.5	61	10	40	103	M10×1.5 3/8-24UNF	—
CH-D086-5D	8.6	61	10	40	103	—	—
CH-D087-5D	8.7	61	10	40	103	3/8-32UNEF	—
CH-D088-5D	8.8	61	10	40	103	M10×1.25	—
CH-D089-5D	8.9	61	10	40	103	—	—
CH-D090-5D	9.0	61	10	40	103	M10×1	—
CH-D091-5D	9.1	61	10	40	103	—	—
CH-D092-5D	9.2	61	10	40	103	—	—
CH-D093-5D	9.3	61	10	40	103	M10×0.75	M10×1.5
CH-D094-5D	9.4	61	10	40	103	7/16-14UNC	—
CH-D095-5D	9.5	61	10	40	103	—	—
CH-D096-5D	9.6	61	10	40	103	—	—
CH-D097-5D	9.7	61	10	40	103	—	—
CH-D098-5D	9.8	61	10	40	103	—	—
CH-D099-5D	9.9	61	10	40	103	7/16-20UNF	—

◎Standard drill without internal coolant

# CH...5D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

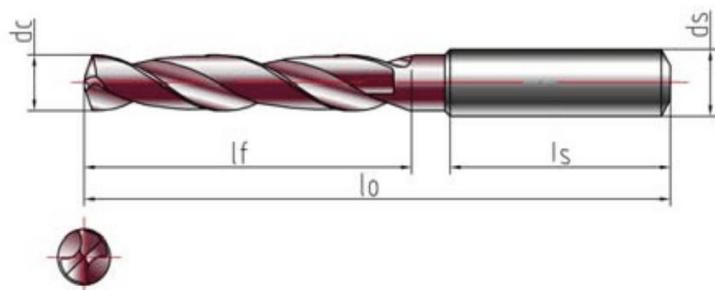
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D100-5D	10.0	61	10	40	103	—	—
CH-D101-5D	10.1	71	12	45	118	—	—
CH-D102-5D	10.2	71	12	45	118	7/16-28UNEF	—
CH-D103-5D	10.3	71	12	45	118	M12×1.75	—
CH-D104-5D	10.4	71	12	45	118	—	—
CH-D105-5D	10.5	71	12	45	118	—	—
CH-D106-5D	10.6	71	12	45	118	—	—
CH-D107-5D	10.7	71	12	45	118	—	—
CH-D108-5D	10.8	71	12	45	118	—	—
CH-D109-5D	10.9	71	12	45	118	1/2-13UNC	—
CH-D110-5D	11.0	71	12	45	118	M12×1	—
CH-D111-5D	11.1	71	12	45	118	—	—
CH-D112-5D	11.2	71	12	45	118	—	M12×1.75
CH-D113-5D	11.3	71	12	45	118	—	—
CH-D114-5D	11.4	71	12	45	118	—	—
CH-D115-5D	11.5	71	12	45	118	1/2-20UNF	—
CH-D116-5D	11.6	71	12	45	118	—	—
CH-D117-5D	11.7	71	12	45	118	—	—
CH-D118-5D	11.8	71	12	45	118	1/2-28UNEF	—
CH-D119-5D	11.9	71	12	45	118	—	—
CH-D120-5D	12.0	71	12	45	118	M14×2	—
CH-D121-5D	12.1	77	14	45	124	—	—
CH-D122-5D	12.2	77	14	45	124	9/16-12UNC	—

◎Standard drill without internal coolant

# CH...5D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

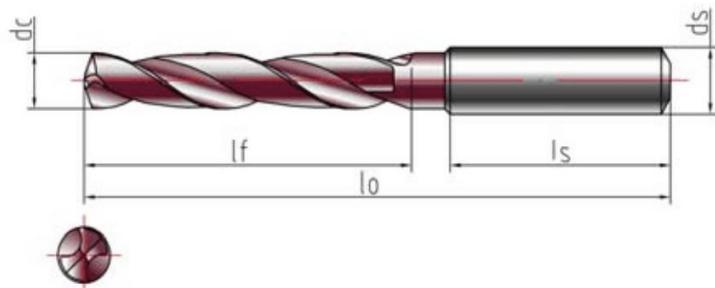
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D123-5D	12.3	77	14	45	124	—	—
CH-D124-5D	12.4	77	14	45	124	—	—
CH-D125-5D	12.5	77	14	45	124	M14×1.5	—
CH-D126-5D	12.6	77	14	45	124	—	—
CH-D127-5D	12.7	77	14	45	124	—	—
CH-D128-5D	12.8	77	14	45	124	—	—
CH-D129-5D	12.9	77	14	45	124	9/16-18UNF	—
CH-D130-5D	13.0	77	14	45	124	M14×1	M14×2
CH-D131-5D	13.1	77	14	45	124	—	—
CH-D132-5D	13.2	77	14	45	124	9/16-24UNEF	—
CH-D133-5D	13.3	77	14	45	124	—	—
CH-D134-5D	13.4	77	14	45	124	—	—
CH-D135-5D	13.5	77	14	45	124	—	—
CH-D136-5D	13.6	77	14	45	124	5/8-11UNC	—
CH-D137-5D	13.7	77	14	45	124	—	—
CH-D138-5D	13.8	77	14	45	124	—	—
CH-D139-5D	13.9	77	14	45	124	—	—
CH-D140-5D	14.0	77	14	45	124	M16×2	—
CH-D141-5D	14.1	83	16	48	133	—	—
CH-D142-5D	14.2	83	16	48	133	—	—
CH-D143-5D	14.3	83	16	48	133	—	—
CH-D144-5D	14.4	83	16	48	133	—	—
CH-D145-5D	14.5	83	16	48	133	M16×1.5	—
CH-D145-5D	14.5	83	16	48	133	5/8-18UNF	—

◎Standard drill without internal coolant

# CH...5D



Solid carbide twist drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

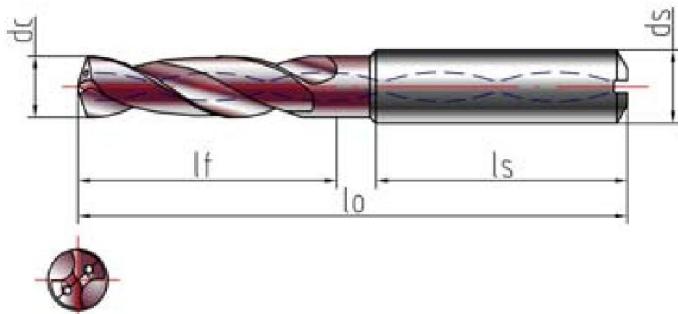
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D146-5D	14.6	83	16	48	133	—	—
CH-D147-5D	14.7	83	16	48	133	—	—
CH-D148-5D	14.8	83	16	48	133	5/8-24UNEF	—
CH-D149-5D	14.9	83	16	48	133	—	—
CH-D150-5D	15.0	83	16	48	133	M16×1	M16×2
CH-D151-5D	15.1	83	16	48	133	—	—
CH-D152-5D	15.2	83	16	48	133	—	—
CH-D153-5D	15.3	83	16	48	133	—	—
CH-D154-5D	15.4	83	16	48	133	—	—
CH-D155-5D	15.5	83	16	48	133	M18×2.5	—
CH-D156-5D	15.6	83	16	48	133	—	—
CH-D157-5D	15.7	83	16	48	133	—	—
CH-D158-5D	15.8	83	16	48	133	—	—
CH-D159-5D	15.9	83	16	48	133	—	—
CH-D160-5D	16.0	83	16	48	133	M18×2	—

◎Standard drill without internal coolant

# CH...3D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

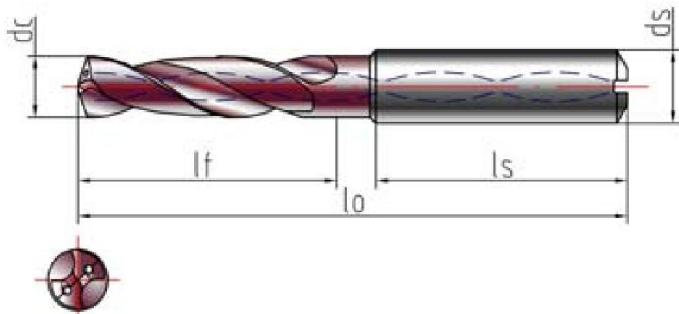
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D033-3D-C	3.3	20	4	28	54	M4x0.7	—
CH-D034-3D-C	3.4	20	4	28	54	NO.8-32UNC	—
CH-D035-3D-C	3.5	20	4	28	54	M4x0.5 NO.8-36UNC	—
CH-D036-3D-C	3.6	20	4	28	54	—	—
CH-D037-3D-C	3.7	20	4	28	54	—	M4x0.7
CH-D038-3D-C	3.8	24	4	28	58	—	M4x0.5
CH-D039-3D-C	3.9	24	4	28	58	NO.10-24UNC	—
CH-D040-3D-C	4.0	24	4	28	58	—	—
CH-D041-3D-C	4.1	24	6	36	66	NO.10-32UNF	—
CH-D042-3D-C	4.2	24	6	36	66	M5x0.8	—
CH-D043-3D-C	4.3	24	6	36	66	—	—
CH-D044-3D-C	4.4	24	6	36	66	—	—
CH-D045-3D-C	4.5	24	6	36	66	M5x0.5 NO.12-24UNC	—
CH-D046-3D-C	4.6	24	6	36	66	NO.12-28UNF	M5x0.8
CH-D047-3D-C	4.7	24	6	36	66	NO.12-32UNEF	—
CH-D048-3D-C	4.8	28	6	36	66	—	—
CH-D049-3D-C	4.9	28	6	36	66	—	—
CH-D050-3D-C	5.0	28	6	36	66	M6x1	—
CH-D051-3D-C	5.1	28	6	36	66	1/4-20UNC	—
CH-D052-3D-C	5.2	28	6	36	66	—	—
CH-D053-3D-C	5.3	28	6	36	66	M6x0.75	—

◎Standard drill with internal coolant

# CH...3D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

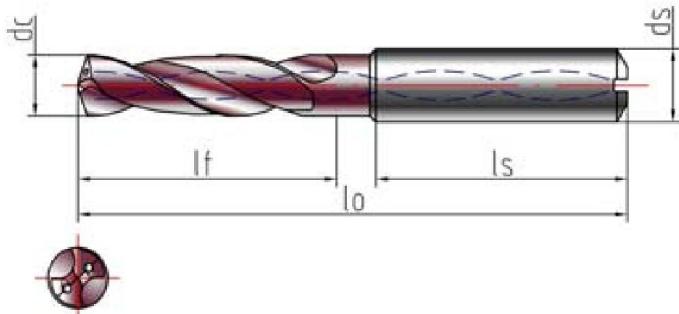
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	1f	ds	ls	lo	cutting tap	extrusion tap
CH-D054-3D-C	5.4	28	6	36	66	—	—
CH-D055-3D-C	5.5	28	6	36	66	1/4-28UNF	M6x1
CH-D056-3D-C	5.6	28	6	36	66	1/4-32UNEF	—
CH-D057-3D-C	5.7	28	6	36	66	—	—
CH-D058-3D-C	5.8	28	6	36	66	—	—
CH-D059-3D-C	5.9	28	6	36	66	—	—
CH-D060-3D-C	6.0	28	6	36	66	—	—
CH-D061-3D-C	6.1	34	8	36	79	—	—
CH-D062-3D-C	6.2	34	8	36	79	—	—
CH-D063-3D-C	6.3	34	8	36	79	—	—
CH-D064-3D-C	6.4	34	8	36	79	—	—
CH-D065-3D-C	6.5	34	8	36	79	—	—
CH-D066-3D-C	6.6	34	8	36	79	5/16-18UNC	—
CH-D067-3D-C	6.7	34	8	36	79	—	—
CH-D068-3D-C	6.8	34	8	36	79	M8x1.25	—
CH-D069-3D-C	6.9	34	8	36	79	5/16-24UNF	—
CH-D070-3D-C	7.0	34	8	36	79	M8x1	—
CH-D071-3D-C	7.1	41	8	36	79	5/16-32UNEF	—
CH-D072-3D-C	7.2	41	8	36	79	—	—
CH-D073-3D-C	7.3	41	8	36	79	M8x0.75	—
CH-D074-3D-C	7.4	41	8	36	79	—	M8x1.25
CH-D075-3D-C	7.5	41	8	36	79	—	—

◎Standard drill with internal coolant

# CH...3D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

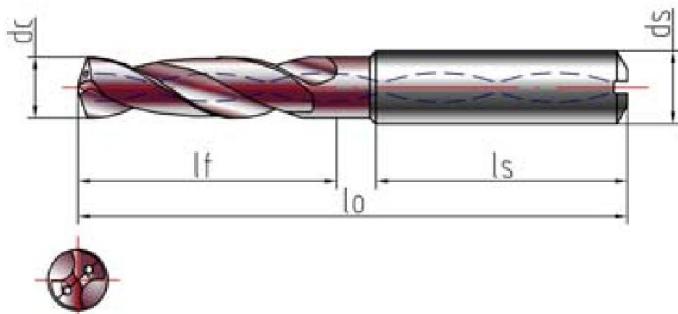
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	1f	ds	ls	lo	cutting tap	extrusion tap
CH-D076-3D-C	7.6	41	8	36	79	—	—
CH-D077-3D-C	7.7	41	8	36	79	—	—
CH-D078-3D-C	7.8	41	8	36	79	—	—
CH-D079-3D-C	7.9	41	8	36	79	—	—
CH-D080-3D-C	8.0	41	8	36	79	3/8-16UNC	—
CH-D081-3D-C	8.1	47	10	40	89	—	—
CH-D082-3D-C	8.2	47	10	40	89	—	—
CH-D083-3D-C	8.3	47	10	40	89	—	—
CH-D084-3D-C	8.4	47	10	40	89	—	—
CH-D085-3D-C	8.5	47	10	40	89	M10x1.5 3/8-24UNF	—
CH-D086-3D-C	8.6	47	10	40	89	—	—
CH-D087-3D-C	8.7	47	10	40	89	3/8-32UNEF	—
CH-D088-3D-C	8.8	47	10	40	89	M10x1.25	—
CH-D089-3D-C	8.9	47	10	40	89	—	—
CH-D090-3D-C	9.0	47	10	40	89	M10x1	—
CH-D091-3D-C	9.1	47	10	40	89	—	—
CH-D092-3D-C	9.2	47	10	40	89	—	—
CH-D093-3D-C	9.3	47	10	40	89	M10x0.75	M10x1.5
CH-D094-3D-C	9.4	47	10	40	89	7/16-14UNC	—
CH-D095-3D-C	9.5	47	10	40	89	—	—
CH-D097-3D-C	9.7	47	10	40	89	—	—
CH-D098-3D-C	9.8	47	10	40	89	—	—

◎Standard drill with internal coolant

# CH...3D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

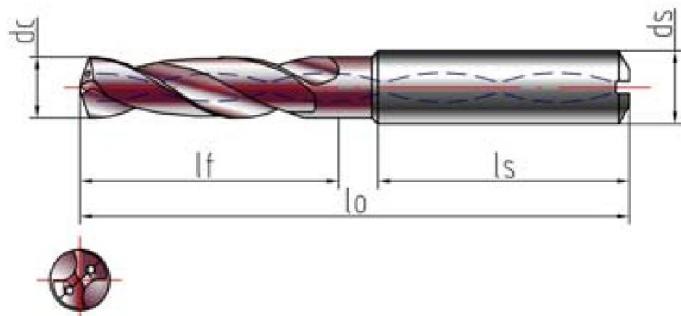
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D099-3D-C	9.9	47	10	40	89	7/16-20UNF	—
CH-D100-3D-C	10.0	47	10	40	89	—	—
CH-D101-3D-C	10.1	55	12	45	102	—	—
CH-D102-3D-C	10.2	55	12	45	102	7/16-28UNEF	—
CH-D103-3D-C	10.3	55	12	45	102	M12x1.75	—
CH-D104-3D-C	10.4	55	12	45	102	—	—
CH-D105-3D-C	10.5	55	12	45	102	—	—
CH-D106-3D-C	10.6	55	12	45	102	—	—
CH-D107-3D-C	10.7	55	12	45	102	—	—
CH-D108-3D-C	10.8	55	12	45	102	—	—
CH-D109-3D-C	10.9	55	12	45	102	1/2-13UNC	—
CH-D110-3D-C	11.0	55	12	45	102	M12x1	—
CH-D111-3D-C	11.1	55	12	45	102	—	—
CH-D112-3D-C	11.2	55	12	45	102	—	M12x1.75
CH-D113-3D-C	11.3	55	12	45	102	—	—
CH-D114-3D-C	11.4	55	12	45	102	—	—
CH-D115-3D-C	11.5	55	12	45	102	1/2-20UNF	—
CH-D116-3D-C	11.6	55	12	45	102	—	—
CH-D117-3D-C	11.7	55	12	45	102	—	—
CH-D118-3D-C	11.8	55	12	45	102	1/2-28UNEF	—
CH-D119-3D-C	11.9	55	12	45	102	—	—
CH-D120-3D-C	12.0	55	12	45	102	M14x2	—

◎Standard drill with internal coolant

# CH...3D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle 45°

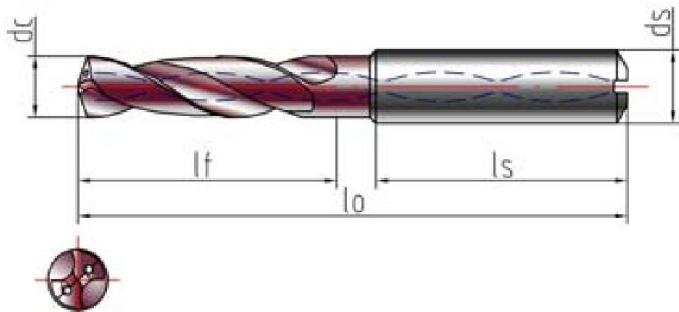
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	$d_c$	$l_f$	$d_s$	$l_s$	$l_o$	cutting tap	extrusion tap
CH-D121-3D-C	12.1	60	14	45	107	—	—
CH-D122-3D-C	12.2	60	14	45	107	9/16-12UNC	—
CH-D123-3D-C	12.3	60	14	45	107	—	—
CH-D124-3D-C	12.4	60	14	45	107	—	—
CH-D125-3D-C	12.5	60	14	45	107	M14x1.5	—
CH-D126-3D-C	12.6	60	14	45	107	—	—
CH-D127-3D-C	12.7	60	14	45	107	—	—
CH-D128-3D-C	12.8	60	14	45	107	—	—
CH-D129-3D-C	12.9	60	14	45	107	9/16-18UNF	—
CH-D130-3D-C	13.0	60	14	45	107	M14x1	M14x2
CH-D131-3D-C	13.1	60	14	45	107	—	—
CH-D132-3D-C	13.2	60	14	45	107	9/16-24UNEF	—
CH-D133-3D-C	13.3	60	14	45	107	—	—
CH-D134-3D-C	13.4	60	14	45	107	—	—
CH-D135-3D-C	13.5	60	14	45	107	—	—
CH-D136-3D-C	13.6	60	14	45	107	5/8-11UNC	—
CH-D137-3D-C	13.7	60	14	45	107	—	—
CH-D138-3D-C	13.8	60	14	45	107	—	—
CH-D139-3D-C	13.9	60	14	45	107	—	—
CH-D140-3D-C	14.0	60	14	45	107	M16x2	—
CH-D141-3D-C	14.1	65	16	48	115	—	—
CH-D142-3D-C	14.2	65	16	48	115	—	—
CH-D143-3D-C	14.3	65	16	48	115	—	—

◎Standard drill with internal coolant

# CH...3D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 3xD(DIA); main edge angle

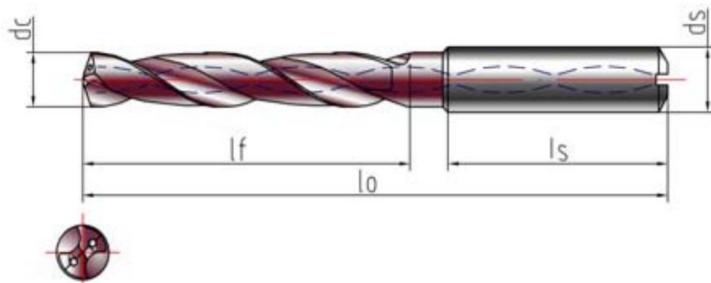
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	l0	cutting tap	extrusion tap
CH-D144-3D-C	14.4	65	16	48	115	—	—
CH-D145-3D-C	14.5	65	16	48	115	M16x1.5	—
CH-D145-3D-C	14.5	65	16	48	115	5/8-18UNF	—
CH-D146-3D-C	14.6	65	16	48	115	—	—
CH-D147-3D-C	14.7	65	16	48	115	—	—
CH-D148-3D-C	14.8	65	16	48	115	5/8-24UNEF	—
CH-D149-3D-C	14.9	65	16	48	115	—	—
CH-D150-3D-C	15.0	65	16	48	115	M16x1	M16x2
CH-D151-3D-C	15.1	65	16	48	115	—	—
CH-D152-3D-C	15.2	65	16	48	115	—	—
CH-D153-3D-C	15.3	65	16	48	115	—	—
CH-D154-3D-C	15.4	65	16	48	115	—	—
CH-D155-3D-C	15.5	65	16	48	115	M18x2.5	—
CH-D156-3D-C	15.6	65	16	48	115	—	—
CH-D157-3D-C	15.7	65	16	48	115	—	—
CH-D158-3D-C	15.8	65	16	48	115	—	—
CH-D159-3D-C	15.9	65	16	48	115	—	—
CH-D160-3D-C	16.0	65	16	48	115	M18x2	—

◎Standard drill with internal coolant

# CH...5D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

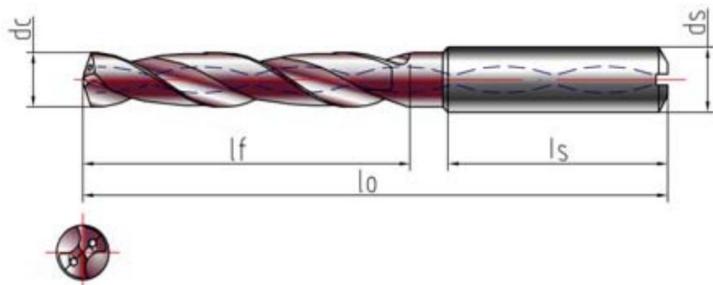
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D033-5D-C	3.3	28	4	28	58	M4×0.7	—
CH-D034-5D-C	3.4	28	4	28	58	No. 8-32UNC	—
CH-D035-5D-C	3.5	28	4	28	58	M4×0.5 No. 8-36UNF	—
CH-D036-5D-C	3.6	28	4	28	58	—	—
CH-D037-5D-C	3.7	28	4	28	58	—	M4×0.7
CH-D038-5D-C	3.8	36	4	28	66	—	M4×0.5
CH-D039-5D-C	3.9	36	4	28	66	No. 10-24UNC	—
CH-D040-5D-C	4.0	36	4	28	66	—	—
CH-D041-5D-C	4.1	36	6	36	74	No. 10-32UNF	—
CH-D042-5D-C	4.2	36	6	36	74	M5×0.8	—
CH-D043-5D-C	4.3	36	6	36	74	—	—
CH-D044-5D-C	4.4	36	6	36	74	—	—
CH-D045-5D-C	4.5	36	6	36	74	M5×0.5 No. 12-24UNC	—
CH-D046-5D-C	4.6	36	6	36	74	No. 12-28UNF	M5×0.8
CH-D047-5D-C	4.7	36	6	36	74	No. 12-32UNEF	—
CH-D048-5D-C	4.8	44	6	36	82	—	—
CH-D049-5D-C	4.9	44	6	36	82	—	—
CH-D050-5D-C	5.0	44	6	36	82	M6×1	—
CH-D051-5D-C	5.1	44	6	36	82	1/4-20UNC	—
CH-D052-5D-C	5.2	44	6	36	82	—	—
CH-D053-5D-C	5.3	44	6	36	82	M6×0.75	—

◎Standard drill with internal coolant

# CH...5D-C



Solid Carbide Internal Cooling Twist Drill



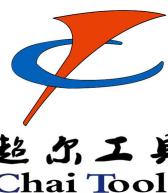
Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

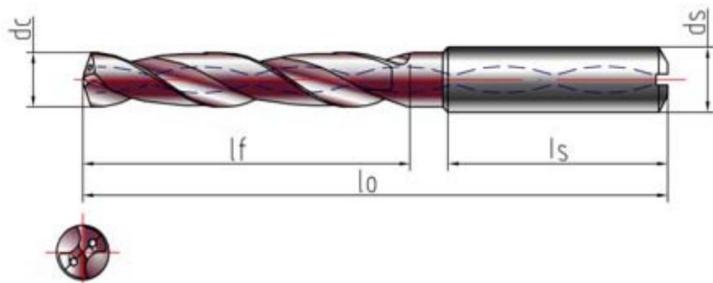
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D054-5D-C	5.4	44	6	36	82	—	—
CH-D055-5D-C	5.5	44	6	36	82	1/4-28UNF	M6×1
CH-D056-5D-C	5.6	44	6	36	82	1/4-32UNEF	—
CH-D057-5D-C	5.7	44	6	36	82	—	—
CH-D058-5D-C	5.8	44	6	36	82	—	—
CH-D059-5D-C	5.9	44	6	36	82	—	—
CH-D060-5D-C	6.0	44	6	36	82	—	—
CH-D061-5D-C	6.1	53	8	36	91	—	—
CH-D062-5D-C	6.2	53	8	36	91	—	—
CH-D063-5D-C	6.3	53	8	36	91	—	—
CH-D064-5D-C	6.4	53	8	36	91	—	—
CH-D065-5D-C	6.5	53	8	36	91	—	—
CH-D066-5D-C	6.6	53	8	36	91	5/16-18UNC	—
CH-D067-5D-C	6.7	53	8	36	91	—	—
CH-D068-5D-C	6.8	53	8	36	91	M8×1.25	—
CH-D069-5D-C	6.9	53	8	36	91	5/16-24UNEF	—
CH-D070-5D-C	7.0	53	8	36	91	M8×1	—
CH-D071-5D-C	7.1	53	8	36	91	5/16-32UNEF	—
CH-D072-5D-C	7.2	53	8	36	91	—	—
CH-D073-5D-C	7.3	53	8	36	91	M8×0.75	—
CH-D074-5D-C	7.4	53	8	36	91	—	M8×1.25
CH-D075-5D-C	7.5	53	8	36	91	—	—
CH-D076-5D-C	7.6	53	8	36	91	—	—

◎Standard drill with internal coolant

# CH...5D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

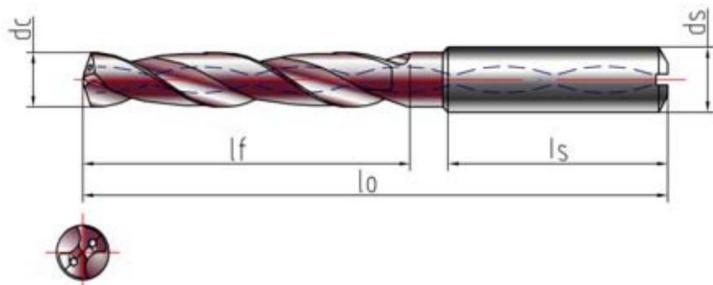
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D077-5D-C	7.7	53	8	36	91	—	—
CH-D078-5D-C	7.8	53	8	36	91	—	—
CH-D079-5D-C	7.9	53	8	36	91	—	—
CH-D080-5D-C	8.0	53	8	36	91	3/8-16UNC	—
CH-D081-5D-C	8.1	61	10	40	103	—	—
CH-D082-5D-C	8.2	61	10	40	103	—	—
CH-D083-5D-C	8.3	61	10	40	103	—	—
CH-D084-5D-C	8.4	61	10	40	103	—	—
CH-D085-5D-C	8.5	61	10	40	103	M10×1.5 3/8-24UNF	—
CH-D086-5D-C	8.6	61	10	40	103	—	—
CH-D087-5D-C	8.7	61	10	40	103	3/8-32UNEF	—
CH-D088-5D-C	8.8	61	10	40	103	M10×1.25	—
CH-D089-5D-C	8.9	61	10	40	103	—	—
CH-D090-5D-C	9.0	61	10	40	103	M10×1	—
CH-D091-5D-C	9.1	61	10	40	103	—	—
CH-D092-5D-C	9.2	61	10	40	103	—	—
CH-D093-5D-C	9.3	61	10	40	103	M10×0.75	M10×1.5
CH-D094-5D-C	9.4	61	10	40	103	7/16-14UNC	—
CH-D095-5D-C	9.5	61	10	40	103	—	—
CH-D096-5D-C	9.6	61	10	40	103	—	—
CH-D097-5D-C	9.7	61	10	40	103	—	—
CH-D098-5D-C	9.8	61	10	40	103	—	—
CH-D099-5D-C	9.9	61	10	40	103	7/16-20UNF	—

◎Standard drill with internal coolant

# CH...5D-C



Solid Carbide Internal Cooling Twist Drill



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◎Solid carbide twist drill: 5xD(DIA); main edge angle

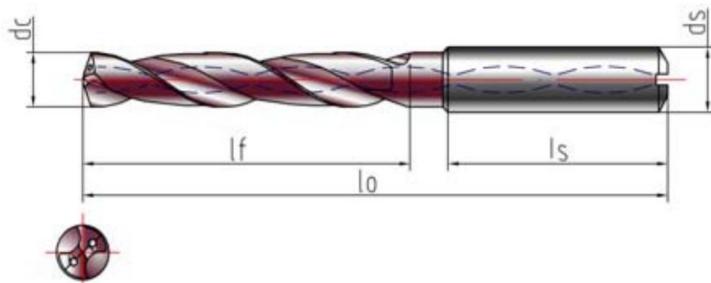
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D100-5D-C	10.0	61	10	40	103	—	—
CH-D101-5D-C	10.1	71	12	45	118	—	—
CH-D102-5D-C	10.2	71	12	45	118	7/16-28UNEF	—
CH-D103-5D-C	10.3	71	12	45	118	M12×1.75	—
CH-D104-5D-C	10.4	71	12	45	118	—	—
CH-D105-5D-C	10.5	71	12	45	118	—	—
CH-D106-5D-C	10.6	71	12	45	118	—	—
CH-D107-5D-C	10.7	71	12	45	118	—	—
CH-D108-5D-C	10.8	71	12	45	118	—	—
CH-D109-5D-C	10.9	71	12	45	118	1/2-13UNC	—
CH-D110-5D-C	11.0	71	12	45	118	M12×1	—
CH-D111-5D-C	11.1	71	12	45	118	—	—
CH-D112-5D-C	11.2	71	12	45	118	—	M12×1.75
CH-D113-5D-C	11.3	71	12	45	118	—	—
CH-D114-5D-C	11.4	71	12	45	118	—	—
CH-D115-5D-C	11.5	71	12	45	118	1/2-20UNF	—
CH-D116-5D-C	11.6	71	12	45	118	—	—
CH-D117-5D-C	11.7	71	12	45	118	—	—
CH-D118-5D-C	11.8	71	12	45	118	1/2-28UNEF	—
CH-D119-5D-C	11.9	71	12	45	118	—	—
CH-D120-5D-C	12.0	71	12	45	118	M14×2	—
CH-D121-5D-C	12.1	77	14	45	124	—	—
CH-D122-5D-C	12.2	77	14	45	124	9/16-12UNC	—

◎Standard drill with internal coolant

# CH...5D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

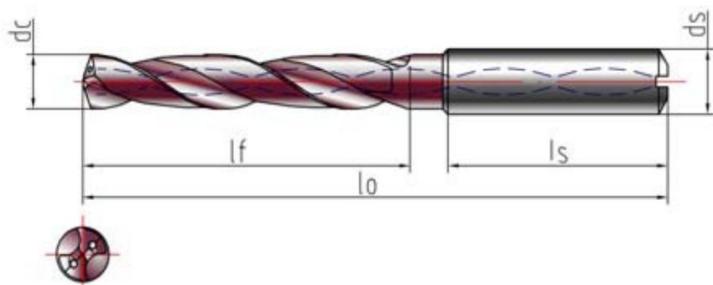
PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D123-5D-C	12.3	77	14	45	124	—	—
CH-D124-5D-C	12.4	77	14	45	124	—	—
CH-D125-5D-C	12.5	77	14	45	124	M14×1.5	—
CH-D126-5D-C	12.6	77	14	45	124	—	—
CH-D127-5D-C	12.7	77	14	45	124	—	—
CH-D128-5D-C	12.8	77	14	45	124	—	—
CH-D129-5D-C	12.9	77	14	45	124	9/16-18UNF	—
CH-D130-5D-C	13.0	77	14	45	124	M14×1	M14×2
CH-D131-5D-C	13.1	77	14	45	124	—	—
CH-D132-5D-C	13.2	77	14	45	124	9/16-24UNEF	—
CH-D133-5D-C	13.3	77	14	45	124	—	—
CH-D134-5D-C	13.4	77	14	45	124	—	—
CH-D135-5D-C	13.5	77	14	45	124	—	—
CH-D136-5D-C	13.6	77	14	45	124	5/8-11UNC	—
CH-D137-5D-C	13.7	77	14	45	124	—	—
CH-D138-5D-C	13.8	77	14	45	124	—	—
CH-D139-5D-C	13.9	77	14	45	124	—	—
CH-D140-5D-C	14.0	77	14	45	124	M16×2	—
CH-D141-5D-C	14.1	83	16	48	133	—	—
CH-D142-5D-C	14.2	83	16	48	133	—	—
CH-D143-5D-C	14.3	83	16	48	133	—	—
CH-D144-5D-C	14.4	83	16	48	133	—	—
CH-D145-5D-C	14.5	83	16	48	133	M16×1.5	—
CH-D145-5D-C	14.5	83	16	48	133	5/8-18UNF	—

◎Standard drill with internal coolant

## CH...5D-C



Solid Carbide Internal Cooling Twist Drill



Use characteristics: used for processing common materials such as structural steel, alloy steel, stainless steel, etc.; strong centering ability, can obtain stable dimensional accuracy and good surface quality; suitable for occasions with excellent rigidity

◎Solid carbide twist drill: 5xD(DIA); main edge angle

PRODUCT MODEL	DIMENSION					threaded bottom hole	
	dc	lf	ds	ls	lo	cutting tap	extrusion tap
CH-D146-5D-C	14.6	83	16	48	133	—	—
CH-D147-5D-C	14.7	83	16	48	133	—	—
CH-D148-5D-C	14.8	83	16	48	133	5/8-24UNEF	—
CH-D149-5D-C	14.9	83	16	48	133	—	—
CH-D150-5D-C	15.0	83	16	48	133	M16×1	M16×2
CH-D151-5D-C	15.1	83	16	48	133	—	—
CH-D152-5D-C	15.2	83	16	48	133	—	—
CH-D153-5D-C	15.3	83	16	48	133	—	—
CH-D154-5D-C	15.4	83	16	48	133	—	—
CH-D155-5D-C	15.5	83	16	48	133	M18×2.5	—
CH-D156-5D-C	15.6	83	16	48	133	—	—
CH-D157-5D-C	15.7	83	16	48	133	—	—
CH-D158-5D-C	15.8	83	16	48	133	—	—
CH-D159-5D-C	15.9	83	16	48	133	—	—
CH-D160-5D-C	16.0	83	16	48	133	M18×2	—

◎Standard drill with internal coolant



# 超尔皇冠钻



HEAD CHANGEABLE DRILL

## HEAD CHANGABLE DRILL INSERTS

## Groove TYPE introduction

Groove code	SHAPE	INTRODUCTION
RC		RC TYPE: Low cutting force, good centering performance. Reinforced cutting edge, high chipping resistance, excellent chip control ability, effectively prolong tool life.
SE		SE TYPE: The cutter head has a self-centering and strong SE-type chisel edge, which avoids hardening of the core and increases the feed rate. The rounded sickle-shaped cutting edge provides excellent chip control and long tool life, even in long-chipping materials. Suitable for processing steel, stainless steel and cast iron.

## GRADE INTRODUCTION

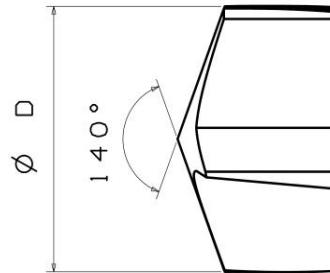
GRADE CODE	INTRODUCTION
CT5520	It is made of a fine-grained cemented carbide with a PVD composite coating of TiAlN matrix. It has high wear resistance and can use very high cutting speed parameters under stable conditions
CT8420	Cutting edge particularly suitable for drilling in alloy and high alloy steels
CT5420	Cutting edge as an alternative for machining cast iron materials

# CDH-RC

HEAD CHANGABLE DRILL INSERTS



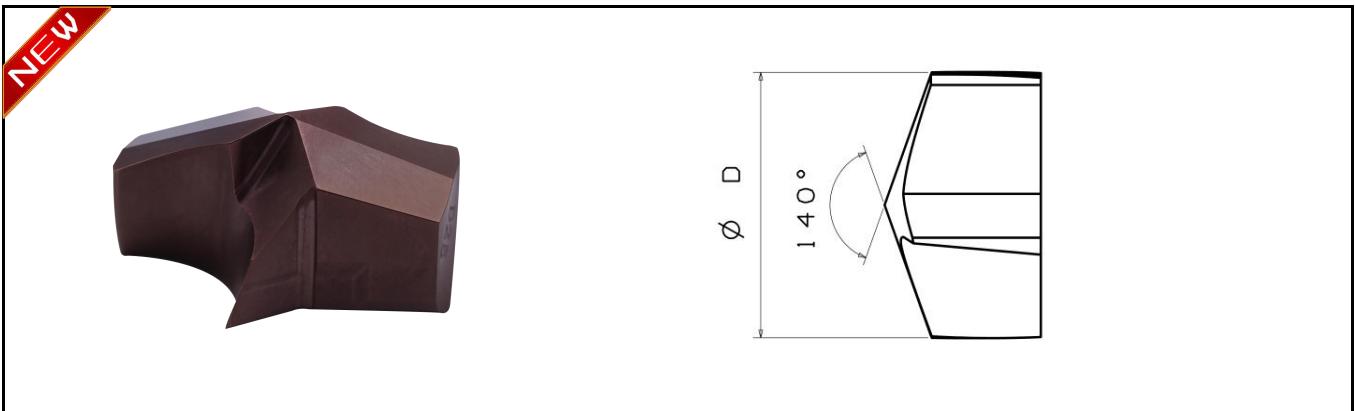
**NEW**



PRODUCT MODEL	DIMENSION			toleranceK7 (METRIC)	
	D		HOLDER SIZE		
	mm	In			
CDH1250RC	12.50	0.4921	C	+0.001 /+0.019	
CDH1300RC	13.00	0.5118	C		
CDH1350RC	13.50	0.531	C		
CDH1351RC	13.51	0.5319	B		
CDH1400RC	14.00	0.5512	B		
CDH1450RC	14.50	0.5709	B		
CDH1451RC	14.51	0.5713	A		
CDH1500RC	15.00	0.5906	A		
CDH1550RC	15.50	0.6102	A		
CDH1600RC	16.00	0.6299	1		
CDH1650RC	16.50	0.6496	1		
CDH1700RC	17.00	0.6693	1		
CDH1750RC	17.50	0.689	1		
CDH1800RC	18.00	0.7087	1		
CDH1801RC	18.01	0.7087	2	+0.002 /+0.023	
CDH1850RC	18.50	0.7283	2		
CDH1900RC	19.00	0.748	2		
CDH1950RC	19.50	0.7677	2		
CDH2000RC	20.00	0.7874	3		
CDH2050RC	20.50	0.8071	3		
CDH2100RC	21.00	0.8268	3		
CDH2150RC	21.50	0.8460	3		
CDH2200RC	22.00	0.8661	3		
CDH2201RC	22.01	0.8665	4		

# CDH-RC

HEAD CHANGABLE DRILL INSERTS



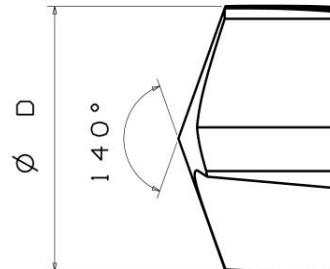
PRODUCT MODEL	DIMENSION			toleranceK7 (METRIC)	
	D		HOLDER SIZE		
	mm	In			
CDH2250RC	22.50	0.8858	4	+0.002 /+0.023	
CDH2300RC	23.00	0.9055	4		
CDH2350RC	23.50	0.9252	4		
CDH2400RC	24.00	0.9449	4		
CDH2401RC	24.01	0.9453	5		
CDH2450RC	24.50	0.9646	5		
CDH2500RC	25.00	0.9843	5		
CDH2550RC	25.50	1.0039	5		
CDH2600RC	26.00	1.0236	5		
CDH2601RC	26.01	1.0240	6		
CDH2650RC	26.50	1.0433	6		
CDH2700RC	27.00	1.0630	6		
CDH2750RC	27.50	1.0827	6		
CDH2800RC	28.00	1.1024	6		
CDH2801RC	28.016	1.1030	7		
CDH2850RC	28.50	1.1220	7		
CDH2900RC	29.00	1.1417	7	+0.002 /+0.027	
CDH2950RC	29.50	1.1614	7		
CDH3000RC	30.00	1.1811	7		
CDH3001RC	30.01	1.1815	8		
CDH3050RC	30.50	1.2008	8		
CDH3100RC	31.00	1.2205	8		
CDH3150RC	31.50	1.2402	8		
CDH3200RC	32.00	1.2598	8		

# CDH-SE



HEAD CHANGABLE DRILL INSERTS

**NEW**

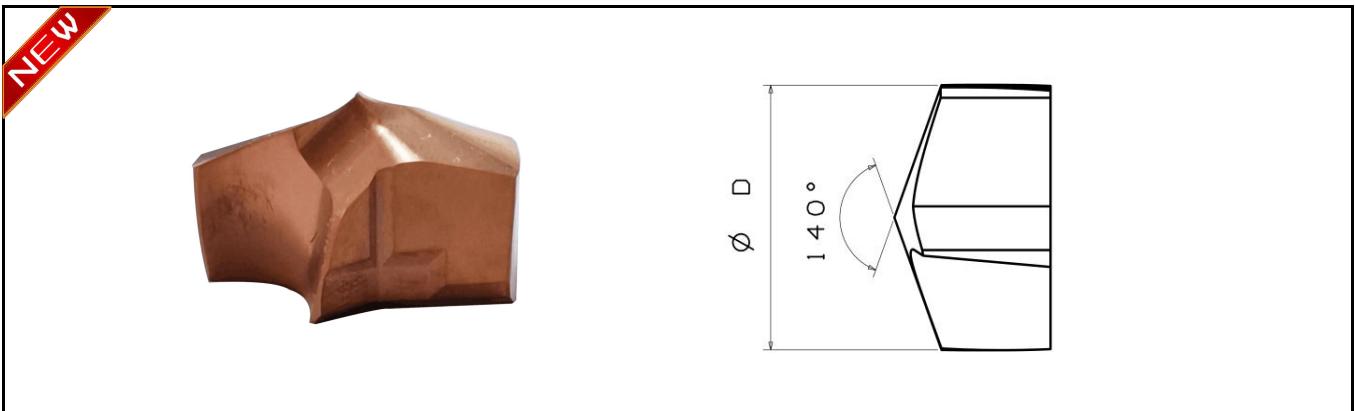


PRODUCT MODEL	DIMENSION			toleranceK7 (METRIC)	
	D		HOLDER SIZE		
	mm	In			
CDH1250SE	12.50	0.4921	C	+0.001 /+0.019	
CDH1300SE	13.00	0.5118	C		
CDH1350SE	13.50	0.531	C		
CDH1351SE	13.51	0.5319	B		
CDH1400SE	14.00	0.5512	B		
CDH1450SE	14.50	0.5709	B		
CDH1451SE	14.51	0.5713	A		
CDH1500SE	15.00	0.5906	A		
CDH1550SE	15.50	0.6102	A		
CDH1600SE	16.00	0.6299	1		
CDH1650SE	16.50	0.6496	1		
CDH1700SE	17.00	0.6693	1		
CDH1750SE	17.50	0.689	1		
CDH1800SE	18.00	0.7087	1		
CDH1801SE	18.01	0.7087	2	+0.002 /+0.023	
CDH1850SE	18.50	0.7283	2		
CDH1900SE	19.00	0.748	2		
CDH1950SE	19.50	0.7677	2		
CDH2000SE	20.00	0.7874	3		
CDH2050SE	20.50	0.8071	3		
CDH2100SE	21.00	0.8268	3		
CDH2150SE	21.50	0.8460	3		
CDH2200SE	22.00	0.8661	3		
CDH2201SE	22.01	0.8665	4		

# CDH-SE



HEAD CHANGABLE DRILL INSERTS

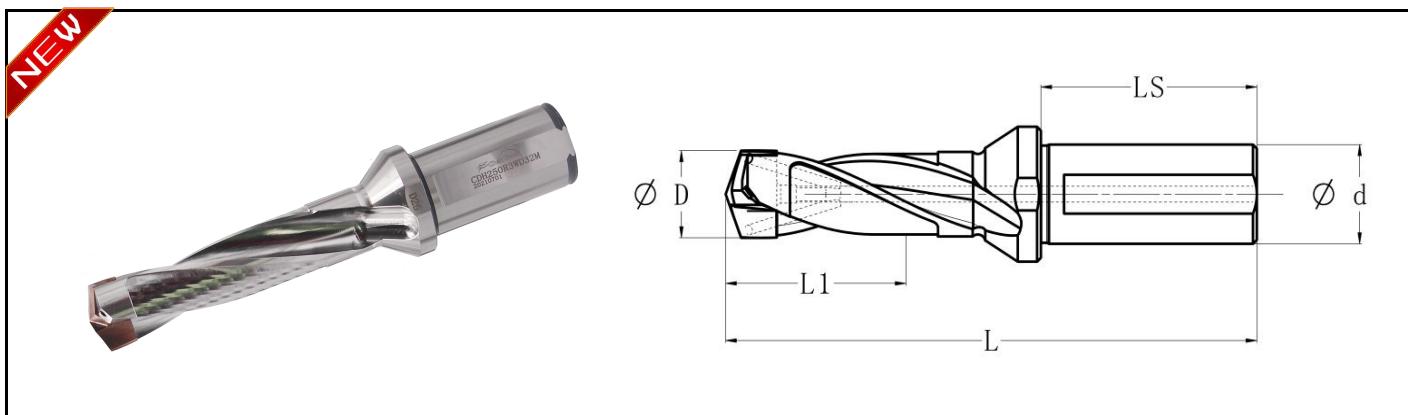


PRODUCT MODEL	DIMENSION			toleranceK7 (METRIC)	
	D		HOLDER SIZE		
	mm	In			
CDH2250SE	22.50	0.8858	4	+0.002 /+0.023	
CDH2300SE	23.00	0.9055	4		
CDH2350SE	23.50	0.9252	4		
CDH2400SE	24.00	0.9449	4		
CDH2401SE	24.01	0.9453	5		
CDH2450SE	24.50	0.9646	5		
CDH2500SE	25.00	0.9843	5		
CDH2550SE	25.50	1.0039	5		
CDH2600SE	26.00	1.0236	5		
CDH2601SE	26.01	1.0240	6		
CDH2650SE	26.50	1.0433	6		
CDH2700SE	27.00	1.0630	6		
CDH2750SE	27.50	1.0827	6		
CDH2800SE	28.00	1.1024	6		
CDH2801SE	28.016	1.1030	7		
CDH2850SE	28.50	1.1220	7		
CDH2900SE	29.00	1.1417	7	+0.002 /+0.027	
CDH2950SE	29.50	1.1614	7		
CDH3000SE	30.00	1.1811	7		
CDH3001SE	30.01	1.1815	8		
CDH3050SE	30.50	1.2008	8		
CDH3100SE	31.00	1.2205	8		
CDH3150SE	31.50	1.2402	8		
CDH3200SE	32.00	1.2598	8		

# CDH-R1



HEAD CHANGABLE DRILL HOLDER



• CDH • 1 x D • METRIC

PRODUCT MODEL	DIMENSION								
	D		Dmax		L1	LS	d	L	HOLDER SIZE
mm	in	mm	in						
1 x D									
CDH125R1WD16M	12.500	0.4921	13.500	0.5314	14	48	16	78	c
CDH136R1WD16M	13.510	0.5319	14.500	0.5708	15	48	16	81	B
CDH146R1WD20M	14.510	0.5713	15.874	0.6249	16	50	20	85	A
CDH160R1WD20M	16.000	0.6299	18.000	0.7086	18	50	20	88	1
CDH181R1WD25M	18.010	0.7091	19.999	0.7873	20	56	25	99	2
CDH200R1WD25M	20.000	0.7874	22.000	0.8661	22	56	25	102	3
CDH221R1WD25M	22.010	0.8665	24.000	0.9448	24	56	25	107	4
CDH241R1WD32M	24.010	0.9453	26.000	1.0236	26	60	32	115	5
CDH261R1WD32M	26.010	1.0240	28.000	1.1023	28	60	32	119	6
CDH281R1WD32M	28.016	1.1030	30.000	1.1811	30	60	32	123	7
CDH301R1WD32M	30.010	1.1815	32.000	1.2598	32	60	32	127	8

• This tool holder has internal coolant

• holder should use correct inerts

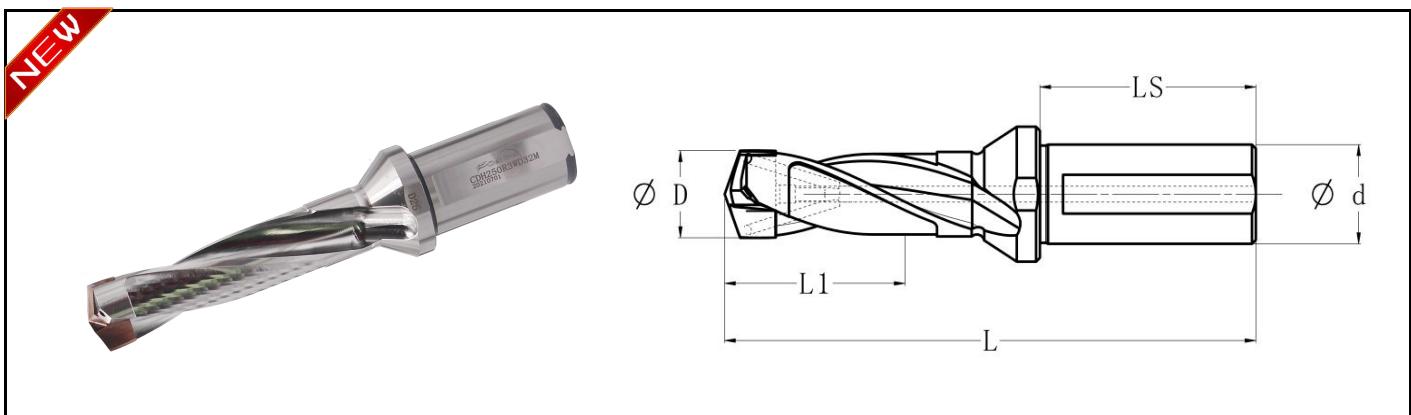
• Inserts to be ordered separately

• For information on adapting screw wrenches, see page C61; for usage, see page C62

# CDH-R3/R5



## HEAD CHANGABLE DRILL HOLDER



### • CDH • 3 x D / 5 x D • METRIC

PRODUCT MODEL	PRODUCT MODEL	DIMENSION								
		D		Dmax		L1		LS	d	SIZE
3 x D	5 x D	mm	in	mm	in	3xD	5xD			
CDH125R3WD16M	CDH125R5WD16M	12.500	0.4921	13.000	0.5118	42	70	48	16	C
CDH130R3WD16M	CDH130R5WD16M	13.000	0.5118	13.500	0.5314	42	70	48	16	C
CDH135R3WD16M	CDH135R5WD16M	13.500	0.5315	13.500	0.5314	42	70	48	16	C
CDH136R3WD16M	CDH136R5WD16M	13.510	0.5319	14.000	0.5512	42	70	48	16	B
CDH140R3WD16M	CDH140R5WD16M	14.000	0.5512	14.500	0.5708	42	70	48	16	B
CDH145R3WD20M	CDH145R5WD20M	14.500	0.5709	14.500	0.5708	48	80	50	20	B
CDH146R3WD20M	CDH146R5WD20M	14.510	0.5713	15.000	0.5906	48	80	50	20	A
CDH150R3WD20M	CDH150R5WD20M	15.000	0.5906	15.500	0.6102	48	80	50	20	A
CDH155R3WD20M	CDH155R5WD20M	15.500	0.6102	15.874	0.6249	48	80	50	20	A
CDH160R3WD20M	CDH160R5WD20M	16.000	0.6299	16.500	0.6496	48	80	50	20	1
CDH165R3WD20M	CDH165R5WD20M	16.500	0.6496	17.000	0.6693	54	90	50	20	1
CDH170R3WD20M	CDH170R5WD20M	17.000	0.6693	17.500	0.6890	54	90	50	20	1
CDH175R3WD20M	CDH175R5WD20M	17.500	0.6890	18.000	0.7086	54	90	50	20	1
CDH180R3WD20M	CDH180R5WD20M	18.000	0.7087	18.000	0.7086	54	90	50	20	1
—	CDH181R5WD25M	18.010	0.7091	18.500	0.7283	—	100	56	25	2
CDH185R3WD25M	CDH185R5WD25M	18.500	0.7283	19.000	0.7480	60	100	56	25	2
CDH190R3WD25M	CDH190R5WD25M	19.000	0.7480	19.500	0.7677	60	100	56	25	2
CDH195R3WD25M	CDH195R5WD25M	19.500	0.7677	19.999	0.7873	60	100	56	25	2
CDH200R3WD25M	CDH200R5WD25M	20.000	0.7874	20.500	0.8071	60	100	56	25	3
CDH205R3WD25M	CDH205R5WD25M	20.500	0.8071	21.000	0.8268	66	110	56	25	3
CDH210R3WD25M	CDH210R5WD25M	21.000	0.8268	21.500	0.8465	66	110	56	25	3
CDH215R3WD25M	CDH215R5WD25M	21.500	0.8465	22.000	0.8661	66	110	56	25	3
CDH220R3WD25M	CDH220R5WD25M	22.000	0.8661	22.000	0.8661	66	110	56	25	3
—	CDH221R5WD25M	22.010	0.8665	22.500	0.8858	—	120	56	25	4

• This tool holder has internal coolant

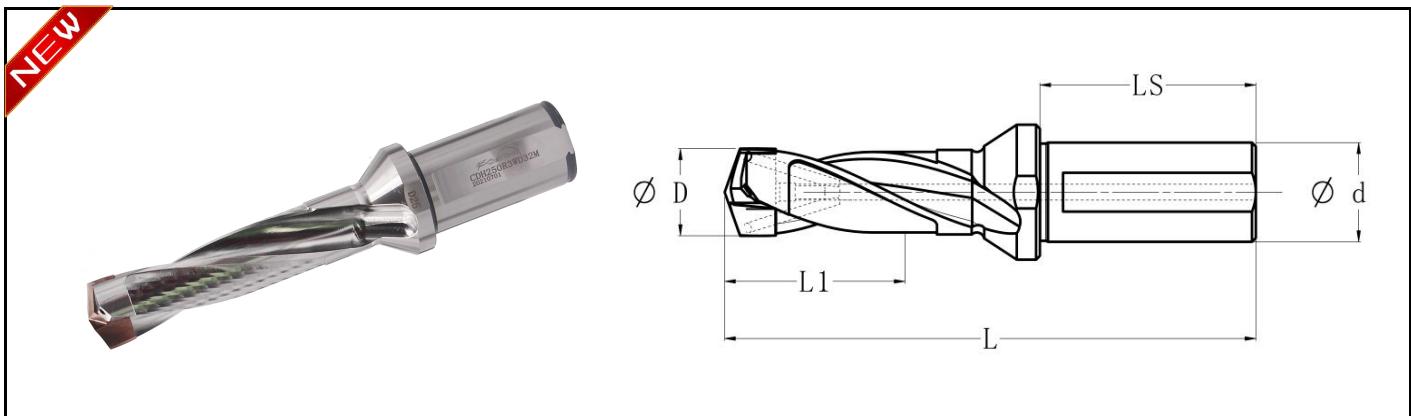
• holder should use correct inerts, Inserts to be ordered separa

• For information on adapting screw wrenches, see page C61; for usage, see page C62

# CDH-R3/R5



## HEAD CHANGABLE DRILL HOLDER



### • CDH • 3 x D / 5 x D • METRIC

PRODUCT MODEL	PRODUCT MODEL	DIMENSION								SIZE
		D		Dmax		L1		LS	d	
3 x D	5 x D	mm	in	mm	in	3xD	5xD	LS	d	SIZE
CDH225R3WD25M	CDH225R5WD25M	22.500	0.8858	23.000	0.9055	72	120	56	25	4
CDH230R3WD25M	CDH230R5WD25M	23.000	0.9055	23.500	0.9252	72	120	56	25	4
CDH235R3WD25M	CDH235R5WD25M	23.500	0.9252	24.000	0.9448	72	120	56	25	4
CDH240R3WD25M	CDH240R5WD25M	24.000	0.9449	24.000	0.9448	72	120	56	25	4
—	CDH241R5WD32M	24.010	0.9453	24.500	0.9646	—	130	60	32	5
CDH245R3WD32M	CDH245R5WD32M	24.500	0.9646	25.000	0.9843	78	130	60	32	5
CDH250R3WD32M	CDH250R5WD32M	25.000	0.9843	25.500	1.0039	78	130	60	32	5
CDH255R3WD32M	CDH255R5WD32M	25.500	1.0039	26.000	1.0236	78	130	60	32	5
CDH260R3WD32M	CDH260R5WD32M	26.000	1.0236	26.000	1.0236	78	130	60	32	5
—	CDH261R5WD32M	26.010	1.0240	26.500	1.0433	—	140	60	32	6
CDH265R3WD32M	CDH265R5WD32M	26.500	1.0433	27.000	1.0630	84	140	60	32	6
CDH270R3WD32M	CDH270R5WD32M	27.000	1.0630	27.500	1.0827	84	140	60	32	6
CDH275R3WD32M	CDH275R5WD32M	27.500	1.0827	28.000	1.1023	84	140	60	32	6
CDH280R3WD32M	CDH280R5WD32M	28.000	1.1024	28.000	1.1023	84	140	60	32	6
—	CDH281R5WD32M	28.016	1.1030	28.500	1.1220	—	150	60	32	7
CDH285R3WD32M	CDH285R5WD32M	28.500	1.1220	29.000	1.1417	90	150	60	32	7
CDH290R3WD32M	CDH290R5WD32M	29.000	1.1417	29.500	1.1614	90	150	60	32	7
CDH295R3WD32M	CDH295R5WD32M	29.500	1.1614	30.000	1.1811	90	150	60	32	7
CDH300R3WD32M	CDH300R5WD32M	30.000	1.1811	30.000	1.1811	90	150	60	32	7
—	CDH301R5WD32M	30.010	1.1815	30.500	1.2008	—	160	60	32	8
CDH305R3WD32M	CDH305R5WD32M	30.500	1.2008	31.000	1.2205	96	160	60	32	8
CDH310R3WD32M	CDH310R5WD32M	31.000	1.2205	31.500	1.2402	96	160	60	32	8
CDH315R3WD32M	CDH315R5WD32M	31.500	1.2402	32.000	1.2598	96	160	60	32	8
CDH320R3WD32M	CDH320R5WD32M	32.000	1.2598	32.000	1.2598	96	160	60	32	8

• This tool holder has internal coolant

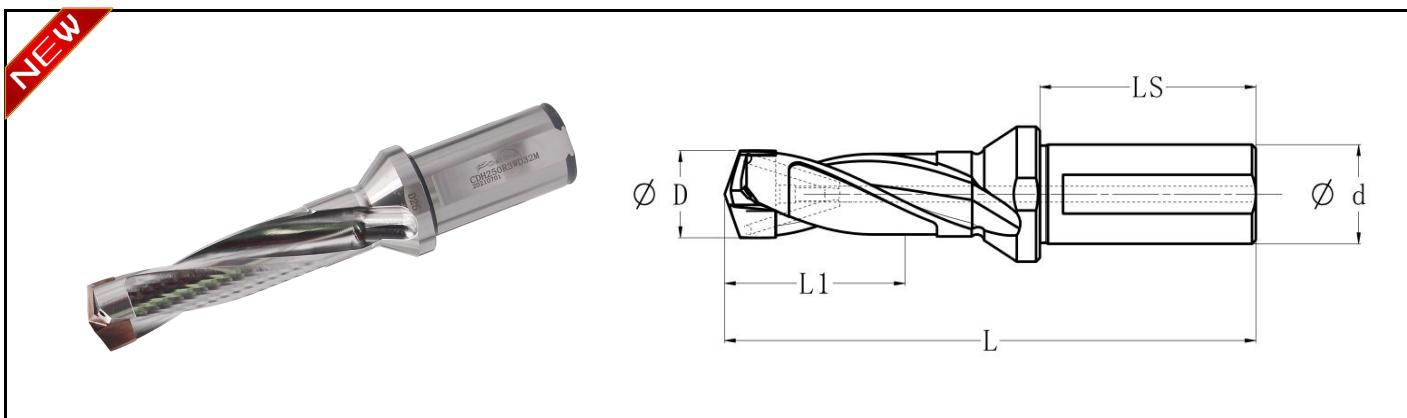
• holder should use correct inerts, Inserts to be ordered separately

• For information on adapting screw wrenches, see page C61;usage C62

# CDH-R7/R10



## HEAD CHANGABLE DRILL HOLDER



### • CDH •7 x D /10 x D • METRIC

PRODUCT MODEL	PRODUCT MODEL	DIMENSION								
		D		Dmax		L1		LS	d	SIZE
7 x D	10 x D	mm	in	mm	in	7xD	10xD			
CDH125R7WD16M	CDH125R10WD16M	12.500	0.4921	13.000	0.5118	98	125	48	16	C
CDH130R7WD16M	CDH130R10WD16M	13.000	0.5118	13.500	0.5314	98	130	48	16	C
CDH135R7WD1GM	CDH135R10WD1GM	13.500	0.5315	13.500	0.5314	98	135	48	16	C
CDH136R7WD1GM	CDH136R10WD1GM	13.510	0.5319	14.000	0.5512	98	135	48	16	B
CDH140R7WD16M	CDH140R10WD16M	14.000	0.5512	14.500	0.5708	98	140	48	16	B
CDH145R7WD20M	CDH145R10WD20M	14.500	0.5709	14.500	0.5708	112	145	50	20	B
CDH146R7WD20M	CDH146R10WD20M	14.510	0.5713	15.000	0.5906	112	145	50	20	A
CDH150R7WD20M	CDH150R10WD20M	15.000	0.5906	15.500	0.6102	112	150	50	20	A
CDH155R7WD20M	CDH155R10WD20M	15.500	0.6102	15.874	0.6249	112	155	50	20	A
CDH160R7WD20M	CDH160R10WD20M	16.000	0.6299	16.500	0.6496	112	160	50	20	1
CDH165R7WD20M	CDH165R10WD20M	16.500	0.6496	17.000	0.6693	126	165	50	20	1
CDH170R7WD20M	CDH170R10WD20M	17.000	0.6693	17.500	0.6890	126	170	50	20	1
CDH175R7WD20M	CDH175R10WD20M	17.500	0.6890	18.000	0.7086	126	175	50	20	1
CDH180R7WD20M	CDH180R10WD20M	18.000	0.7087	18.000	0.7086	126	180	50	20	1
—	CDH181R10WD25M	18.010	0.7091	18.500	0.7283	—	185	56	25	2
CDH185R7WD25M	CDH185R10WD25M	18.500	0.7283	19.000	0.7480	140	185	56	25	2
CDH190R7WD25M	CDH190R10WD25M	19.000	0.7480	19.500	0.7677	140	190	56	25	2
CDH195R7WD25M	CDH195R10WD25M	19.500	0.7677	19.999	0.7873	140	195	56	25	2
CDH200R7WD25M	CDH200R10WD25M	20.000	0.7874	20.500	0.8071	140	200	56	25	3
CDH205R7WD25M	CDH205R10WD25M	20.500	0.8071	21.000	0.8268	154	205	56	25	3
CDH210R7WD25M	CDH210R10WD25M	21.000	0.8268	21.500	0.8465	154	210	56	25	3
CDH215R7WD25M	CDH215R10WD25M	21.500	0.8465	22.000	0.8661	154	215	56	25	3
CDH220R7WD25M	CDH220R10WD25M	22.000	0.8661	22.000	0.8661	154	220	56	25	3
—	CDH221R10WD25M	22.010	0.8665	22.500	0.8858	—	225	56	25	4

• This tool holder has internal coolant

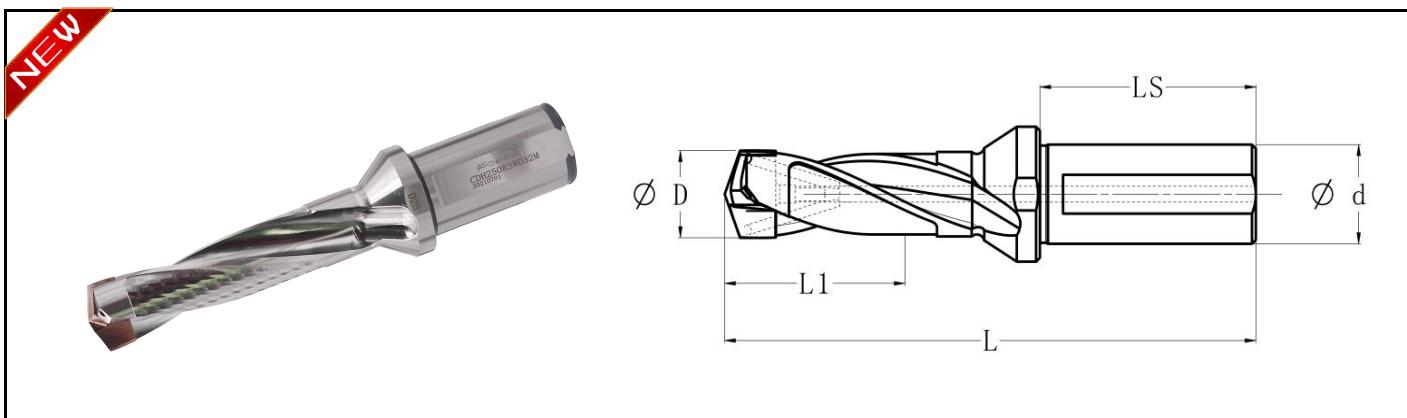
• holder should use correct inerts, Inserts to be ordered separa

• For information on adapting screw wrenches, see page C61; for usage, see page C62

# CDH-R7/R10



HEAD CHANGABLE DRILL HOLDER



• CDH •7 x D /10 x D • METRIC

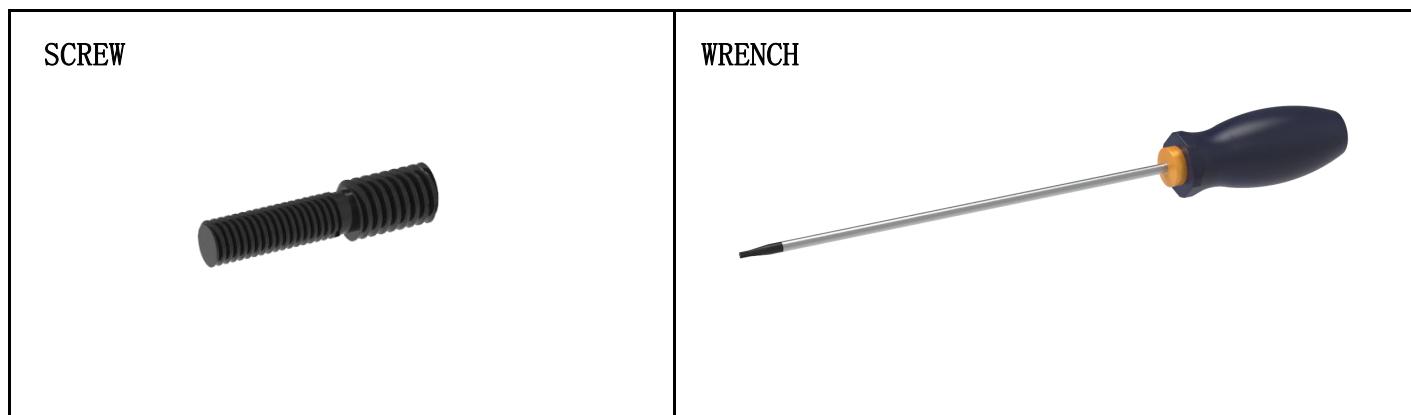
PRODUCT MODEL	PRODUCT MODEL	DIMENSION								刀座尺寸
		D		Dmax		L1		LS	d	
7 x D	10 x D	mm	in	mm	in	7xD	10xD			
CDH225R7WD25M	CDH225R10WD25M	22.500	0.8858	23.000	0.9055	168	225	56	25	4
CDH230R7WD25M	CDH230R10WD25M	23.000	0.9055	23.500	0.9252	168	230	56	25	4
CDH235R7WD25M	CDH235R10WD25M	23.500	0.9252	24.000	0.9448	168	235	56	25	4
CDH240R7WD25M	CDH240R10WD25M	24.000	0.9449	24.000	0.9448	168	240	56	25	4
—	CDH241R10WD32M	24.010	0.9453	24.500	0.9646	—	245	60	32	5
CDH245R7WD32M	CDH245R10WD32M	24.500	0.9646	25.000	0.9843	182	245	60	32	5
CDH250R7WD32M	CDH250R10WD32M	25.000	0.9843	25.500	1.0039	182	250	60	32	5
CDH255R7WD32M	CDH255R10WD32M	25.500	1.0039	26.000	1.0236	182	255	60	32	5
CDH260R7WD32M	CDH260R10WD32M	26.000	1.0236	26.000	1.0236	182	260	60	32	5
—	CDH261R10WD32M	26.010	1.0240	26.500	1.0433	—	265	60	32	6
CDH265R7WD32M	CDH265R10WD32M	26.500	1.0433	27.000	1.0630	196	265	60	32	6
CDH270R7WD32M	CDH270R10WD32M	27.000	1.0630	27.500	1.0827	196	270	60	32	6
CDH275R7WD32M	CDH275R10WD32M	27.500	1.0827	28.000	1.1023	196	275	60	32	6
CDH280R7WD32M	CDH280R10WD32M	28.000	1.1024	28.000	1.1023	196	280	60	32	6
—	CDH281R10WD32M	28.016	1.1030	28.500	1.1220	—	285	60	32	7
CDH285R7WD32M	CDH285R10WD32M	28.500	1.1220	29.000	1.1417	210	285	60	32	7
CDH290R7WD32M	CDH290R10WD32M	29.000	1.1417	29.500	1.1614	211	290	60	32	7
CDH295R7WD32M	CDH295R10WD32M	29.500	1.1614	30.000	1.1811	212	295	60	32	7
CDH300R7WD32M	CDH300R10WD32M	30.000	1.1811	30.000	1.8110	213	300	60	32	7
—	CDH301R10WD32M	30.010	1.1815	30.500	1.2008	—	305	60	32	8
CDH305R7WD32M	—	30.500	1.2008	31.000	1.2205	224	—	60	32	8
CDH310R7WD32M	CDH310R10WD32M	31.000	1.2205	31.500	1.2402	224	310	60	32	8
CDH315R7WD32M	—	31.500	1.2402	32.000	1.2598	224	—	60	32	8
CDH320R7WD32M	CDH320R10WD32M	32.000	1.2598	32.000	1.2598	224	320	60	32	8

• This tool holder has internal coolant

• holder should use correct inerts, Inserts to be ordered separately

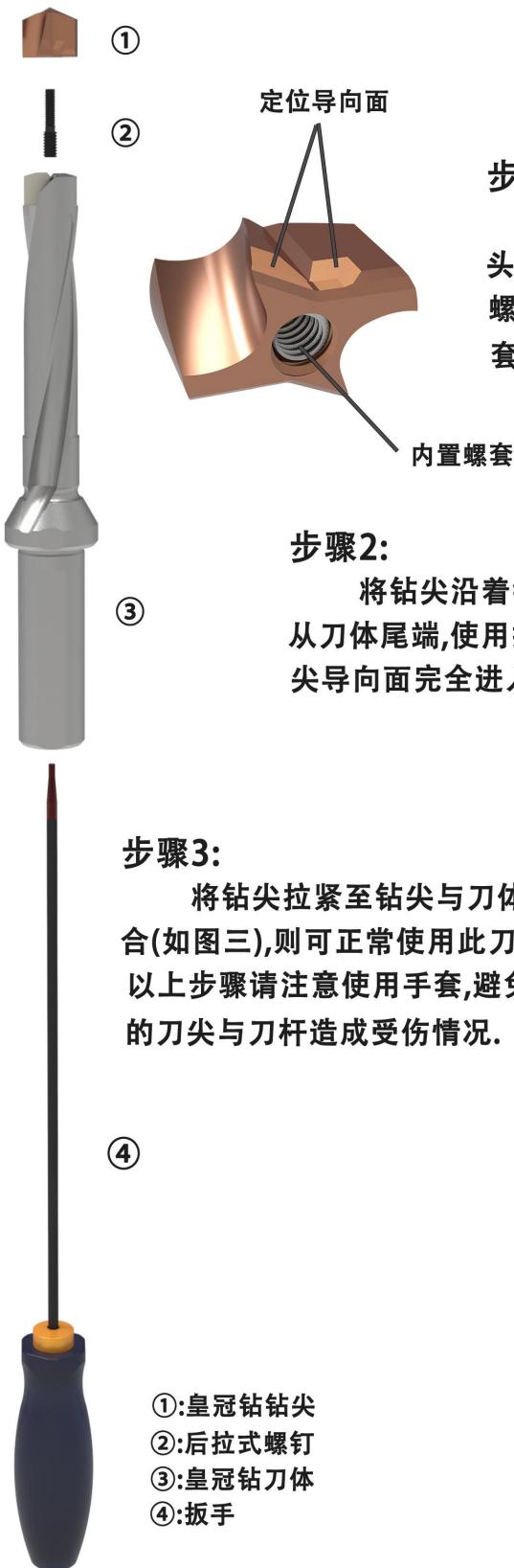
• For information on adapting screw wrenches, see page C61; f

## HEAD CHANGABLE DRILL HOLDER ACCESSORY



PRODUCT DIA	HOLDER SIZE	SCREW	WRENCH (x DIA)				
			1XD	3XD	5XD	7XD	10XD
12.50 - 13.50	C	CLD02502513	CBLT5156	CBLT5156	CBLT5156	CBLT5188	CBLT5290
13.51 - 14.50	B	CLD0250316	CBLT6156	CBLT6156	CBLT6156	CBLT6188	CBLT6290
14.51 - 15.87	A	CLD0250316	CBLT6156	CBLT6156	CBLT6156	CBLT6188	CBLT6290
15.88 - 18.00	1	CLD02503516	CBL015185	CBL015185	CBL015185	CBL015225	CBL015297
18.01 - 19.99	2	CLD02503516	CBL015185	CBL015185	CBL015185	CBL015225	CBL015297
20.00 - 22.00	3	CLD030419	CBL020210	CBL020210	CBL020210	CBL020260	CBL020260
22.01 - 24.00	4	CLD030419	CBL020210	CBL020210	CBL020210	CBL020260	CBL020260
24.01 - 26.00	5	CLD040523	CBL025240	CBL025240	CBL025240	CBL025240	CBL025295
26.01 - 28.00	6	CLD040523	CBL025240	CBL025240	CBL025240	CBL025240	CBL025295
28.01 - 30.00	7	CLD050628	CBL030265	CBL030265	CBL030265	CBL030265	CBL030265
30.01 - 32.00	8	CLD050628	CBL030265	CBL030265	CBL030265	CBL030265	CBL030265





## 步骤1:

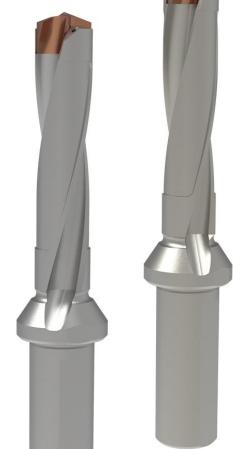
将后拉式螺钉②从头部锁入刀体中,直至螺钉头部与刀体齐平(如图一)后,再安装钻尖,请注意,若螺钉未与刀体安装齐平,则容易造成钻尖内置的螺套脱落.导致无法正确安装钻尖.

## 步骤2:

将钻尖沿着钻尖定位导向面,放置在刀槽口部位置,从刀体尾端,使用扳手,将头部螺钉轻轻拧入钻尖,直至钻尖导向面完全进入刀体后再开始往下拧紧螺钉(如图二).

图四

图三



图一





Chai Tools



镗刀及镗刀刀柄

**POWER**

# 镗 刀模块

• 精镗主体 • 微调刀夹

• 精镗单元

• 粗镗头

桥 镗

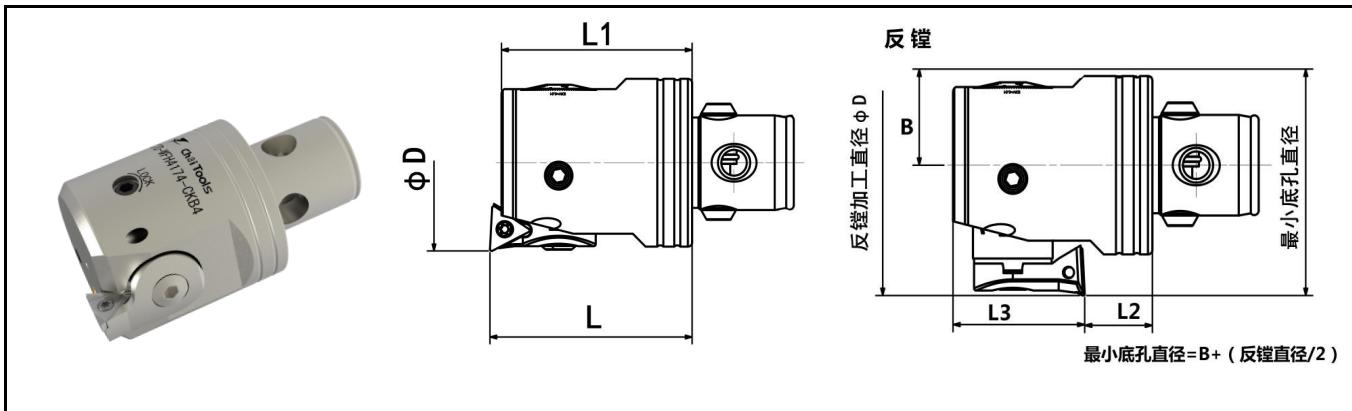
• 桥式粗镗 • 桥式精镗

**Chai Tools**

# CTD-WFH



Boring tool: fine boring body



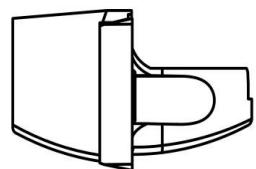
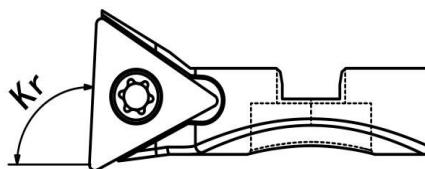
PRODUCT MODEL	CONNECT	CLAMP	BORING HOLE			REVERSE BORING				INSETS
			DIA $\phi D$	L	L1	RANGE $\phi D$	L2	L3	B	
CTD-WFH2036-CKB1	CK1	WFH1-1	20~26	32.5	30.5	-	10.5	20	10	TP 0802
		WFH1-2	25~31			30~31				
		WFH1-3	30~36			30~36				
CTD-WFH2547-CKB2	CK2	WFH2-1	25~33	35.5	33	-	11.5	21.5	12.5	TP 0802
		WFH2-2	32~40			36~40				
		WFH2-3	39~47			39~47				
CTD-WFH3260-CKB3	CK3	WFH3-1	32~42	40	37	-	10	27	16	TC 1102
		WFH3-2	41~51			46~51				
		WFH3-3	50~60			50~60				
CTD-WFH4174-CKB4	CK4	WFH4-1	41~54	47	43	-	12	31	20	TC 1102
		WFH4-2	50~63			53~63				
		WFH4-3	61~74			61~74				
CTD-WFH5395-CKB5	CK5	WFH5-1	53~70	57	52	62~70	15	37	25.5	TC 1102
		WFH5-2	65~82			65~82				
		WFH5-3	78~95			78~95				
CTD-WFH68150-CKB6	CK6	WFH6-1	68~100	71	67	80~100	23	44	32.5	TC 1102
		WFH6-2	94~126			94~126				
		WFH6-3	118~150			118~150				
CTD-WFH100203-CKB6	CK6	WFH6-1	100~153	71	67	112~153	23	44	46.5	TC 1102
		WFH6-2	126~179			126~179				
		WFH6-3	150~203			150~203				
CTD-WFH100203-CKB7	CK7	WFH6-1	100~153	87	83	112~153	39	44	46.5	TC 1102
		WFH6-2	126~179			126~179				
		WFH6-3	150~203			150~203				

◎Standard cutter head with internal coolant, inserts to be ordered separately

◎WFH O-1CLAMP, WFH O-2、WFH O-3CLAMP, Please order separately

# WFH

## FINE BORING TOOL HOLDER



COMPATIBLE CONNECTOR: CK1/CK2/CK3			COMPATIBLE CONNECTOR: CK4/CK5/CK6/CK7					
PRODUCT	Kr	INSERTS	PRODUCT	Kr	INSERTS	PRODUCT	Kr	INSERTS
WFH1-1	92°	TP08	WFH4-1	92°	TC11	WFH4-1E	90°	TC11
WFH1-2			WFH4-2			WFH4-2E		
WFH1-3			WFH4-3			WFH4-3E		
WFH2-1			WFH5-1			WFH5-1E		
WFH2-2			WFH5-2			WFH5-2E		
WFH2-3			WFH5-3			WFH5-3E		
WFH3-1			WFH6-1			WFH6-1E		
WFH3-2			WFH6-2			WFH6-2E		
WFH3-3			WFH6-3			WFH6-3E		

◎ Inserts to be ordered separately

Cermet INSERTS	
<b>推荐</b>	
INSERTS MODEL	GRADE
TPGH 080202L-F	CT4100
TPGH 080204L-F	CT4100
TCGT 110204L-F	CT4100

◇ COMPATIBLE TAEGUTEC, KYOCERA



ACCESSORY		
INSERTS MODEL	SCREW	WRENCH
TP08	CSC2250	CTS07W
TC11	CSC2560	CTS08W

## 使用步骤

准备工作：须先确认刀片安装是否匹配，刀片座坚固螺丝是否锁紧

步骤一：松开微调锁紧螺丝（逆时针旋转）图

步骤二：旋转微调刻度盘（图）顺时针旋转使加工直径增大，逆时针旋转加工直径缩小（刻度盘每格为直径0.01mm）

步骤三：调整尺寸加工时，请按照同方向旋转结束，以确保微调精度

步骤四：以适当力度拧紧微调锁紧螺钉（顺时针旋转）图完成调整

### 操作示意图



## 产品结构

- ① 镗头柄部
- ② 镗头本体
- ③ 微调刻度盘
- ④ 微调锁紧螺钉
- ⑤ 注油孔
- ⑥ 刀片座锁紧螺钉
- ⑦ 刀片座



## 使用者注意事项

- 1.请在调整范围内加工使用。
- 2.调整微调刻度盘前，必须松开微调锁紧螺钉，否则会对内部精调结构造成损坏。
- 3.本产品是由调整微调刻度盘带动精密螺杆旋转，来实现刀片座移动的。在阻力过大或无法转动时，请立即停止调整，并确认以下事项：
  - A.微调锁紧螺钉是否松开；
  - B.是否超出调整范围。
- 4.试用反镗功能时，主轴必须反转。
- 5.用户须注入润滑脂（图），润滑脂的注入量以从刻度盘周围渗出为止，润滑脂的作用不但起到润滑的作用，还可以清除渗入的冷却液和杂质；为了防止长时间不使用而使润滑脂硬化，请定期转动刻度盘。
- 6.请客户不要自行拆开镗头。

PIONEER

# 微调刀夹

- 调节精度：半径0.005/div



## 精 精 镗单元

- 调节精度：半径0.01/div



- 专业设计，可非标应用
- 适用于精度要求较高的孔加工

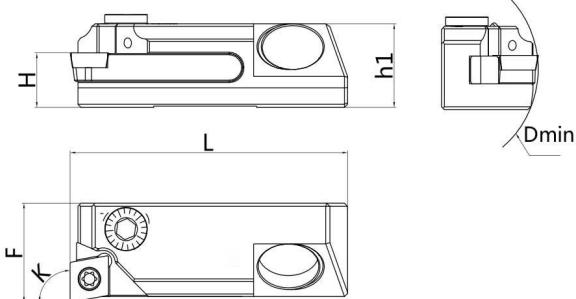


Chai Tools

**CDJ**



MICRO-ADJUST CLAMP



PIC IS RIGHT CLAMP

PRODUCT MODEL	LEFT/RIGTH	DIMENSIONS							INSERT	SCREW	WRENCH
		K	H	F	L	h1	Dmin	R			
CDJ90_L16_CC06R	RIGHT HAND	90°	8.5	16	45.8	13.5	28	0.4	CC...0602	CSC2560	CTS08W
CDJ95_L16_CC06R		95°	8.5	16	45.8	13.5	28	0.4			
CDJ90_L22_CC09R		90°	10.5	22	48.3	15.5	36	0.4	CC...09T3	CSC4090	CTS15W
CDJ95_L22_CC09R		95°	10.5	22	48.3	15.5	36	0.4			
CDJ90_L16_TP09R		90°	8.5	16	45.8	13.5	28	0.4	TP...0902	CSC2250	CTS07W
CDJ95_L16_TP09R		95°	8.5	16	45.8	13.5	28	0.4			
CDJ90_L16_TC09R		90°	8.5	16	45.8	13.5	28	0.4	TC...0902	CSC2560	CTS08W
CDJ95_L16_TC09R		95°	8.5	16	45.8	13.5	28	0.4			
CDJ90_L20_TC11R		90°	8.5	20	45.8	13.5	36	0.4	TC...1102	CSC2560	CTS08W
CDJ95_L20_TC11R		95°	8.5	20	45.8	13.5	36	0.4			
CDJ90_L20_TP11R		90°	9.3	20	45.8	13.5	36	0.4	TP...1103	CSC2250	CTS07W
CDJ95_L20_TP11R		95°	9.3	20	45.8	13.5	36	0.4			
CDJ90_L16_CC06L	Left hand	90°	8.5	16	45.8	13.5	28	0.4	CC...0602	CSC2560	CTS08W
CDJ95_L16_CC06L		95°	8.5	16	45.8	13.5	28	0.4			
CDJ90_L22_CC09L		90°	10.5	22	48.3	15.5	36	0.4	CC...09T3	CSC4090	CTS15W
CDJ95_L22_CC09L		95°	10.5	22	48.3	15.5	36	0.4			
CDJ90_L16_TP09L		90°	8.5	16	45.8	13.5	28	0.4	TP...0902	CSC2250	CTS07W
CDJ95_L16_TP09L		95°	8.5	16	45.8	13.5	28	0.4			
CDJ90_L16_TC09L		90°	8.5	16	45.8	13.5	28	0.4	TC...0902	CSC2560	CTS08W
CDJ95_L16_TC09L		95°	8.5	16	45.8	13.5	28	0.4			
CDJ90_L20_TC11L		90°	8.5	20	45.8	13.5	36	0.4	TC...1102	CSC2560	CTS08W
CDJ95_L20_TC11L		95°	8.5	20	45.8	13.5	36	0.4			
CDJ90_L20_TP11L		90°	9.3	20	45.8	13.5	36	0.4	TP...1103	CSC2250	CTS07W
CDJ95_L20_TP11L		95°	9.3	20	45.8	13.5	36	0.4			

◎ Inserts to be ordered separately; MIC. DIA 0.01/div; MAX RADIAL 1mm, AXIAL ADJU. 1mm.

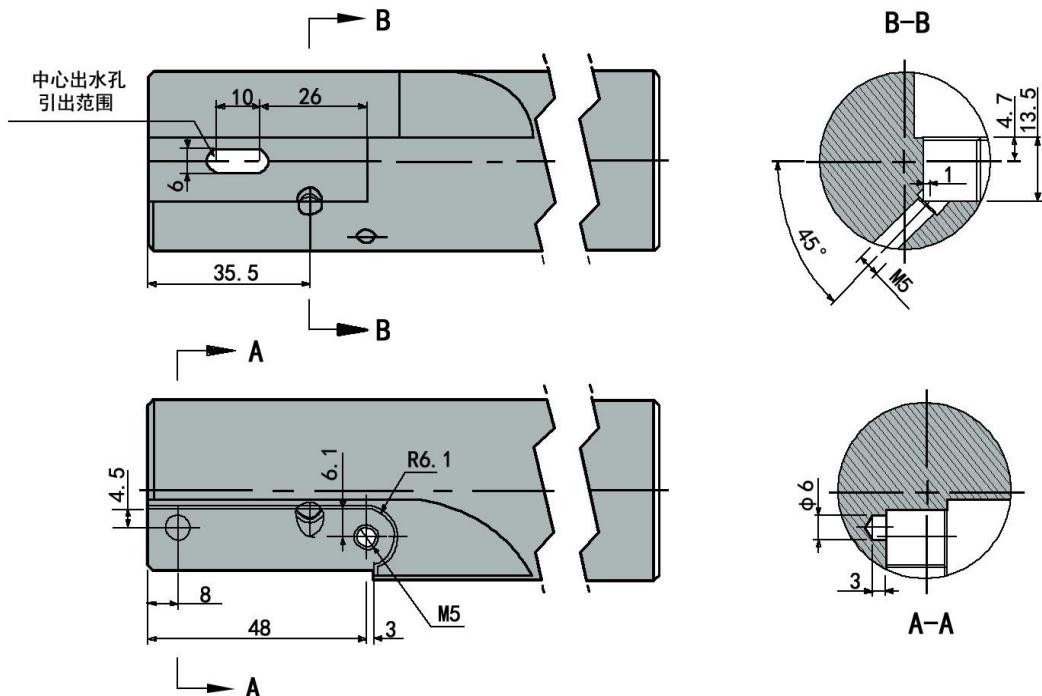
#### ACCESSORY

PRODUCT MODEL	SCREW	AXIAL SCREW	Axial ring	WRENCH	WRENCH
CDJ	CLA0502008	CLY0502008	CDJ12	CBL40	CBL30

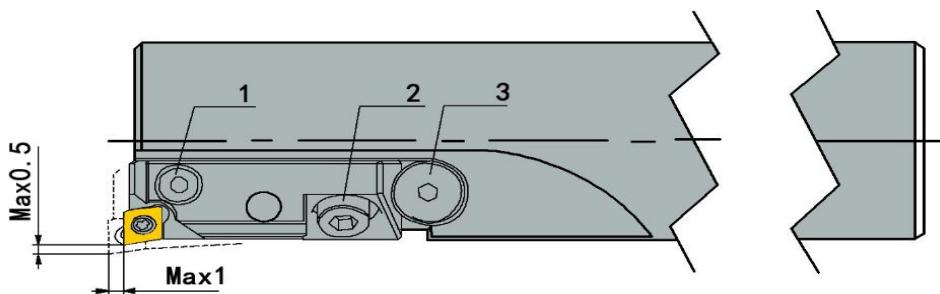
## MICRO-ADJUST CLAMP

## CLAMP Installation size

- PICTURE IS FOR THE RIGHT HAND CLAMP.



## CLAMP Adjustment method



## RADIAL Adj.

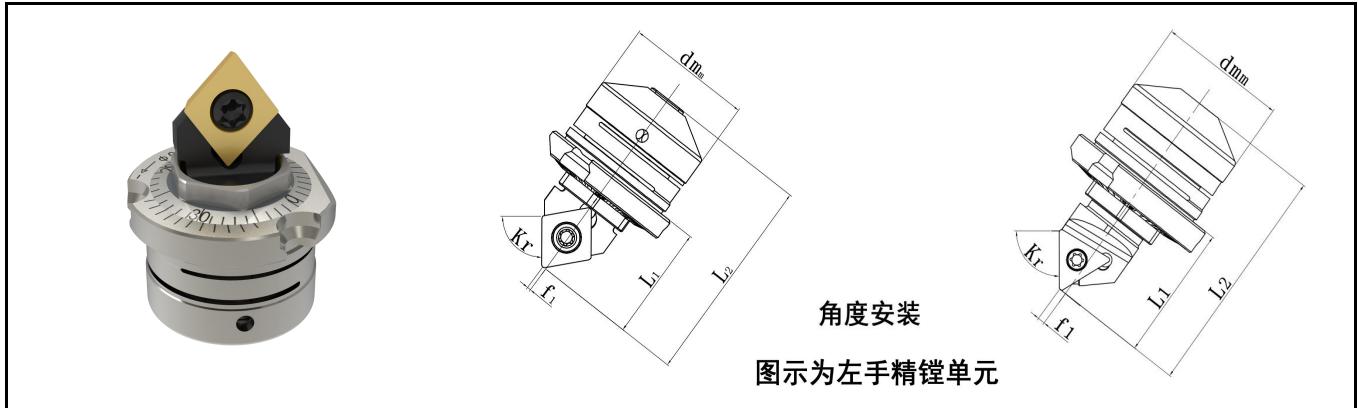
1. loosen the CLAMP locking screw
2. clockwise rotate AXIAL ADJU SCREW (3)
3. CLAMP Move forward to requ.size
4. Tighten the locking screw of CLAMP (2)

## AXIAL Adjustment method

1. Turn the (1) clockwise to gradually increase the diameter
2. Rotate (1) counter clockwise, the machining diameter decreases
3. the radial fine-tuning screw is that each time a scale is rotated, the machining diameter of the tool changes by 0.01mm

Note that if the CLAMP needs to be adjusted backwards, the CLAMP locking screw should be loosened, and the CLAMP should be to the rearmost position, then gradually adjusted forward to the desired size.

## Fine boring unit



PRODUCT MODEL	L/R	installation type	DIMENSIONS							INSERT
			Kr	dmm	L1	L2	f1	Dmin	$\lambda$	
RCR-31-CC06	R	Angle installation	90°	16	14.3	25.15	0.45	25.5	-3°	CC...0602
RCR-31-TC06				16	14.3	25.0	0.2	24.8	0°	TC...06T1
RCR-32-TC09				20	19.1	33.7	0.9	32.5	0°	TC...0902
RCR-32-TP09				20	19.1	33.7	0.9	32.5	0°	TP...0902
RCR-33-TC11				22	23.0	45.3	1.1	42.0	0°	TC...1102
RCR-33-TP11				22	23.0	45.3	1.1	42.0	0°	TP...1103
RCR-34-TC16				32	33.3	62.3	1.2	59.4	0°	TC...16T3
RCR-34-TP16				32	33.3	62.3	1.2	59.4	0°	TP...16T3
LCR-31-CC06	L	Angle installation	90°	16	14.3	25.15	0.45	25.5	-3°	CC...0602
LCR-31-TC06				16	14.3	25.0	0.2	24.8	0°	TC...06T1
LCR-32-TC09				20	19.1	33.7	0.9	32.5	0°	TC...0902
LCR-32-TP09				20	19.1	33.7	0.9	32.5	0°	TP...0902
LCR-33-TC11				22	23.0	45.3	1.1	42.0	0°	TC...1102
LCR-33-TP11				22	23.0	45.3	1.1	42.0	0°	TP...1103
LCR-34-TC16				32	33.3	62.3	1.2	59.4	0°	TC...16T3
LCR-34-TP16				32	33.3	62.3	1.2	59.4	0°	TP...16T3

◎  $\lambda$  : edge angle

◎ the precision diameter 0.02/div, RADIUS 0.01/div

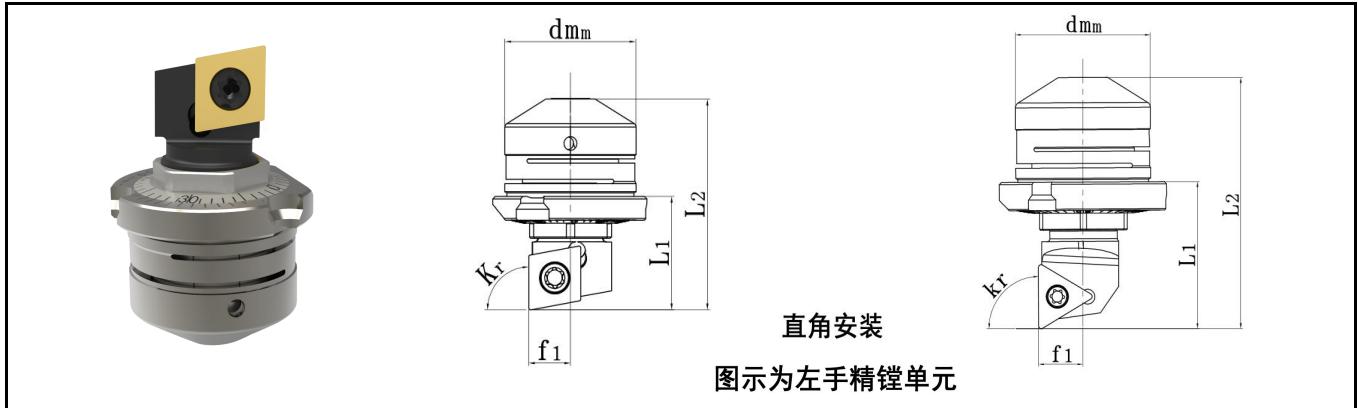
◎ Inserts to be ordered separately

◎ For conventional boring, order a left-hand fine boring unit

◎ f1: For obtaining sharp fillets r=0 and screw clamping in CLAMP

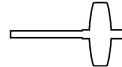
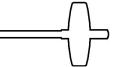
◎ Dmin: Minimum hole diameter based on maximum nose radius

## Fine boring unit

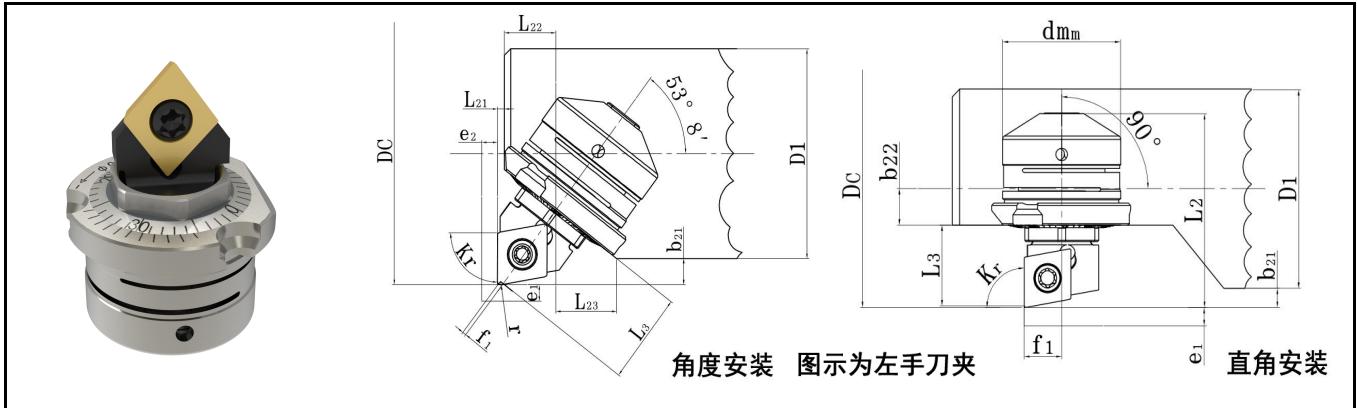


PRODUCT MODEL	L/R	安装类型	DIMENSIONS							INSERT
			Kr	dmm	L1	L2	f1	Dmin	$\lambda$	
RCR-11-CC06	RIGHT	Right angle instal	90°	16	13.3	24.1	5.1	27	-3°	CC...0602
RCR-12-TC09				20	18.3	32.9	6.3	36.5	0°	TC...0902
RCR-12-TP09				20	18.3	32.9	6.3	36.5	0°	TP...0902
RCR-13-TC11				22	22.1	44.3	7.2	48.5	0°	TC...1102
RCR-13-TP11				22	22.1	44.3	7.2	48.5	0°	TP...1103
RCR-14-TC16				32	32.0	62.7	10.3	68.4	0°	TC...16T3
RCR-14-TP16				32	32.0	62.7	10.3	68.4	0°	TP...16T3
LCR-11-CC06	LEFT	Right angle instal	90°	16	13.3	24.1	5.1	27	-3°	CC...0602
LCR-12-TC09				20	18.3	32.9	6.3	36.5	0°	TC...0902
LCR-12-TP09				20	18.3	32.9	6.3	36.5	0°	TP...0902
LCR-13-TC11				22	22.1	44.3	7.2	48.5	0°	TC...1102
LCR-13-TP11				22	22.1	44.3	7.2	48.5	0°	TP...1103
LCR-14-TC16				32	32.0	62.7	10.3	68.4	0°	TC...16T3
LCR-14-TP16				32	32.0	62.7	10.3	68.4	0°	TP...16T3

## ACCESSORY

INSERTS MODEL	SCREW	WRENCH	locking	WRENCH
				
CC...0602	CSC2560	CTS08W	CSC3080	CTS10W
TC...06T1	CSS2005	CTS06W	CSC3080	CTS10W
TC...0902	CSC2250	CTS07W	CSC3080	CTS10W
TP...1102	CSC2560	CTS08W	CSC3080	CTS10W
TP...1103	CSC3080	CTS10W	CSC4090	CTS15W
TC...16T3	CSC4090	CTS15W	CSC5012	CTS20W
TP...16T3	CSC4090	CTS15W	CSC5012	CTS20W

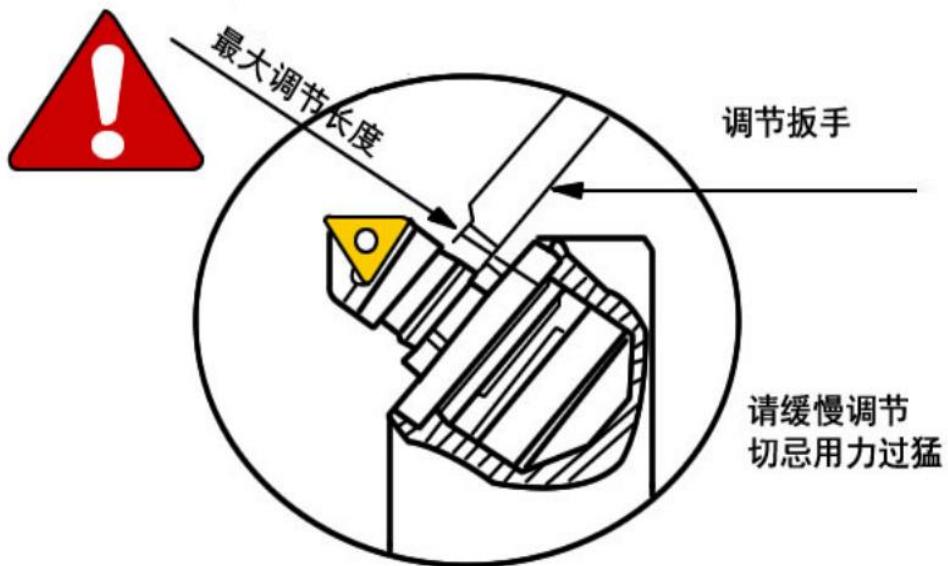
## Fine boring unit



INSTA LL	INSERT	DIMENSIONS												
		r	D1 min	Dc min	b21	e1 max	e2 max	b22	L3 min	L21	L22	L23	f1	
Kr=90°	C/T...06	0.2	26	27.9	0.6	2.5	—	3.6	9.8	—	—	—	5.1	
		0.4		27.6	0.55				9.6					
		0.8		27.0	0.5				9.1					
	T...0902	0.2	34.5	37.4	1.45	3.5	—	4.55	13.95	—	—	—	6.3	
		0.4		37.1	1.3				13.6					
		0.8		36.5	1.0				12.9					
	T...11	0.2	46.5	49.4	1.45	6	—	7.75	16.75	—	—	—	7.2	
		0.4		49.1	1.3				16.4					
		0.8		48.5	1.0				15.7					
Kr=90°	T...16T3	0.4	67	69.6	1.3	10	—	9.4	25.0	—	—	—	10.3	
		0.8		69.0	1.0				24.3					
		1.2		68.4	0.7				23.6					
Kr=90°	C...0602	0.2	22	26.2	1.7	2	1.5	—	11.0	0.5	6.6	9.55	0.4	
		0.4		25.9	1.65				10.7					
		0.8		25.3	1.6				10.1					
	T...06T1	0.2	22	25.7	1.5	2	1.5	—	10.9	0.5	6.6	9.55	0.4	
		0.4		25.4	1.45				10.6					
		0.8		24.8	1.4				10.0					
	T...0902	0.2	28.5	33.4	2.45	2.8	2.1	—	14.9	0.5	9.4	12.15	0.95	
		0.4		33.1	2.3				14.5					
		0.8		32.5	2.0				13.7					
	T...11	0.2	38	42.9	2.45	4.8	3.6	—	17.6	0.5	11.2	14.85	1.15	
		0.4		42.6	2.3				17.2					
		0.8		42.0	2.0				16.4					
	T...16T3	0.4	55	60.6	2.8	8	6	—	26.2	0.5	16.65	23.7	1.3	
		0.8		60.0	2.5				25.4					
		1.2		59.4	2.2				24.6					

## Fine boring unit

### MICRO-ADJ. fine boring



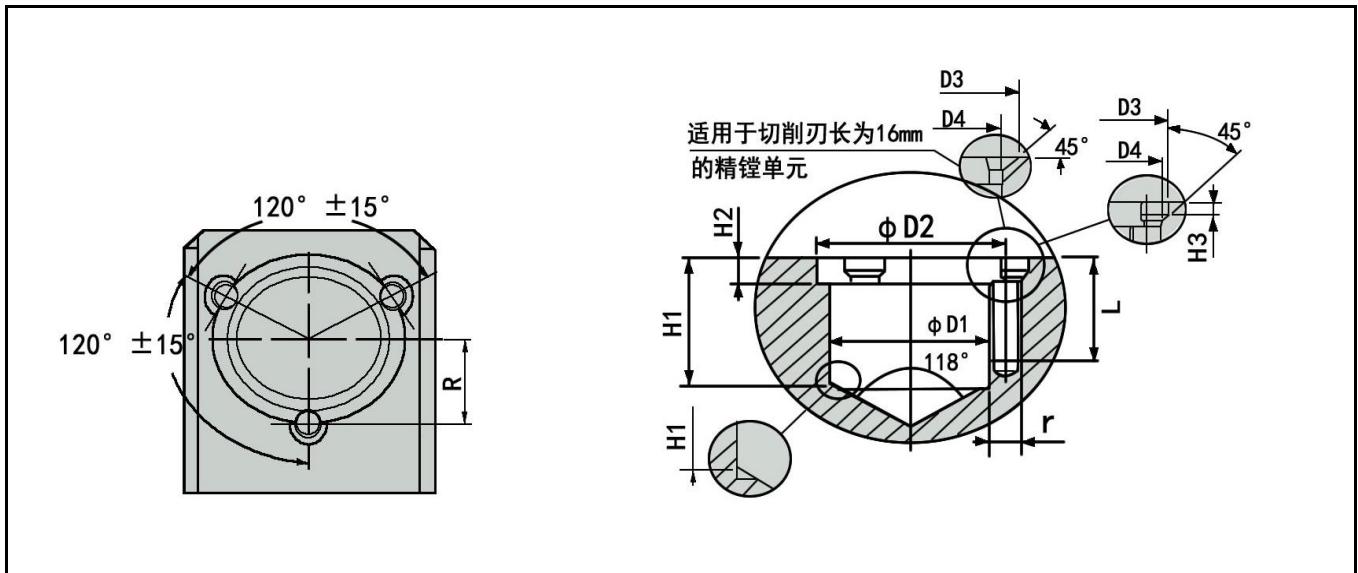
- ◎ The fine-tuning boring head is a precision fine-tuning module in the customized non-standard tool system, which is suitable for the boring application of the finishing process;
- ◎ Its structural design, high precision and high reliability feature greatly improve the production efficiency of the combined boring tool design, and reduce production cycle;
- ◎ The non-standard tool using the fine-tuning boring head module is very convenient to adjust during fine boring, the operation is simple, and the self-locking structure effectively reduces the damage

## FEATURES

- ◎ Radial installation, small axial spacing, especially for tools with small diameters
- ◎ The fine-tuning dial is on the front of the module, so fine-tuning can be done at a very convenient angle.
- ◎ self-locking design, no other operations are required before fine-tuning, and no locking is required after adj.
- ◎ installed in the blind hole, which can effectively prevent the entry of cutting fluid and dust, improvee life and dimensio

boring unit Fine-tuning fine boring unit installation dimens

### R/LCR



### Installation size

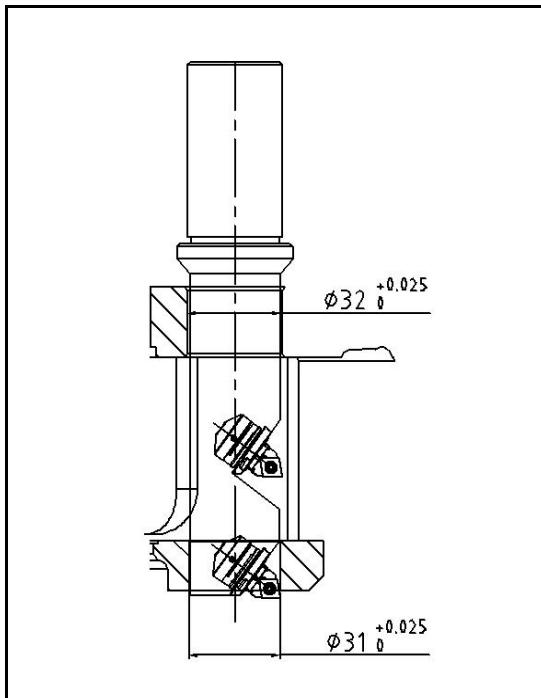
D直径	D1(H7)	D2	D3	D4	H1	H2	H3	L	R	T
16	16	19	4.6	3.2	11.5	2.8	1.6	9	9.65±0.02	M3
20	20	25	4.6	3.2	15.5	4	1.6	9	12.5±0.05	M3
22	22	30	6.5	4.3	24	5	1.8	13	15.4±0.05	M4
32	32	46	11.9	5.4	33	6.3	—	16	23±0.05	M5

## Fine boring unit

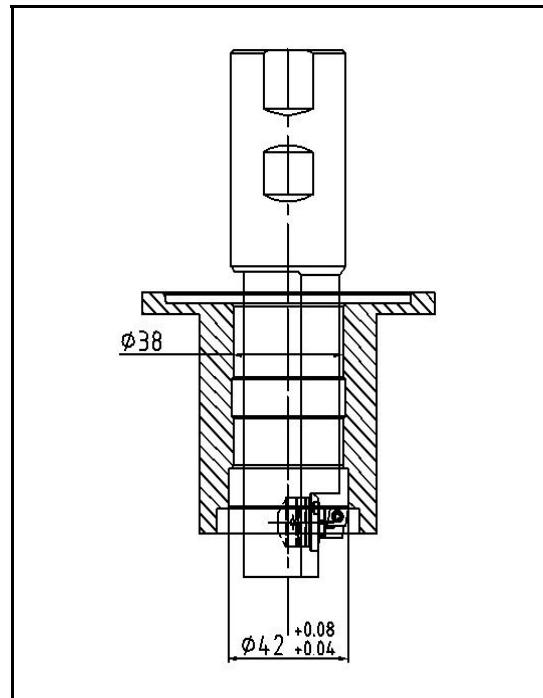
Application example of fine boring unit



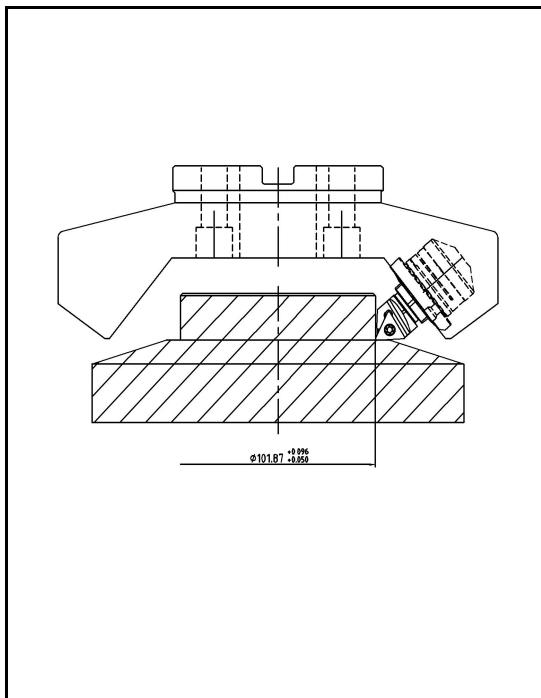
1: High Precision Compound Holes



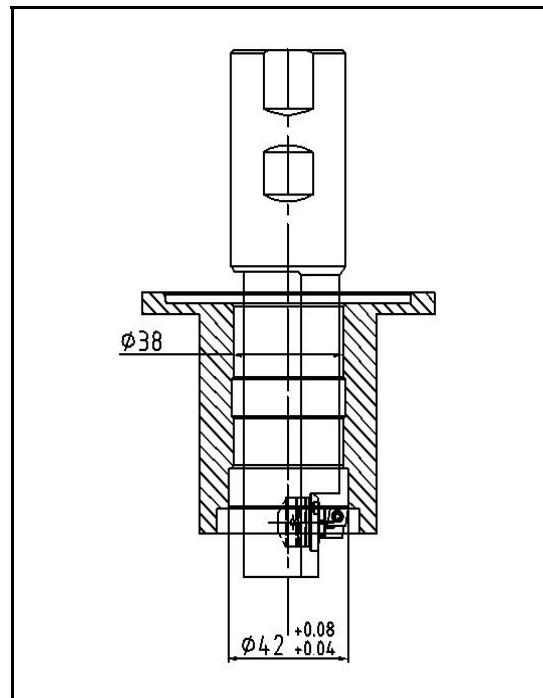
2: Through hole back boring hole



3: Sleeve boring outer surface



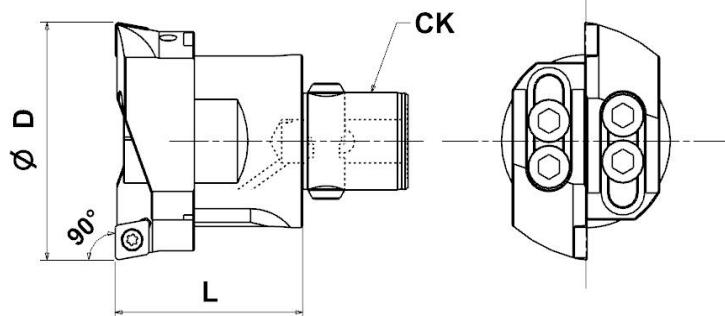
4: Rough&fine composite tool



# CTD-WRH



ROUGH BORING CUTTER MODULE



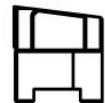
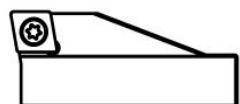
MODEL	BORING $\Phi D$ (mm)	Insert holder model	CONN ECTOR	L	<b>Kg</b>	INSERTS
CTD-WRH2026-CKB1	20~26	WRH-2026-CC06	CK1	32.5	0.1	CC...06
CTD-WRH2533-CKB2	25~33	WRH-2533-CC06	CK2	35.5	0.2	
CTD-WRH3242-CKB3	32~42	WRH-3242-CC09	CK3	40	0.3	CC...09
CTD-WRH4154-CKB4	41~54	WRH-4154-CC09	CK4	47	0.5	
CTD-WRH5370-CKB5	53~70	WRH-5370-CC12	CK5	57	0.8	CC...12
CTD-WRH6890-CKB6	68~90	WRH-6890-CC12	CK6	71	1.6	
CTD-WRH88110-CKB6	88~110	WRH-88110-CC12			1.8	
CTD-WRH98126-CKB6	98~126	WRH-98126-CC12			2.8	
CTD-WRH125153-CKB6	125~153	WRH-125153-CC12			3.0	
CTD-WRH98126-CKB7	98~126	WRH-98126-CC12	CK7	87	3.8	
CTD-WRH125153-CKB7	125~153	WRH-125153-CC12			4.1	
CTD-WRH148176-CKB6	148~176	WRH-148176-CC12	CK6	71	3.6	
CTD-WRH175203-CKB6	175~203	WRH-175203-CC12			3.8	
CTD-WRH148176-CKB7	148~176	WRH-148176-CC12	CK7	117	6.4	CC...12
CTD-WRH175203-CKB7	175~203	WRH-175203-CC12			6.6	

◎Standard cutter head

◎With corresponding blade holder

◎INSERT to be ordered separately

Rough boring cartridge



Insert holder model	RANGE $\Phi D$ (mm)	Kr	INSERT	INSERT SCREW	WRENCH
WRH-2026-CC06	20~26	90°	CC06	CSG2565-P	CTS08W-P
WRH-2533-CC06	25~33		CC09	CSG4011-P	CTS15W-P
WRH-3242-CC09	32~42		CC12	CSG5012-P	CTS20W-P
WRH-4154-CC09	41~54				
WRH-5370-CC12	53~70				
WRH-6890-CC12	68~90				
WRH-88110-CC12	88~110				
WRH-98126-CC12	98~126				
WRH-125153-CC12	125~153				
WRH-148176-CC12	148~176				
WRH-175203-CC12	175~203				

◎ INSERT to be ordered separately

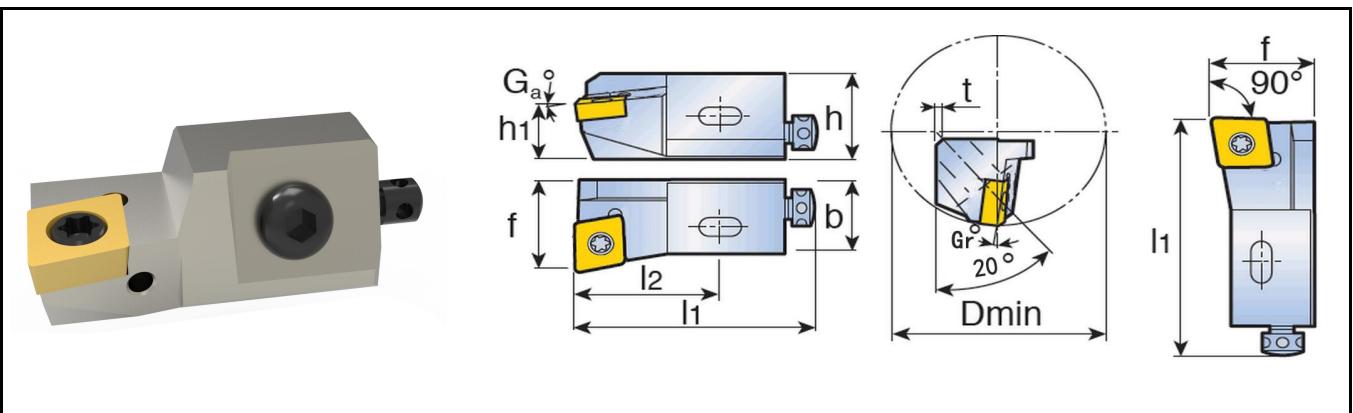


# SCFCR/L



## CLAMP

SCFCR/L, 90°

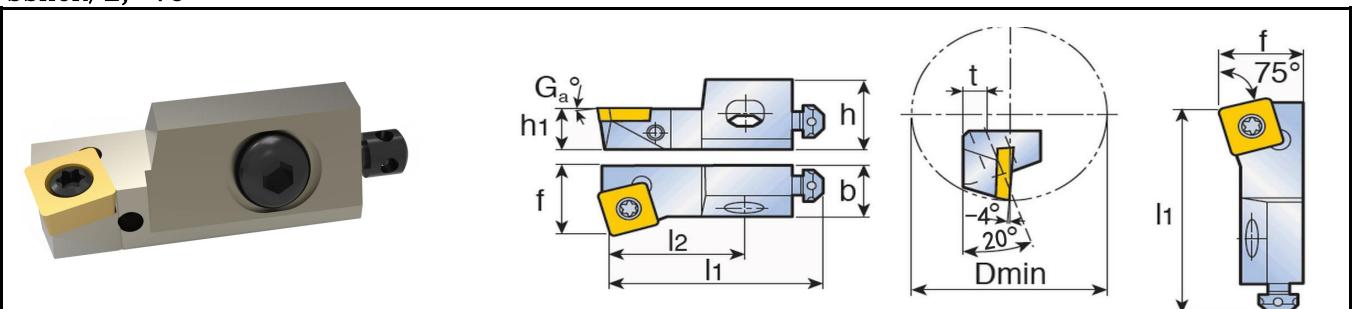


MODEL	L/R	DIMENSIONS									INSERTS
		$h$	$h_1$	$b$	$l_1$	$l_2$	$f$	$Gr$	$t$	$D_{min}$	
SCFCR 08CA-06	RIGHT	11	8	8	32	15	10	—	—	25	CC...0602
SCFCR 10CA-09		15	10	11	50	30	14	—	—	40	CC...09T3
SCFCR 12CA-09		20	12	16	55	35	20	—	—	50	CC...09T3
SCFCR 12CA-12		20	12	16	55	47	20	-3	6	50	CC...1204
SCFCL 08CA-06	LEFT	11	8	8	32	15	10	—	—	25	CC...0602
SCFCL 10CA-09		15	10	11	50	30	14	—	—	40	CC...09T3
SCFCL 12CA-09		20	12	16	55	35	20	—	—	50	CC...09T3
SCFCL 12CA-12		20	12	16	55	47	20	-3	6	50	CC...1204

◎ INSERT to be ordered separately

◎ For accessories and installation dimensions, see page D18

SSKCR/L, 75°



MODEL	L/R	DIMENSIONS									INSERTS
		$h$	$h_1$	$b$	$l_1$	$l_2$	$f$	$G_a$	$t$	$D_{min}$	
SSKCR 10CA-09	RIGHT	15	10	11	50	30	14	-1	5	40	SC...09T3
SSKCR 12CA-12		20	12	15	55	35	20	-1	6	50	SC...1204
SSKCL 10CA-09	LEFT	15	10	11	50	30	14	-1	5	40	SC...09T3
SSKCL 12CA-12		20	12	15	55	35	20	-1	6	50	SC...1204

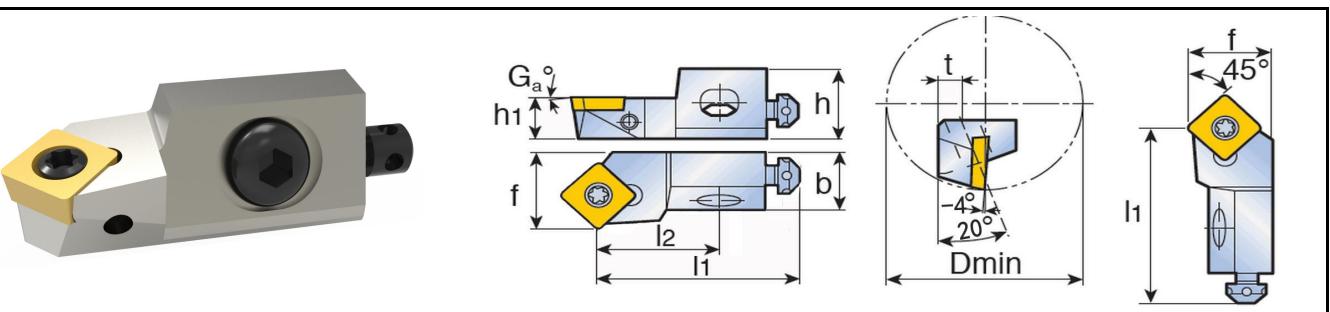
◎ INSERT to be ordered separately; For accessories and installation dimensions, see page D18

# SSKCR/L、SSSCR/L



## CLAMP

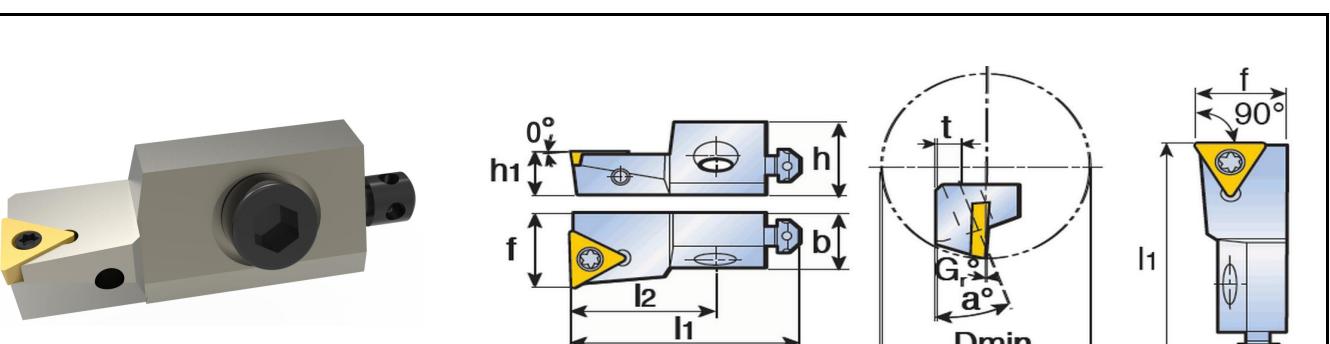
SSSCR/L, 45°



MODEL	L/R	DIMENSIONS									INSERTS
		h	h1	b	l1	l2	f	Ga	t	Dmin	
SSSCR 10CA-09	RIGHT	15	10	11	44	24	14	-4	5	40	SC...09T3
SSSCR 12CA-12		20	12	15	47	27	20	-4	6	50	SC...1204
SSSCL 10CA-09	LEFT	15	10	11	44	24	14	-4	5	40	SC...09T3
SSSCL 12CA-12		20	12	15	47	27	20	-4	6	50	SC...1204

◎ INSERT to be ordered separately; For acce:

STFCR/L, 90°



MODEL	L/R	DIMENSIONS									INSERTS
		h	h1	b	l1	l2	f	Gr	t	Dmin	
STFCR 10CA 09	RIGHT	15	10	10	50	30	14	-3	5		TC...0902
STFCR 10CA 11		15	10	11	50	30	14	-3	5	40	TC...1102
STFCR 12CA 16		20	12	15	55	35	20	-3	6	50	TC...16T3
STFCR 16CA 16		21	16	20	63	38	25	-6	—	50	
STFCL 10CA 09	LEFT	15	10	10	50	30	14	-3	5		TC...0902
STFCL 10CA 11		15	10	11	50	30	14	-3	5	40	TC...1102
STFCL 12CA 16		20	12	15	55	35	20	-3	6	50	TC...16T3
STFCL 16CA 16		21	16	20	63	38	25	-6	—	50	

◎ INSERT to be ordered separately; For acce

NOTE: 10CA ,  $\alpha=20^\circ$

12CA ,  $\alpha=20^\circ$

16CA ,  $\alpha=45^\circ$

# STFCR/L



## CLAMP

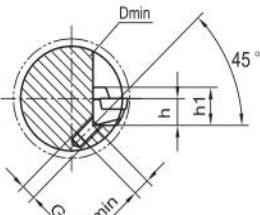
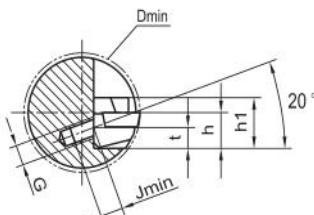
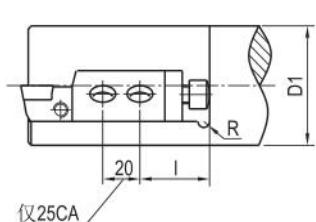
### INSERTS SCREW

INSERTS MODEL	SCREW	WRENCH	INSERTS MODEL	SCREW	WRENCH
CC...0602	CSC2560	CTS08W	SC...1204	CSC5012	CTS20W
CC...09T3	CSC4090	CTS15W	TC...0902	CSC2250	CTS07W
CC...1204	CSC5012	CTS20W	TC...1102	CSC2560	CTS08W
SC...09T3	CSC4090	CTS15W	TC...16T3	CSC4090	CTS15W

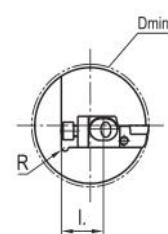
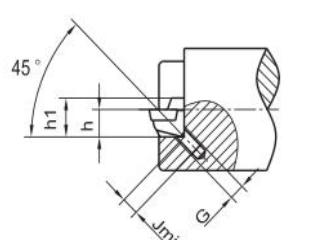
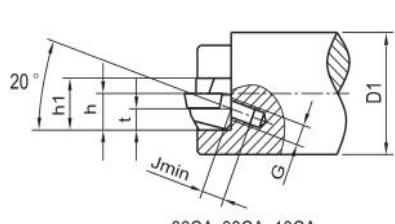
### Tool holder accessories and installation dimensions

	CLAMP MODEL	① SCREW	② WRENCH	③ RADIAL SCREW	④ AXIAL SCREW	⑤ WRENCH
06CA	CLB0350806	CBL23	CLZ390	CLC0300605	CBL15	
08CA	CLB0401607	CBL25	CLZ470	CLC0300605	CBL15	
10CA	CLB0602010	CBL40	CLZ470	CLC0400807	CBL20	
12CA	CLB0602510	CBL40	CLZ580	CLC0401207	CBL20	
16CA	CLB08030125	CBL50	CLZ618	CLC0401207	CBL20	

#### - 轴向安装 Axial mounting

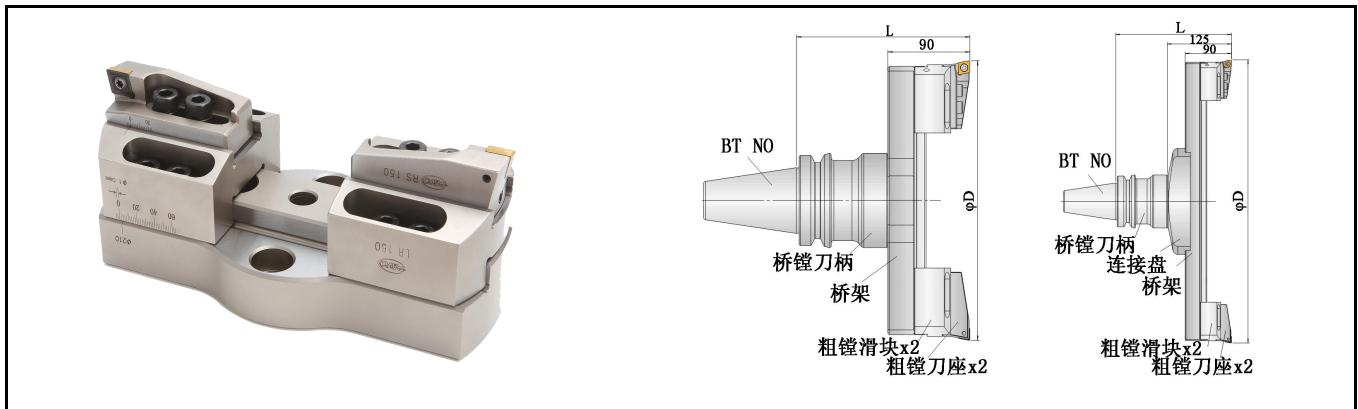


#### - 径向安装 Radial mounting



CLAMP MODEL	h	l	G	Jmin	t	h1	Rmax	Dmin	D1
06CA	6	12	M3.5X0.6	10	3.5	8.5	2.0	20	
08CA	8	17	M4X0.7	10	4.5	10	2.5	25	The maximum diameter of the shank is less than the diameter of the boring hole by 3mm
10CA	10	20	M6X1	14	5.0	15	4.0	40	
12CA	12	20	M6X1	14	6.0	20	5.0	50	
16CA	16	25	M8X1.25	15	—	21	5.0	55	
16CA	20	30	M8X1.25	15	—	25	5.0	70	

Standard Steel Bridge Rough Boring Tool (Large Bore), RANGE  $\phi 150-\phi 850$



RANGE $\phi D$ (mm)	MODEL	W. kg	CONNECTOR		steel bridge		Rough boring slide (2PCS 1 SET)		INSERTS BASE (2PCS 1 SET)		FOR INSERT S
			MODEL	W. kg	MODEL	W. kg	MODEL	W. kg	MODEL	W. kg	
150-210	CLR 150-210	5.5	/	/	CL 150-210	2.5	LR 150	1.9 1 SET	RS 150	0.6 1SET	CC 1204
210-290	CLR 210-290	6.7			CL 210-290	3.7					
290-370	CLR 290-370	8.05			CL 290-370	5.05					
370-450	CLR 370-450	9.8			CL 370-450	6.8					
450-530	CLR 450-530	11.4			CL 450-530	8.4					
530-610	CLR 530-610	17.2	CL40 -200	4.7	CL 530-610	9.5					
610-690	CLR 610-690	18.7			CL 610-690	11.0					
690-770	CLR 690-770	20.4			CL 690-770	12.7					
770-850	CLR 770-850	22.7			CL 770-850	15.0					

◎ INSERT to be ordered separately

◎ Pull studs are not included in the combination, please note that the form of pull studs is also different

◎ Also can make extended bridge type boring holder (non-standard) can be customized when needed

◎ The direction of the tool nose of the standard product and the direction of rotation are in the same phase

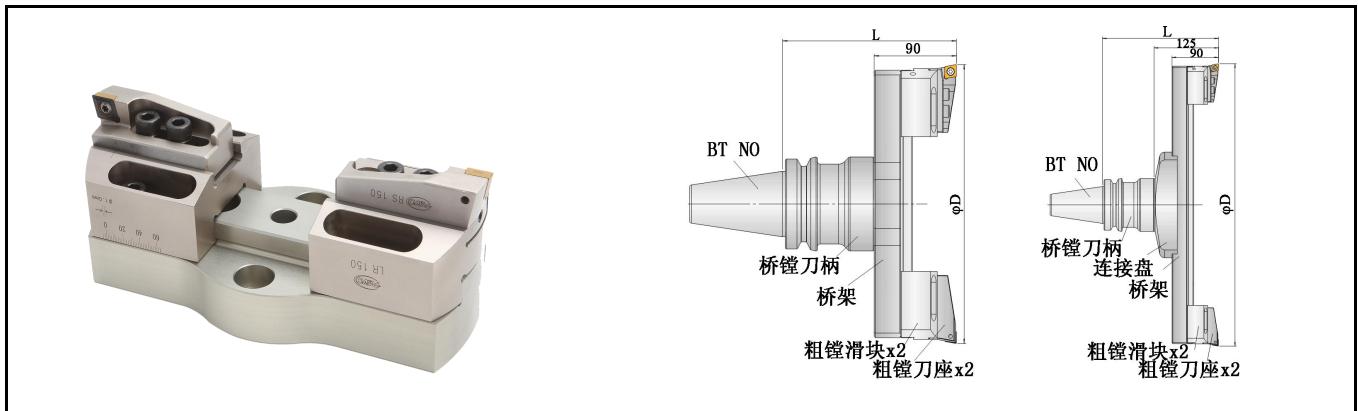
◎ Parts can also be sold individually

◎ Wider range of customization

◎ Since it is a modular type, it is possible to handle various types of processing by simply combining the components, thereby simplifying  
 ◎ Another aluminum alloy bridge is optional, which can be used to reduce the weight of the tool.

## CLR-AL

Lightweight Aluminum Bridge Rough Boring Tool (Large Bore),  
RANGE  $\Phi 150-\Phi 850$



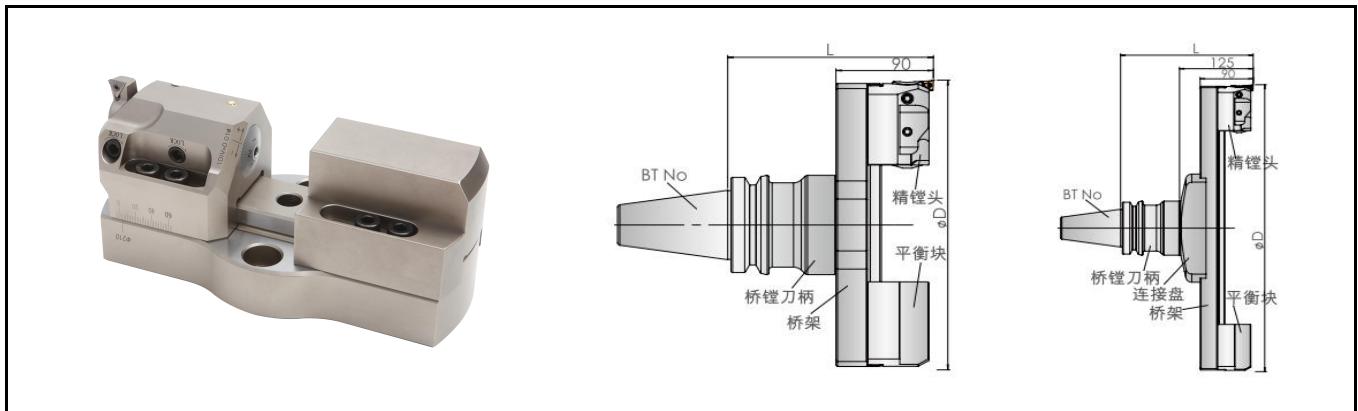
RANGE $\Phi D$ (mm)	MODEL	kg	connect		alum. bridge		Rough boring slide		INSERTS		INSERTS
			MODEL	kg	MODEL	kg	MODEL	kg	MODEL	kg	
150-210	CLR 150-210 AL	3.9	/	/	CL 150-210 AL	0.9	LR 150	1.9 set	RS 150	0.6 SET	CC 1204
210-290	CLR 210-290 AL	4.3			CL 210-290 AL	1.3					
290-370	CLR 290-370 AL	5.0			CL 290-370 AL	2.0					
370-450	CLR 370-450 AL	5.5			CL 370-450 AL	2.5					
450-530	CLR 450-530 AL	6.0			CL 450-530 AL	3.0					
530-610	CLR 530-610 AL	11.2	CL40-200	4.7	CL 530-610 AL	3.5					
610-690	CLR 610-690 AL	12.0			CL 610-690 AL	4.3					
690-770	CLR 690-770 AL	13.2			CL 690-770 AL	5.5					
770-850	CLR 770-850 AL	13.9			CL 770-850 AL	6.2					

◎ INSERT to be ordered separately

# CLF



Hard Steel Bridge Fine Boring Tool (Large Bore), RANGE  $\phi$  150-



RANGE $\phi$ D (mm)	MODEL	kg			steel bridge		Fine boring and fine-tuning slider		Fine boring balance		INSERTS	
			connect									
			MODEL	kg	MODEL	kg	MODEL	kg	MODEL	kg		
150-210	CLF 150-210	6.2	/	4.7	CL 150-210	2.5	LP 150	1.6	LM150	1.05	TC11 CC09	
210-290	CLF 210-290	7.5			CL 210-290	3.7						
290-370	CLF 290-370	8.5			CL 290-370	5.05						
370-450	CLF 370-450	10.2			CL 370-450	6.8						
450-530	CLF 450-530	11.6			CL 450-530	8.4						
530-610	CLF 530-610	17.5			CL 530-610	9.5						
610-690	CLF 610-690	19.0			CL 610-690	11.0						
690-770	CLF 690-770	20.8			CL 690-770	12.7						
770-850	CLF 770-850	23.0			CL 770-850	15.0						

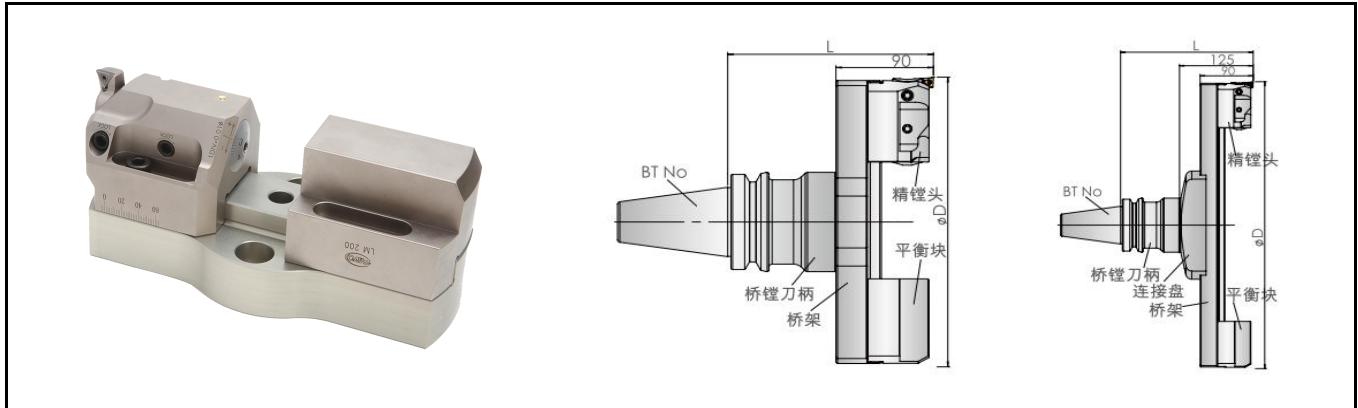
◎ INSERT to be ordered separately

INSERTS			
INSERTS	INSERTS	INSERTS	INSERTS
FST-6A (标配) FST-6B FST-6C	TC 1102	FSC-6A FSC-6B FSC-6C	CC 09T3

## CLF-AL



Light Aluminum Bridge Fine Boring Tool (Large Bore), RANGE  $\phi 150$  -  $\phi 770$



RANGE $\phi D$ (mm)	MODEL	kg			alum. bridge		Fine boring and fine-tuning slider		Fine boring balance		INSERT S	
			connect									
			MODEL	kg	MODEL	kg	MODEL	kg	MODEL	kg		
150-210	CLF 150-210 AL	4.6	/	4.7	CL 150-210 AL	0.9	LP 150	1.6	LM150	1.05	TC11 CC09	
210-290	CLF 210-290 AL	5.1			CL 210-290 AL	1.3						
290-370	CLF 290-370 AL	5.5			CL 290-370 AL	2						
370-450	CLF 370-450 AL	5.9			CL 370-450 AL	2.5						
450-530	CLF 450-530 AL	6.2			CL 450-530 AL	3						
530-610	CLF 530-610 AL	11.5			CL 530-610 AL	3.5						
610-690	CLF 610-690 AL	12.3			CL 610-690 AL	4.3						
690-770	CLF 690-770 AL	13.6			CL 690-770 AL	5.5						
770-850	CLF 770-850 AL	14.2			CL 770-850 AL	6.2						

◎ INSERT to be ordered separately

INSERT BASE			
OR INSERT BAS	INSERTS	OR INSERT BAS	INSERTS
FST-6A (标配) FST-6B FST-6C	TC 1102	FSC-6A FSC-6B FSC-6C	CC 09T3

## LF150Extended functions of the LF150 fine boring head



- ◎ Increase the RANGE of the boring head by exchanging the INSERTS seat
- ◎ The reverse boring process can be performed by installing the INSERTS seat reversely, which improves the processing efficiency and accuracy

### Swap the RANGE of the INSERTS block

Insert holder model	RANGE with the corresponding bridge		RANGE with the corresponding bridge		RANGE with the corresponding bridge	
	Φ D (mm)	bridge	Φ D (mm)	bridge	Φ D (mm)	bridge
FS*-6A	150–210	CL 150–210	370–450	CL 370–450	610–690	CL 610–690
FS*-6B	176–236		396–476		636–716	
FS*-6C	200–260		420–500		660–740	
FS*-6A	210–290	CL 210–290	450–530	CL 450–530	610–770	CL 690–770
FS*-6B	236–315		476–556		716–746	
FS*-6C	260–340		500–580		740–820	
FS*-6A	290–370	CL 290–370	530–610	CL 530–610	770–850	CL 770–850
FS*-6B	316–396		556–636		796–876	
FS*-6C	340–420		580–660		820–900	

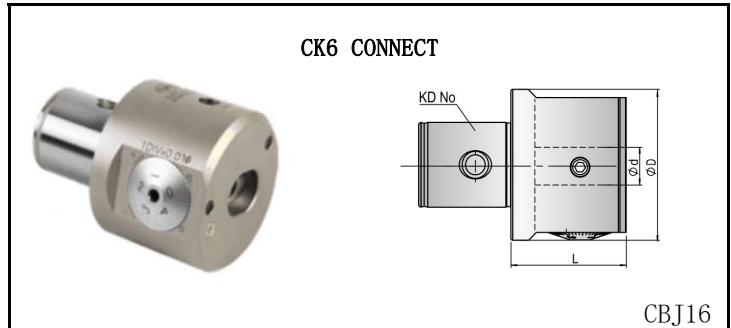
◎Wider range of customization

**CBJ**

## Steel Small Diameter Fine Boring

RANGE  $\Phi 6 - \Phi 50$ 

Shank model	L	Kg
BT40-CK6-55	55	1.22
BT50-CK6-85	85	4.28
SK40-CK6-90	90	1.22
SK50-CK6-85	85	4.28
HSK A63-CK6-100	100	2.20
HSK A100-CK6-85	85	4.20

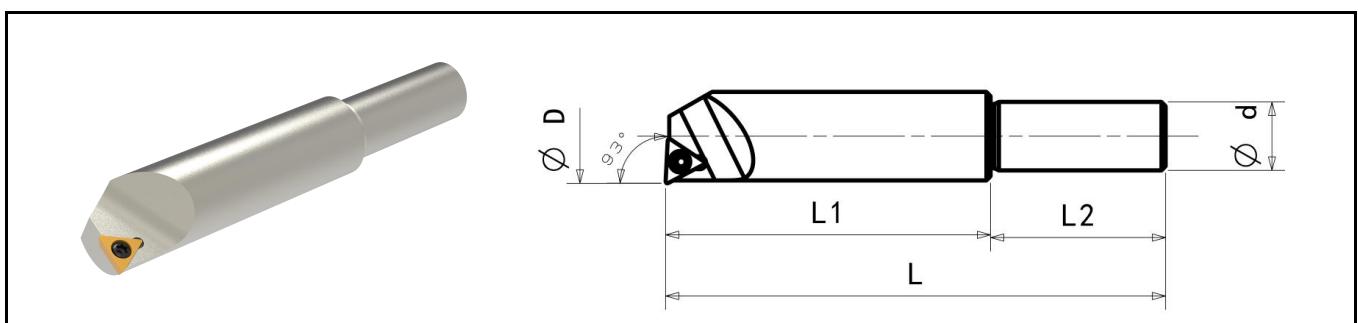


CBJ16

BORING MODEL	CK NO.	D	d	L	JOURNEY	W. kg
CBJ16	6	64	16	50	6	1.25

◎Note that the tool holder, fine boring mechanism, and steel boring bars must be ordered separately

## steel boring SHANK



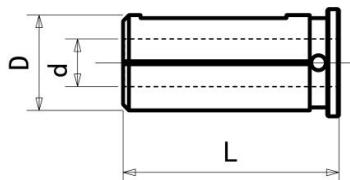
MODEL	RANGE	D	d	L1	L2	L	INSERT	SCREW/WRENCH	W. kg	
CBJ1606-24	6-8	16	16	24	42	66	WBGT 0601	CSS2005 CTS06W	0.07	
CBJ1608-32	8-11			32	42	76	TBGT 0601		0.08	
CBJ1610-40	10-13			40	42	77			0.08	
CBJ1612-53	12-17			53	42	90	TPGH 0902	CSC2560 CTS08W	0.11	
CBJ1616-68	16-21			68	42	102			0.14	
CBJ1620-83	20-26			83	42	120		TPGH 1103	0.21	
CBJ1620-90	25-32			90	38	124			0.30	
CBJ1630-90	30-42			90	38	124			0.32	
CBJ1640-90	40-50			90	38	124			0.41	

◎Standard shank without internal coolant

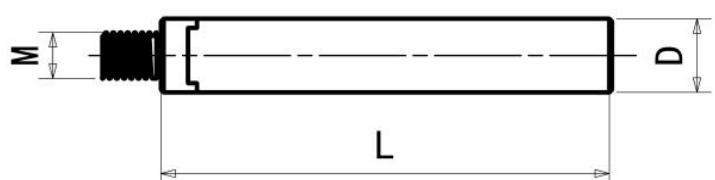
◎INSERTS to be ordered separately

Solid hard small diameter fine boring

conversion sleeve

PRODUCT MODEL	DIMENSION			Combined tungsten steel handle	 
	D	d	L		
CEC1608	16	8	37	CWC08*M5	
CEC1610	16	10	37	CWC10*M6	
CEC1612	16	12	37	CWC12*M6	
CEC1614	16	14	37	CWC14*M6	

Carbide anti-vibration tool holder

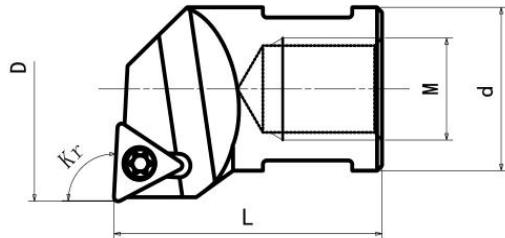
MODEL	DIMENSION			conversion sleeve	W. kg	boring head	
	D	L	M				
CWC08H100M5	8	100	M5	 	0.08	CN09/10.5	
CWC10H100M6	10	100	M6		0.15	CN12	
CWC10H150M6	10	150			0.23		
CWC12H100M6	12	100			0.24	CN14	
CWC12H150M6	12	150			0.33		
CWC14H150M6	14	150			0.43	CN16	
CWC14H200M6	14	200			0.58		
CWC16H100M10	16	100	M10		0.42	CN18/2/2/24/2/28/30/32/ 34/36/38/40/4/N46	
CWC16H150M10	16	150	M10		0.61		
CWC16H200M10	16	200	M10		0.82		

◎Standard shank without internal coolant

**CN**

Small diameter fine boring head

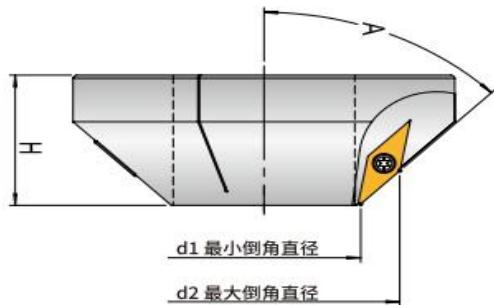
Boring CUTTER head



MODEL	DIMENSION					RANGE	W. kg	INSERT	SCREW/WRENCH
	D	L	M	d	Kr				
CN09	9					9-10.5	0.03		
CN10.5	10.5	18	M5	8		10.5-12	0.03		
CN12	12					12-14	0.03		
CN14	14					14-16	0.03		
CN16	16					16-18	0.04		
CN18	18					18-20	0.04		
CN20	20					20-22	0.05		
CN22	22					22-24	0.05		
CN24	24					24-26	0.05		
CN26	26					26-28	0.05		
CN28	28					28-30	0.06		
CN30	30					30-32	0.06		
CN32	32					32-34	0.07		
CN34	34					34-36	0.09		
CN36	36					36-38	0.11		
CN38	38					38-40	0.15		
CN40	40					40-42	0.16		
CN42	42					42-46	0.19		
CN46	46					46-50	0.26		

◎CUTTER HEAD COMPATIBLE WITH CWC CARBIDE ALLOY SHANK

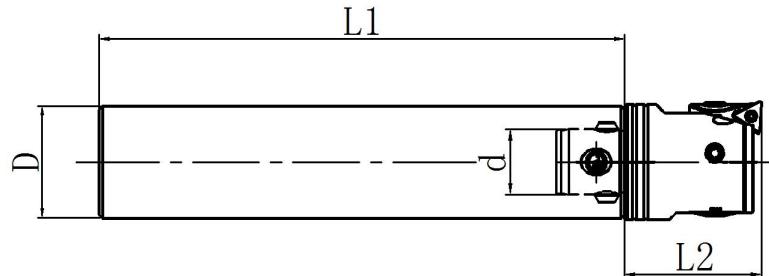
## chamfer ring



PRODUCT MODEL	EDGE QTY	ANGLE A	d1	d2	H	SHANK	INSERT	SCREW+ INSERT	LOCK. SCREW	W. kg			
MC1-34-45	1	45	21	34	22	CK1	VCGT110302	CSC2560 CTS08W	M5x16	0.06			
MC2-39-45			26	39	25	CK2				0.12			
MC3-54-45			34	54	35	CK3		CSC4090 CTS15W	M6x20	0.52			
MC4-62-45			42	62	38	CK4				0.70			
MC5-93-45			53	93	43	CK5			M6x25	1.31			
MC6-107-45			67	107	46	CK6			M8x25	1.82			
MC6-138-45			98	138						3.85			
MC6-160-45			120	160						5.58			
MC1-41-30	2	30	23	41	30	CK1	VCGT110302	CSC2560 CTS08W	M5x16	0.11			
MC2-46-30			28	46	35	CK2				0.22			
MC3-53-30			35	53		CK3			M6x20	0.35			
MC4-61-30			43	61		CK4				0.42			
MC5-84-30			56	84	48	CK5	VCGT160404	CSC4090 CTS15W	M8x25	1.30			
MC6-98-30			70	98		CK6				1.20			
MC6-120-30			92	120						3.05			
MC6-142-30			114	142						4.10			

◎ INSERTS to be ordered separately

Super hard solid tungsten carbide boring bars



PRODUCT MODEL	SHANK	CONNECT	DIMENSION (mm)				 Kg
			D	d	L1	L2	
SCB-C19-CKB1-150	SCB	CK1	19	11	150	32.5	0.50
SCB-C19-CKB1-200	SCB	CK1	19	11	200	32.5	0.70
SCB-C19-CKB1-250	SCB	CK1	19	11	250	32.5	0.90
SCB-C24-CKB2-200	SCB	CK2	24	14	200	35.5	1.00
SCB-C24-CKB2-250	SCB	CK2	24	14	250	35.5	1.20
SCB-C24-CKB2-300	SCB	CK2	24	14	300	35.5	1.50
SCB-C32-CKB3-250	SCB	CK3	32	18	250	40	1.80
SCB-C32-CKB3-300	SCB	CK3	32	18	300	40	2.20
SCB-C32-CKB3-350	SCB	CK3	32	18	350	40	3.00

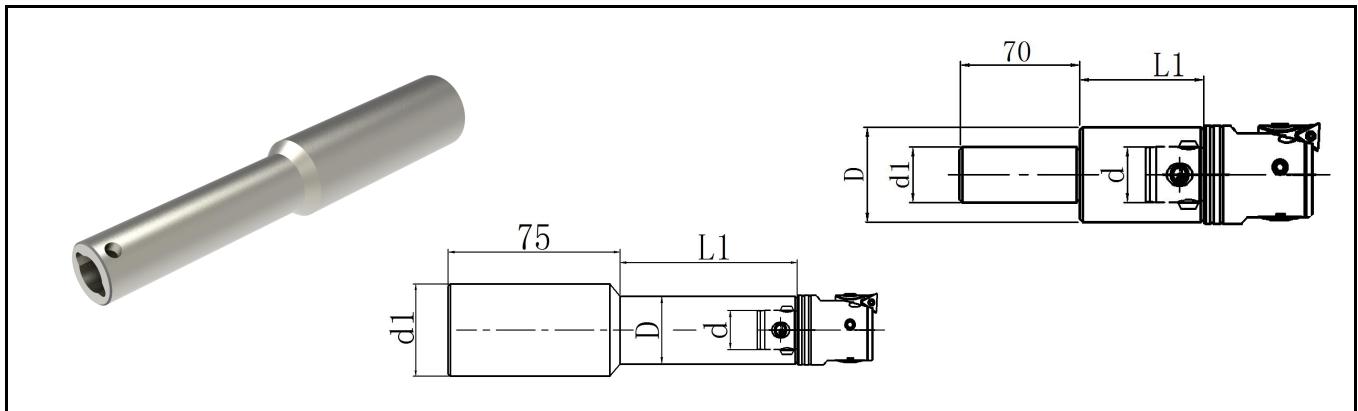
◎high toughness, toughness and durability, high hardness, high rigidity, high shock resistance, can be used for deep hole machining (8D)

◎Various specifications have water holes, and the chip removal and cooling effect are good in deep hole machining

◎Straight shank results, the processing depth can be adjusted according to the processing needs

**SSB**

Steel CK CONNECT Boring Bars

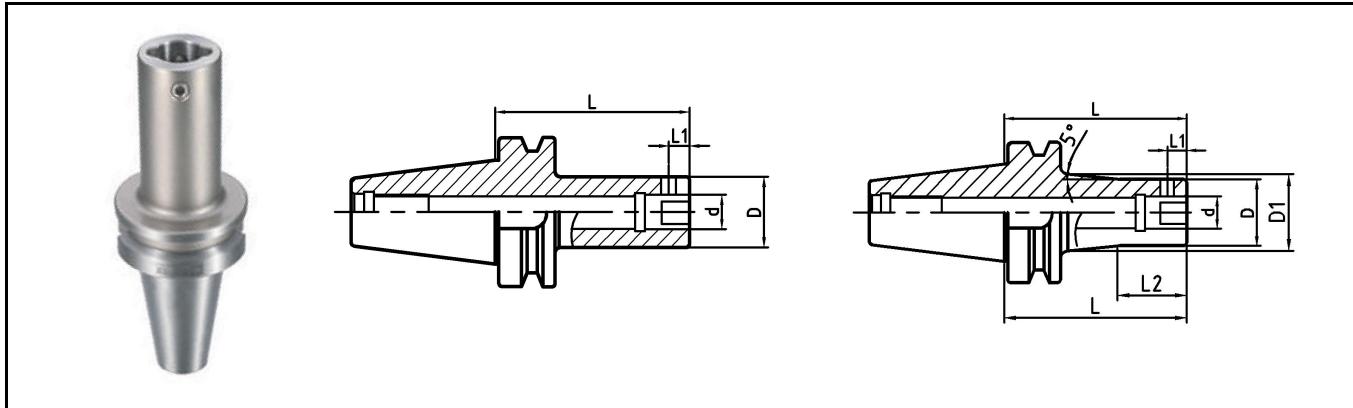


PRODUCT MODEL	hand type	CONNE CT	DIMENSION				<b>Kg</b>
			D	d	d1	L	
SSB-C32-CKB1-75	SSB	CK1	19	11	32	75	0.52
SSB-C32-CKB2-70	SSB	CK2	24	14	32	70	0.59
SSB-C32-CKB2-120	SSB	CK2	24	14	32	120	0.85
SSB-C32-CKB3-70	SSB	CK3	31	18	32	70	0.73
SSB-C32-CKB3-120	SSB	CK3	31	18	32	120	1.01
SSB-C32-CKB4-60	SSB	CK4	39	22	32	60	0.77
SSB-C32-CKB4-110	SSB	CK4	39	22	32	110	1.19
SSB-C32-CKB5-60	SSB	CK5	50	28	32	60	1.02
SSB-C32-CKB5-120	SSB	CK5	50	28	32	120	1.89
SSB-C32-CKB6-60	SSB	CK6	64	36	32	60	1.42
SSB-C32-CKB6-120	SSB	CK6	64	36	32	120	2.20

## BT - CK



Boring tool holder series

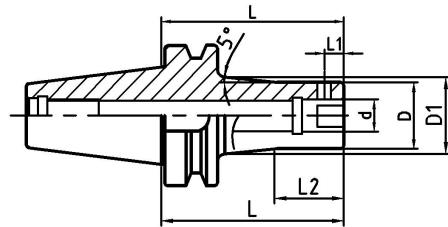
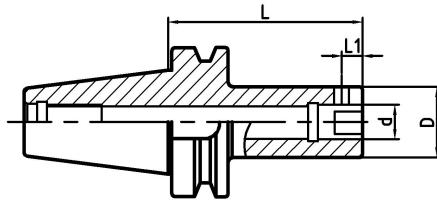


PRODUCT SERIES	TYPE	DIMENSION				PIC B DIM.		CKCK side screw	WRENC H	<b>Kg</b>
		D	d	L1	L	d1	L2			
BT40-CK1-70	CK1	19	11	5.05	70	—	—	M050Z050-30P-D	L025	1.03
BT40-CK1-100	CK1	19	11	5.05	100	20.7	60	M050Z050-30P-D	L025	1.10
BT40-CK2-75	CK2	24	14	6.62	75	—	—	M050Z060-30P-D	L025	1.10
BT40-CK2-100	CK2	24	14	6.62	100	—	—	M050Z060-30P-D	L025	1.18
BT40-CK2-130	CK2	24	14	6.62	130	30	65	M050Z060-30P-D	L025	1.33
BT40-CK3-80	CK3	31	18	8	80	—	—	M060Z090-30P-D	L03	1.22
BT40-CK3-100	CK3	31	18	8	100	—	—	M060Z090-30P-D	L03	1.32
BT40-CK3-135	CK3	31	18	8	135	34.5	75	M060Z090-30P-D	L03	1.54
BT40-CK3-165	CK3	31	18	8	165	39.7	85	M060Z090-30P-D	L03	1.76
BT40-CK4-70	CK4	39	22	10	70	—	—	M080Z120-30P-D	L04	1.21
BT40-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	1.46
BT40-CK4-150	CK4	39	22	10	150	43.4	85	M080Z120-30P-D	L04	1.90
BT40-CK4-170	CK4	39	22	10	170	46.9	95	M080Z120-30P-D	L04	2.16
BT40-CK5-60	CK5	50	28	13	60	—	—	M100Z160-30P-D	L05	1.22
BT40-CK5-80	CK5	50	28	13	80	—	—	M100Z160-30P-D	L05	1.52
BT40-CK5-100	CK5	50	28	13	100	—	—	M100Z160-30P-D	L05	1.80
BT40-CK5-150	CK5	50	28	13	150	—	—	M100Z160-30P-D	L05	2.52
BT40-CK5-180	CK5	50	28	13	180	—	—	M100Z160-30P-D	L05	2.90
BT40-CK6-55	CK6	64	36	16	55	—	—	M120Z200-30P-D	L06	1.22
BT40-CK6-100	CK6	64	36	16	100	—	—	M120Z200-30P-D	L06	2.29
BT40-CK6-150	CK6	64	36	16	150	—	—	M120Z200-30P-D	L06	3.50
BT40-CK6-180	CK6	64	36	16	180	—	—	M120Z200-30P-D	L06	4.22
BT40-CK7-100	CK7	90	46	19.15	100	—	—	M200Z290-30P-D	L10	3.50
BT40-CK7-150	CK7	90	46	19.15	150	—	—	M200Z290-30P-D	L10	5.50

## BT - CK



Boring tool holder

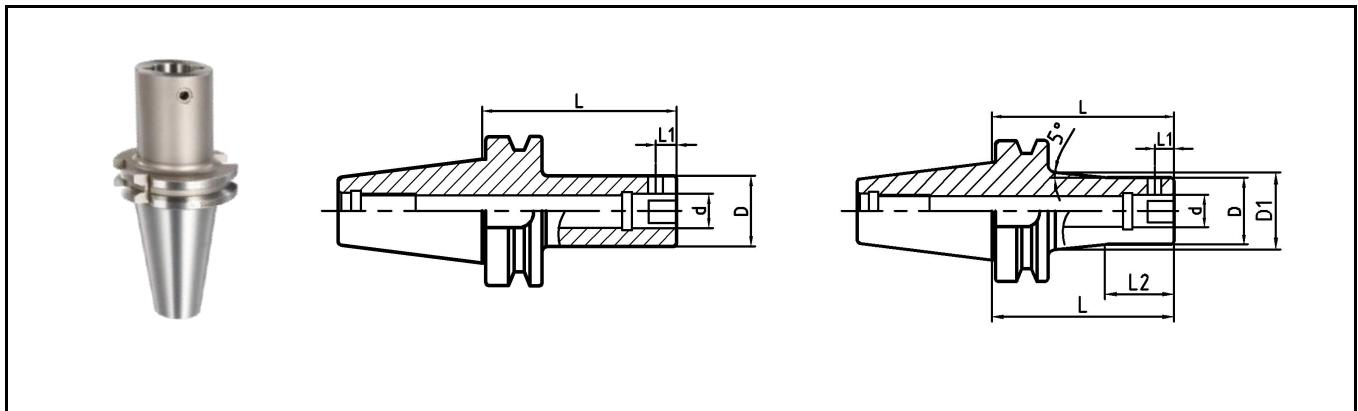


PRODUCT SERIES	TYPE	DIMENSION				PIC B DIM.		CKCK side screw	WRENC H	<b>Kg</b>
		D	d	L1	L	d1	L2			
BT50-CK1-80	CK1	19	11	5.05	80	—	—	M050Z050-30P-D	L025	3.20
BT50-CK1-115	CK1	19	11	5.05	115	20.7	50	M050Z050-30P-D	L025	3.73
BT50-CK2-80	CK2	24	14	6.62	80	—	—	M050Z060-30P-D	L025	3.68
BT50-CK2-105	CK2	24	14	6.62	105	—	—	M050Z060-30P-D	L025	3.78
BT50-CK2-135	CK2	24	14	6.62	135	26.6	65	M050Z060-30P-D	L025	3.89
BT50-CK3-85	CK3	31	18	8	85	—	—	M060Z090-30P-D	L03	3.80
BT50-CK3-110	CK3	31	18	8	110	—	—	M060Z090-30P-D	L03	3.95
BT50-CK3-140	CK3	31	18	8	140	32.7	75	M060Z090-30P-D	L03	4.09
BT50-CK3-170	CK3	31	18	8	170	38	85	M060Z090-30P-D	L03	4.31
BT50-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	3.98
BT50-CK4-160	CK4	39	22	10	160	42.5	85	M080Z120-30P-D	L04	4.50
BT50-CK4-205	CK4	39	22	10	205	50	95	M080Z120-30P-D	L04	5.13
BT50-CK5-90	CK5	50	28	13	90	—	—	M100Z160-30P-D	L05	4.30
BT50-CK5-165	CK5	50	28	13	165	—	—	M100Z160-30P-D	L05	5.20
BT50-CK5-210	CK5	50	28	13	210	57.8	120	M100Z160-30P-D	L05	5.92
BT50-CK5-270	CK5	50	28	13	270	68.4	120	M100Z160-30P-D	L05	7.23
BT50-CK6-85	CK6	64	36	16	85	—	—	M120Z200-30P-D	L06	4.28
BT50-CK6-155	CK6	64	36	16	155	—	—	M120Z200-30P-D	L06	5.97
BT50-CK6-215	CK6	64	36	16	215	—	—	M120Z200-30P-D	L06	7.43
BT50-CK6-250	CK6	64	36	16	250	—	—	M120Z200-30P-D	L06	8.27
BT50-CK6-300	CK6	64	36	16	300	80.5	160	M120Z200-30P-D	L06	10.21
BT50-CK6-350	CK6	64	36	16	350	90	160	M120Z200-30P-D	L06	12.90
BT50-CK7-85	CK7	90	36	19.15	85	—	—	M200Z290-30P-D	L10	4.96
BT50-CK7-150	CK7	90	36	19.15	150	—	—	M200Z290-30P-D	L10	6.52
BT50-CK7-210	CK7	90	36	19.15	210	—	—	M200Z290-30P-D	L10	8.55
BT50-CK7-250	CK7	90	36	19.15	250	—	—	M200Z290-30P-D	L10	10.35
BT50-CK7-300	CK7	90	36	19.15	300	—	—	M200Z290-30P-D	L10	12.55
BT50-CK7-350	CK7	90	36	19.15	350	—	—	M200Z290-30P-D	L10	13.25

# SK-CK

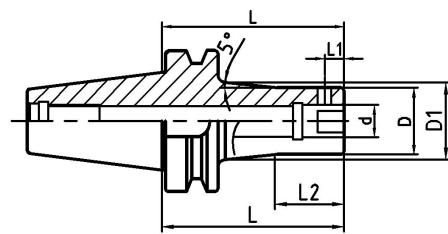
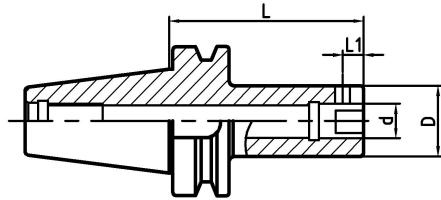


Boring head holder



PRODUCT SERIES	TYPE	DIMENSION				PIC B DIM.		CKCK side screw	WRENC H	Kg
		D	d	L1	L	d1	L2			
SK40-CK1-70	CK1	19	11	5.05	70	—	—	M050Z050-30P-D	L025	1.03
SK40-CK1-100L	CK1	19	11	5.05	100	20.7	60	M050Z050-30P-D	L025	1.10
SK40-CK2-75	CK2	24	14	6.62	75	—	—	M050Z060-30P-D	L025	1.10
SK40-CK2-100	CK2	24	14	6.62	100	—	—	M050Z060-30P-D	L025	1.18
SK40-CK2-130L	CK2	24	14	6.62	130	28.3	75	M050Z060-30P-D	L025	1.33
SK40-CK3-80	CK3	31	18	8	80	—	—	M060Z090-30P-D	L03	1.22
SK40-CK3-100	CK3	31	18	8	100	—	—	M060Z090-30P-D	L03	1.32
SK40-CK3-135L	CK3	31	18	8	135	34.5	85	M060Z090-30P-D	L03	1.54
SK40-CK3-165L	CK3	31	18	8	165	39.7	85	M060Z090-30P-D	L03	1.76
SK40-CK4-70	CK4	39	22	10	70	—	—	M080Z120-30P-D	L04	1.21
SK40-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	1.46
SK40-CK4-150L	CK4	39	22	10	150	43.4	95	M080Z120-30P-D	L04	1.90
SK40-CK4-170L	CK4	39	22	10	170	46.9	95	M080Z120-30P-D	L04	2.16
SK40-CK5-80	CK5	50	28	13	80	—	—	M100Z160-30P-D	L05	1.52
SK40-CK5-100	CK5	50	28	13	100	—	—	M100Z160-30P-D	L05	1.80
SK40-CK5-150	CK5	50	28	13	150	—	—	M100Z160-30P-D	L05	2.52
SK40-CK5-180	CK5	50	28	13	180	—	—	M100Z160-30P-D	L05	2.90
SK40-CK6-90	CK6	64	36	16	90	—	—	M120Z200-30P-D	L06	1.22
SK40-CK6-150	CK6	64	36	16	150	—	—	M120Z200-30P-D	L06	3.50
SK40-CK6-180	CK6	64	36	16	180	—	—	M120Z200-30P-D	L06	4.22
SK40-CK7-100	CK7	90	46	19.15	100	—	—	M200Z290-30P-D	L10	3.50
SK40-CK7-150	CK7	90	46	19.15	150	—	—	M200Z290-30P-D	L10	5.50

## Boring head holder

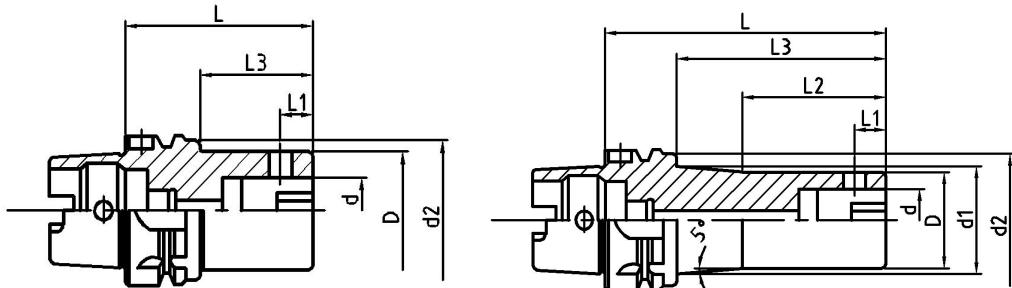


PRODUCT SERIES	TYPE	DIMENSION				PIC B DIM.		CKCK side screw	WRENC H	<b>Kg</b>
		D	d	L1	L	d1	L2			
SK50-CK1-80	CK1	19	11	5.05	80	—	—	M050Z050-30P-D	L025	3.60
SK50-CK1-115L	CK1	19	11	5.05	115	20.7	60	M050Z050-30P-D	L025	3.73
SK50-CK2-80	CK2	24	14	6.62	80	—	—	M050Z060-30P-D	L025	3.60
SK50-CK2-105	CK2	24	14	6.62	105	—	—	M050Z060-30P-D	L025	3.78
SK50-CK2-135L	CK2	24	14	6.62	135	26.6	75	M050Z060-30P-D	L025	3.89
SK50-CK3-85	CK3	31	18	8	85	—	—	M060Z090-30P-D	L03	3.80
SK50-CK3-110	CK3	31	18	8	110	—	—	M060Z090-30P-D	L03	3.95
SK50-CK3-140L	CK3	31	18	8	140	32.7	85	M060Z090-30P-D	L03	4.09
SK50-CK3-170L	CK3	31	18	8	170	38	85	M060Z090-30P-D	L03	4.31
SK50-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	3.98
SK50-CK4-160L	CK4	39	22	10	160	42.5	95	M080Z120-30P-D	L04	4.50
SK50-CK4-205L	CK4	39	22	10	205	50	95	M080Z120-30P-D	L04	5.13
SK50-CK5-90	CK5	50	28	13	90	—	—	M100Z160-30P-D	L05	4.30
SK50-CK5-165	CK5	50	28	13	165	—	—	M100Z160-30P-D	L05	5.20
SK50-CK5-210L	CK5	50	28	13	210	57.8	120	M100Z160-30P-D	L05	5.92
SK50-CK5-270L	CK5	50	28	13	270	68.4	120	M100Z160-30P-D	L05	7.23
SK50-CK6-85	CK6	64	36	16	85	—	—	M120Z200-30P-D	L06	4.28
SK50-CK6-155	CK6	64	36	16	155	—	—	M120Z200-30P-D	L06	5.97
SK50-CK6-215	CK6	64	36	16	215	—	—	M120Z200-30P-D	L06	7.43
SK50-CK6-250	CK6	64	36	16	250	—	—	M120Z200-30P-D	L06	8.27
SK50-CK6-300L	CK6	64	36	16	300	80.5	160	M120Z200-30P-D	L06	10.21
SK50-CK7-85	CK7	90	36	19.15	85	—	—	M200Z290-30P-D	L10	4.96
SK50-CK7-150	CK7	90	36	19.15	150	—	—	M200Z290-30P-D	L10	6.52
SK50-CK7-210	CK7	90	36	19.15	210	—	—	M200Z290-30P-D	L10	8.55
SK50-CK7-250	CK7	90	36	19.15	250	—	—	M200Z290-30P-D	L10	10.35
SK50-CK7-300	CK7	90	36	19.15	300	—	—	M200Z290-30P-D	L10	12.55
SK50-CK7-350	CK7	90	36	19.15	350	—	—	M200Z290-30P-D	L10	13.25

# HSK A -CK



Boring tool holder

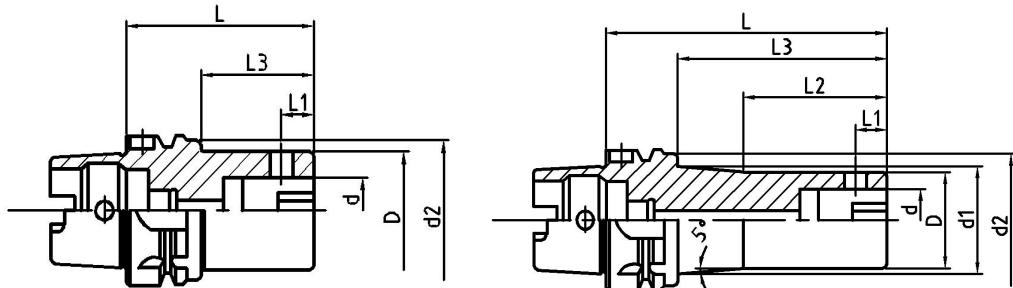


PRODUCT SERIES	TYPE	DIMENSION				PIC B DIM.		CKCK side screw	WRENC H	<b>Kg</b>
		D	d	L1	L	d1	L2			
HSKA63-CK1-70	CK1	19	11	5.05	70	—	—	M050Z050-30P-D	L025	0.80
HSKA63-CK1-100L	CK1	19	11	5.05	100	23.5	50	M050Z050-30P-D	L025	0.90
HSKA63-CK2-75	CK2	24	14	6.62	75	—	—	M050Z060-30P-D	L025	0.90
HSKA63-CK2-100	CK2	24	14	6.62	100	—	—	M050Z060-30P-D	L025	1.00
HSKA63-CK2-130L	CK2	24	14	6.62	130	31	65	M050Z060-30P-D	L025	1.10
HSKA63-CK3-80	CK3	31	18	8	80	—	—	M060Z090-30P-D	L03	1.00
HSKA63-CK3-100	CK3	31	18	8	100	—	—	M060Z090-30P-D	L03	1.10
HSKA63-CK3-135L	CK3	31	18	8	135	37	75	M060Z090-30P-D	L03	1.30
HSKA63-CK3-165L	CK3	31	18	8	165	41	85	M060Z090-30P-D	L03	1.40
HSKA63-CK4-70	CK4	39	22	10	70	—	—	M080Z120-30P-D	L04	1.00
HSKA63-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	1.30
HSKA63-CK4-150L	CK4	39	22	10	150	44	95	M080Z120-30P-D	L04	1.70
HSKA63-CK4-170L	CK4	39	22	10	170	47.5	95	M080Z120-30P-D	L04	1.90
HSKA63-CK5-80	CK5	50	28	13	80	—	—	M100Z160-30P-D	L05	1.40
HSKA63-CK5-100	CK5	50	28	13	100	—	—	M100Z160-30P-D	L05	1.80
HSKA63-CK5-150	CK5	50	28	13	150	—	—	M100Z160-30P-D	L05	2.20
HSKA63-CK5-180	CK5	50	28	13	180	—	—	M100Z160-30P-D	L05	2.70
HSKA63-CK6-100	CK6	64	36	16	100	—	—	M120Z200-30P-D	L06	2.20
HSKA63-CK6-150	CK6	64	36	16	150	—	—	M120Z200-30P-D	L06	2.80
HSKA63-CK6-180	CK6	64	36	16	180	—	—	M120Z200-30P-D	L06	3.30
HSKA63-CK7-110	CK7	90	46	19.15	110	—	—	M200Z290-30P-D	L10	3.50
HSKA63-CK7-150	CK7	90	46	19.15	150	—	—	M200Z290-30P-D	L10	5.20

# HSK A -CK



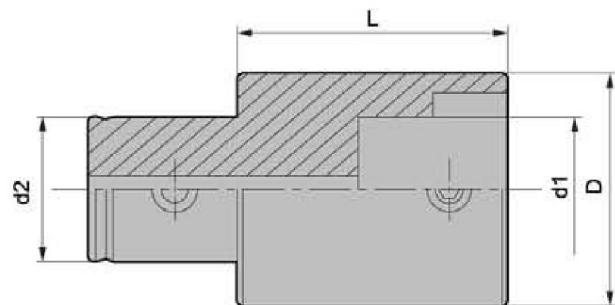
Boring tool holder



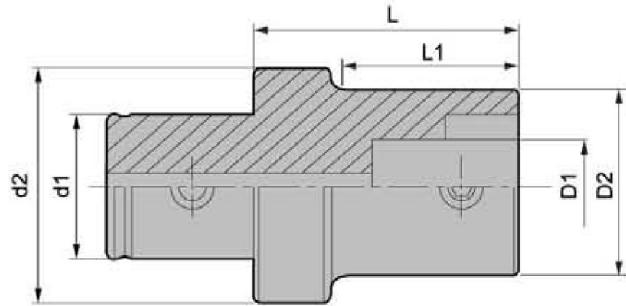
PRODUCT SERIES	TYPE	DIMENSION				PIC B DIM.		CKCK side screw	WRENC H	<b>Kg</b>
		D	d	L1	L	d1	L2			
HSKA100-CK1-80	CK1	19	11	5.05	80	—	—	M050Z050-30P-D	L025	2.40
HSKA100-CK1-115L	CK1	19	11	5.05	115	24	50	M050Z050-30P-D	L025	2.50
HSKA100-CK2-80	CK2	24	14	6.62	80	—	—	M050Z060-30P-D	L025	2.45
HSKA100-CK2-105	CK2	24	14	6.62	105	—	—	M050Z060-30P-D	L025	2.50
HSKA100-CK2-135L	CK2	24	14	6.62	135	30	65	M050Z060-30P-D	L025	2.60
HSKA100-CK3-85	CK3	31	18	8	85	—	—	M060Z090-30P-D	L03	2.60
HSKA100-CK3-110	CK3	31	18	8	110	—	—	M060Z090-30P-D	L03	2.70
HSKA100-CK3-140L	CK3	31	18	8	140	35.5	75	M060Z090-30P-D	L03	2.80
HSKA100-CK3-170L	CK3	31	18	8	170	41	85	M060Z090-30P-D	L03	2.90
HSKA100-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	2.80
HSKA100-CK4-160L	CK4	39	22	10	160	47	85	M080Z120-30P-D	L04	3.50
HSKA100-CK4-205L	CK4	39	22	10	205	50.5	110	M080Z120-30P-D	L04	4.00
HSKA100-CK5-90	CK5	50	28	13	90	—	—	M100Z160-30P-D	L05	3.50
HSKA100-CK5-165	CK5	50	28	13	165	—	—	M100Z160-30P-D	L05	4.20
HSKA100-CK5-210L	CK5	50	28	13	210	61	120	M100Z160-30P-D	L05	4.80
HSKA100-CK5-270L	CK5	50	28	13	270	69.5	130	M100Z160-30P-D	L05	5.60
HSKA100-CK6-85	CK6	64	36	16	85	—	—	M120Z200-30P-D	L06	4.20
HSKA100-CK6-155	CK6	64	36	16	155	—	—	M120Z200-30P-D	L06	5.00
HSKA100-CK6-215	CK6	64	36	16	215	—	—	M120Z200-30P-D	L06	5.80
HSKA100-CK6-250	CK6	64	36	16	250	—	—	M120Z200-30P-D	L06	6.20
HSKA100-CK6-300L	CK6	64	36	16	300	80	180	M120Z200-30P-D	L06	7.10
HSKA100-CK7-125	CK7	90	36	19.15	125	—	—	M200Z290-30P-D	L10	5.22
HSKA100-CK7-200	CK7	90	36	19.15	200	—	—	M200Z290-30P-D	L10	6.88
HSKA100-CK7-275	CK7	90	36	19.15	275	—	—	M200Z290-30P-D	L10	8.26

**CK**

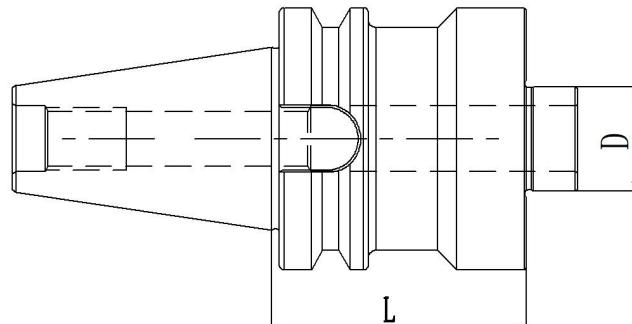
## Equal Diameter Extension Adapter



PRODUCT SERIES	TYPE	DIMENSION				CKCK side screw	WRENCH	<b>Kg</b>
		D	d1	d2	L			
CK1-1-30	CK1	19	11	11	30	M050Z050-30P-D	L025	0.06
CK2-2-30	CK2	24	14	14	30	M050Z060-30P-D	L025	0.09
CK3-3-30	CK3	31	18	18	30	M060Z090-30P-D	L03	0.14
CK4-4-45	CK4	39	22	22	45	M080Z120-30P-D	L04	0.29
CK4-4-60	CK4	39	22	22	60	M080Z120-30P-D	L04	0.47
CK5-5-60	CK5	50	28	28	60	M100Z160-30P-D	L05	0.75
CK5-5-90	CK5	50	28	28	90	M100Z160-30P-D	L05	1.18
CK6-6-60	CK6	64	36	36	60	M120Z200-30P-D	L06	1.46
CK6-6-100	CK6	64	36	36	100	M120Z200-30P-D	L06	2.35
CK7-7-105	CK7	80	36	36	105	M200Z300-30P-D	L10	5.28

**Unequal Diameter Extension Adapter**


PRODUCT SERIES	DIMENSION						CKCK side screw	WRENCH H	 Kg
	D1	D2	d1	d2	L1	L			
CK2-1-36	11	19	14	24	30	36	M050Z050-30P-D	L025	0.08
CK3-1-41	11	19	18	31	30	41	M050Z050-30P-D	L025	0.12
CK3-2-37	14	24	18	31	25	37	M050Z060-30P-D	L025	0.13
CK4-1-58	11	19	22	39	40	58	M050Z050-30P-D	L025	0.24
CK4-2-50	14	24	22	39	36	50	M050Z060-30P-D	L025	0.22
CK4-3-50	18	31	22	39	37	50	M060Z090-30P-D	L03	0.30
CK5-1-60	11	19	28	50	40	60	M050Z050-30P-D	L025	0.38
CK5-2-54	14	24	28	50	35	54	M050Z060-30P-D	L025	0.38
CK5-2-74	14	24	28	50	55	74	M050Z060-30P-D	L025	0.45
CK5-3-47	18	31	28	50	29	47	M060Z090-30P-D	L03	0.46
CK5-3-72	18	31	28	50	54	72	M060Z120-30P-D	L03	0.54
CK5-4-42	22	39	28	50	25	42	M080Z120-30P-D	L04	0.43
CK5-4-67	22	39	28	50	50	67	M080Z050-30P-D	L04	0.62
CK6-1-70	11	19	36	64	40	70	M050Z060-30P-D	L025	0.90
CK6-2-63	14	24	36	64	45	63	M050Z060-30P-D	L025	0.66
CK6-2-93	14	24	36	64	75	93	M050Z090-30P-D	L025	0.71
CK6-3-56	18	31	36	64	39	56	M060Z090-30P-D	L03	0.70
CK6-3-96	18	31	36	64	79	96	M060Z120-30P-D	L03	0.91
CK6-4-51	22	39	36	64	35	51	M080Z120-30P-D	L04	0.76
CK6-4-101	22	39	36	64	85	101	M080Z160-30P-D	L04	1.19
CK6-5-41	28	50	36	64	25	41	M100Z160-30P-D	L05	0.72
CK6-5-91	28	50	36	64	75	91	M100Z050-30P-D	L05	1.46
CK7-6-106	28	50	36	64	75	91	M100Z050-30P-D	L05	3.12

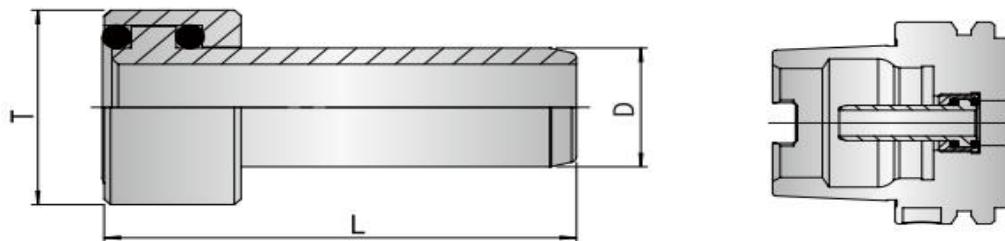
**Bridge boring tool holder**


PRODUCT SERIES	ΦD	L	Fastening screws	handle type	weight kg
BT40-CT-100	40	100	E120U400-D	BT40	2.90
BT40-CT-150	40	150	E120U400-D		4.24
BT50-CT-100	40	100	E120U400-D	BT50	5.50
BT50-CT-150	40	150	E120U400-D		6.38
BT50-CT-200	40	200	E120U400-D		7.61
BT50-CT-250	40	250	E120U400-D		10.44
BT50-CT-300	40	300	E120U400-D		12.37
BT50-CT-350	40	350	E120U400-D		14.33
BT50-CT-400	40	400	E120U400-D		15.0
SK50-CT-100	40	100	E120U400-D	SK50	5.50
SK50-CT-150	40	150	E120U400-D		6.38
SK50-CT-200	40	200	E120U400-D		7.61
HSKA100-CT-100	40	100	E120U400-D	HSKA100	3.96
HSKA100-CT-150	40	150	E120U400-D		4.59
HSKA100-CT-200	40	200	E120U400-D		5.48
HSKA100-CT-250	40	250	E120U400-D		7.52
HSKA100-CT-300	40	300	E120U400-D		10.32

# HSK-CP

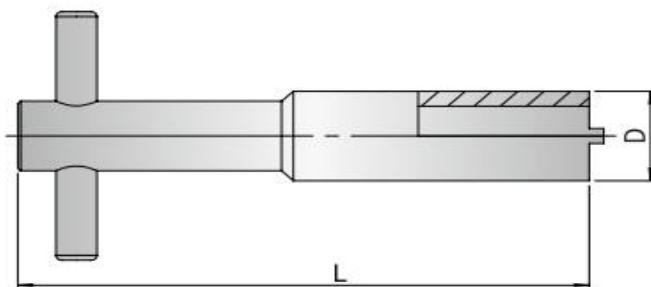


Inner cooling tube



PRODUCT SERIES	L	11	D	T	weight kg
HSK63-CP	36.6	11.5	12	M18x1.0	0.02
HSK100-CP	44	15.5	16	M24x1.0	0.06

Inner cooling tube special WRENCH

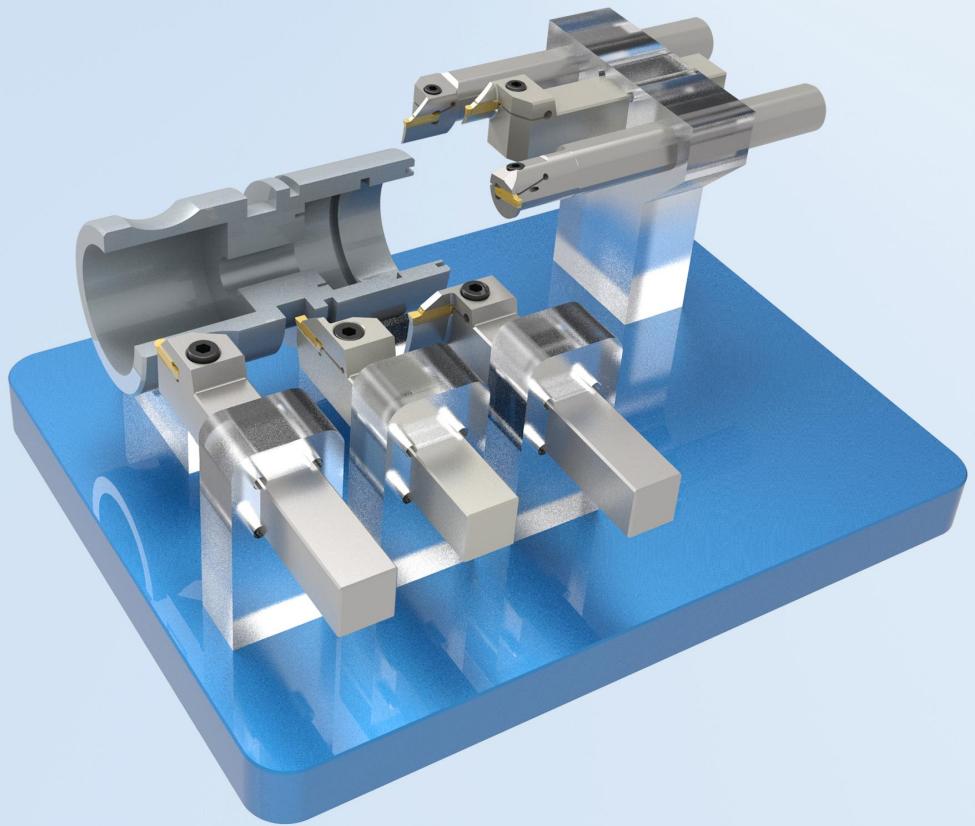


PRODUCT SERIES	L	D	weight kg
HSK63-CPW	100	18	0.14
HSK100-CPW	125	24	0.32

# 超尔槽刀系列

让切槽变得 **更轻松！**

- ① TTER/L 外圆切槽刀杆
- ② TTFR/L-RN 端面切槽刀杆
- ③ TGIFR/L 端面内孔切槽刀杆
- ④ TTIR/L 内孔切槽刀杆

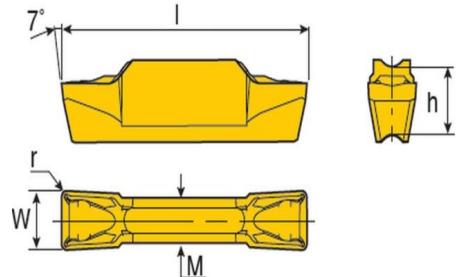


# TDGU/TDGX



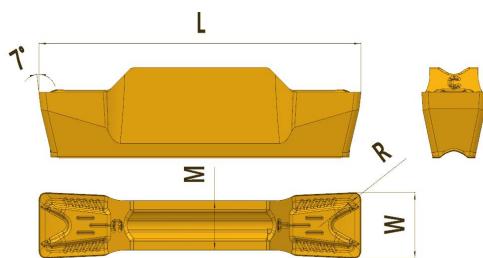
## GROOVING INSERTS

FLAT INSERTS: PRESSED INSERTS FOR EXTERNAL, INTERNAL FACE TURNING, GROOVING AND PARTING



INSERT MODEL	DIMENSION					TURNING MILL		GROOVING	GRADE
	$W \pm 0.05$	M	L	h	r	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	CT5320
TDGU 200	2.0	1.7	20.0	4.7	0.3	0.12–0.18	0.4–1.2	0.03–0.18	●
TDGU 250	2.5	2.2	20.0	4.7	0.3	0.15–0.19	0.4–1.8	0.04–0.11	
TDGU 300	3.0	2.2	20.0	4.7	0.3	0.15–0.19	0.4–1.8	0.04–0.11	
TDGU 400	4.0	3.0	20.0	4.7	0.4	0.18–0.24	0.5–2.4	0.09–0.15	
TDGU 500	5.0	4.0	25.0	5.2	0.4	0.20–0.30	0.5–3.0	0.11–0.20	
TDGU 600	6.0	5.0	25.0	5.2	0.8	0.22–0.36	0.1–0.4	0.13–0.23	

FLAT INSERTS: PRESSED INSERTS FOR EXTERNAL, INTERNAL FACE TURNING, GROOVING AND PARTING



INSERT MODEL	DIMENSION				TURNING MILL		GROOVING	GRADE	
	$W \pm 0.05$	M	L	R	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	CT5320	CT7320
TDGX 3E-0.4	3.0	2.2	20.0	0.4	0.17–0.20	0.5–1.8	0.06–0.18	●	●
TDGX 4E-0.4	4.0	3.0	20.0	0.4	0.20–0.27	0.5–2.4	0.07–0.20		
TDGX 4E-0.8	4.0	3.0	20.0	0.8	0.22–0.27	1.0–2.4	0.07–0.20		
TDGX 5E-0.4	5.0	4.0	25.0	0.4	0.22–0.32	0.5–3.0	0.08–0.23		
TDGX 5E-0.8	5.0	4.0	25.0	0.8	0.25–0.37	1.0–3.0	0.08–0.23		
TDGX 6E-0.4	6.0	5.0	25.0	0.4	0.25–0.38	0.5–3.6	0.12–0.35		
TDGX 6E-0.8	6.0	5.0	25.0	0.8	0.26–0.42	1.0–3.6	0.12–0.35		

# TDGC/TDGU-R



## GROOVING INSERTS

FLAT INSERTS: FOR GROOVING、PARTING & TURNING MILL PROCESS

INSERT MODEL	DIMENSION				TURNING MILL		GROOVING	GRADE	
	W ±0.05	M	L	R	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	CT5320	CT7320
TDGC 2E-02	2.0	1.7	20.0	0.2	0.17-0.20	0.5-1.8	0.05-0.18		
TDGC 3E-02	3.0	2.4	20.0	0.2	0.20-0.27	0.5-2.4	0.07-0.25		
TDGC 4E-03	4.0	3.0	20.0	0.3	0.22-0.27	1.0-2.4	0.08-0.30	●	●
TDGC 5E-03	5.0	4.0	25.0	0.3	0.20-0.27	0.5-2.4	0.09-0.35		
TDGC 6E-03	6.0	5.0	25.0	0.3	0.22-0.27	1.0-2.4	0.12-0.40		

ROUND INSERTS: FOR EXTERNAL, INNER HOLETURNING MILL、GROOVING AND PROFILING

INSERT MODEL	DIMENSION					TURNING MILL		GROOVING	GRADE
	W ±0.05	M	l	h	r	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	CT5320
TDGU 200-1.0R	2.0	1.7	20.0	4.7	1.0	0.10-0.25	0.0-1.0	0.05-0.15	
TDGU 300-1.5R	3.0	2.2	20.0	4.7	1.5	0.15-0.28	0.0-1.5	0.08-0.18	
TDGU 400-2.0R	4.0	3.0	20.0	4.7	2.0	0.18-0.35	0.0-2.0	0.10-0.20	●
TDGU 500-2.5R	5.0	4.0	25.0	5.2	2.5	0.20-0.42	0.0-2.5	0.12-0.23	
TDGU 600-3.0R	6.0	5.0	25.0	5.2	3.0	0.25-0.54	0.0-3.0	0.15-0.27	
TDGU 800-4.0R	8.0	6.0	30.0	6.4	4.0	0.30-0.67	0.0-4.0	0.18-0.35	

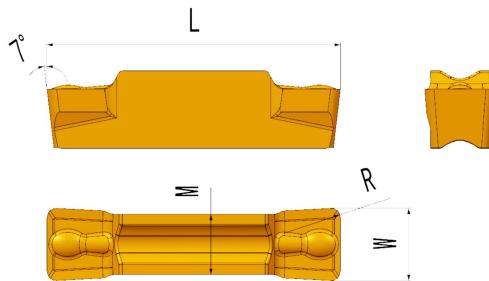
◎Grooved inserts with insert width of 8MM have no standard shank, but can be customized

# TDEF



## GROOVING INSERTS

FLAT INSERT: FOR EXTERNAL, INNER HOLE, FACeturning MILL、GROOVING& PARTING



INSERT MODEL	DIMENSION				TURNING MILL		GROOVING		GRADE	
	W±0.05	M	l	r	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)		CT5320	CT101
TDEF 3.00E-0.40	3.0	2.2	20.0	0.4	0.15-0.22	0.5-2.0	0.07-0.15	● ●	● ●	
TDEF 4.00E-0.40	4.0	3.0	20.0	0.4	0.18-0.30	0.5-2.4	0.09-0.18			
TDEF 4.00E-0.80	4.0	3.0	20.0	0.8	0.18-0.30	1.0-2.4	0.09-0.18			
TDEF 5.00E-0.40	5.0	4.0	25.0	0.4	0.20-0.35	0.5-2.3	0.11-0.20			
TDEF 5.00E-0.80	5.0	4.0	25.0	0.8	0.23-0.35	1.0-3.0	0.11-0.20			
TDEF 6.00E-0.80	6.0	5.0	25.0	0.8	0.24-0.42	1.0-3.6	0.13-0.30			
TDEF 6.00E-1.20	6.0	5.0	25.0	1.2	0.24-0.42	1.3-3.6	0.13-0.30			
TDEF 8.00E-0.80	8.0	6.0	30.0	0.8	0.30-0.56	1.0-4.8	0.15-0.40			
TDEF 8.00E-1.20	8.0	6.0	30.0	1.2	0.30-0.56	1.3-4.8	0.15-0.40			

◎Grooved inserts with insert width of 8MM have no standard shank, but can be customized

- Grooving Knife Selection Considerations

- FACE GROOVING INSERT MIN DIA(mm)

FACE MACHINING	INSERT (FLAT)	WIDTH	MIN DIA	INS. (FLA.)	WIDTH	MIN DIA	INS. F LAT	WIDTH	MIN. DIA	INS. (ROUN)	INS. WIDTH	MIN. DIA
		3	18		3	54		3	44		3	41
		4	18		4	34		4	42		4	36
		5	20		/	/		5	50		5	54
		6	18		/	/		6	48		6	48

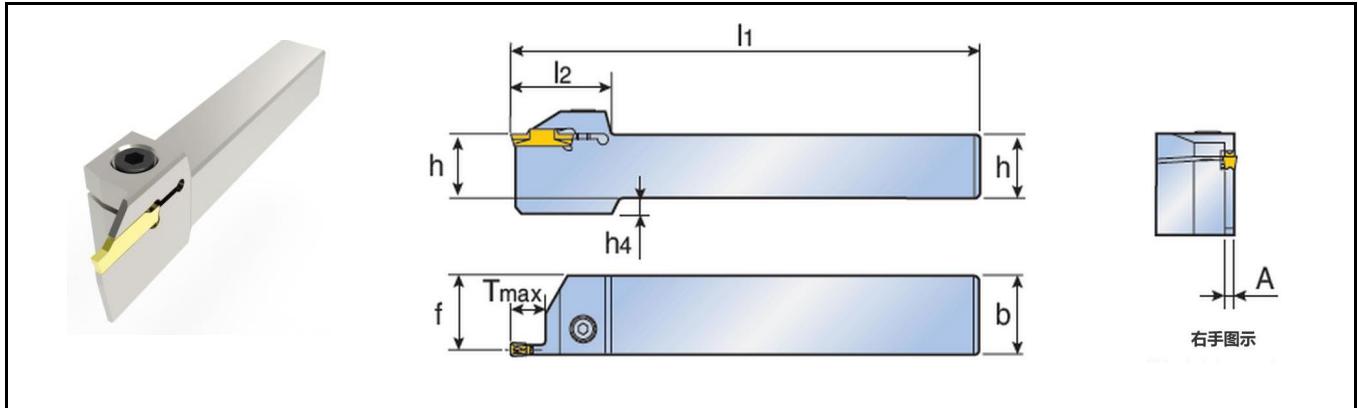
- INNER HOLE GROOVING INSERT MIN DIA

INNER HOLE	INS. FLAT	WIDTH	MIN DIA	INS. (FLA.)	WIDTH	MIN DIA	INS. F LAT	WIDTH	MIN. DIA	INS. (ROUN)	WIDTH	MIN. DIA
		2	24		2	40		/	/		2	41
		2.5	24		/	/		/	/		/	/
		3	24		3	50		3	40		3	38
		4	21		4	50		4	40		4	38
		5	30		5	60		5	50		5	43
		6	31		6	60		6	50		6	46
		/	/		/	/		8	62		8	56

# TTER/L



Grooving tool holder series: EXTERNAL TURNING MILL & GROOVING



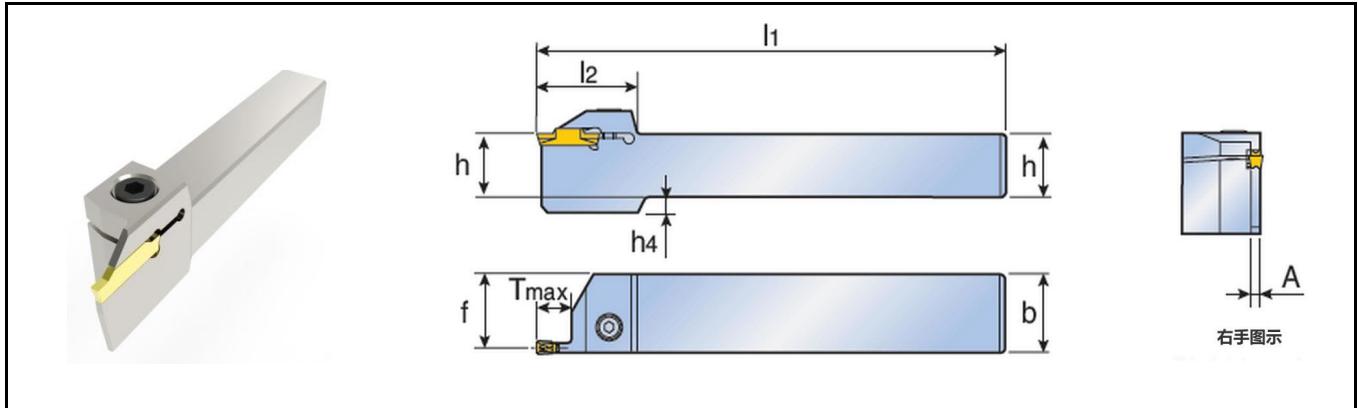
PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	l1	f	12	A	h4	Tmax	
TTER/L 1616-2T08	2	16	16	110	15.1	33	1.8	4	8.0	TDGU TDGX TDGC TDEF
TTER/L 2020-2T08	2	20	20	125	19.1	33	1.8	—	8.0	
TTER/L 2525-2T08	2	25	25	150	24.1	33	1.8	—	8.0	
TTER/L 1616-2	2	16	16	110	15.1	32	1.8	4	12.0	
TTER/L 2020-2	2	20	20	125	19.1	32	1.8	—	12.0	
TTER/L 2525-2	2	25	25	150	24.1	32	1.8	—	12.0	
TTER/L 1616-2T17	2	16	16	110	15.1	37	1.8	4	17.0	
TTER/L 2020-2T17	2	20	20	125	19.1	37	1.8	—	17.0	
TTER/L 2525-2T17	2	25	25	150	24.1	37	1.8	—	17.0	
TTER/L 1616-2.5	2.5	16	16	110	15.1	32	2.0	4	12.0	
TTER/L 2020-2.5	2.5	20	20	125	19.1	32	2.0	—	12.0	
TTER/L 2525-2.5	2.5	25	25	150	24.1	32	2.0	—	12.0	
TTER/L 1616-3T09	3	16	16	110	14.8	32	2.4	4	9.0	
TTER/L 2020-3T09	3	20	20	125	18.8	32	2.4	—	9.0	
TTER/L 2525-3T09	3	25	25	150	23.8	32	2.4	—	9.0	
TTER/L 1616-3	3	16	16	110	14.8	32	2.4	4	12.0	
TTER/L 2020-3	3	20	20	125	18.8	32	2.4	—	12.0	
TTER/L 2525-3	3	25	25	150	23.8	32	2.4	—	12.0	
TTER/L 1616-3T20	3	16	16	110	14.8	38.5	2.4	—	20.0	
TTER/L 2020-3T20	3	20	20	125	18.8	38.5	2.4	—	20.0	
TTER/L 2525-3T20	3	25	25	150	23.8	38.5	2.4	—	20.0	
TTER/L 2525-3T25	3	25	25	150	23.8	44.5	2.4	—	25.0	
TTER/L 1616-4T10	4	16	16	110	14.5	32	3.0	4	10.0	
TTER/L 2020-4T10	4	20	20	125	18.5	32	3.0	—	10.0	
TTER/L 2525-4T10	4	25	25	150	23.5	32	3.0	—	10.0	

◎Inserts are ordered separately, this shank has no internal coolant.

# TTER/L



Grooving tool holder series: EXTERNAL TURNING MILL & GROOVING



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	11	f	12	A	h4	$T_{max}$	
TTER/L 1616-4	4	16	16	110	14.5	33	3.0	4	15.0	TDGU TDGX TDGC TDEF
TTER/L 2020-4	4	20	20	125	18.5	33	3.0	—	15.0	
TTER/L 2525-4	4	25	25	150	23.5	33	3.0	—	15.0	
TTER/L 1616-4T25	4	16	16	110	14.5	45	3.0	—	25.0	
TTER/L 2020-4T25	4	20	20	125	18.5	45	3.0	—	25.0	
TTER/L 2525-4T25	4	25	25	150	23.5	45	3.0	—	25.0	
TTER/L 2020-5T12	5	20	20	125	18.1	37	4.0	—	12.0	
TTER/L 2525-5T12	5	25	25	150	23.1	37	4.0	—	12.0	
TTER/L 2020-5	5	20	20	125	18.1	37	4.0	—	20.0	
TTER/L 2525-5	5	25	25	150	23.1	37	4.0	—	20.0	
TTER/L 2525-5T25	5	25	25	150	23.1	37	4.0	—	25.0	
TTER/L 2525-5T32	5	25	25	150	23.0	56	4.0	—	32.0	
TTER/L 2020-6T12	6	20	20	125	17.6	37	5.0	—	12.0	
TTER/L 2525-6T12	6	25	25	150	22.6	37	5.0	7	12.0	
TTER/L 2020-6	6	20	20	125	17.6	41	5.0	—	20.0	
TTER/L 2525-6	6	25	25	150	22.6	41	5.0	7	20.0	
TTER/L 2525-6T32	6	25	25	150	22.5	56	5.0	7	32.0	

◎ Inserts are ordered separately, this shank has no

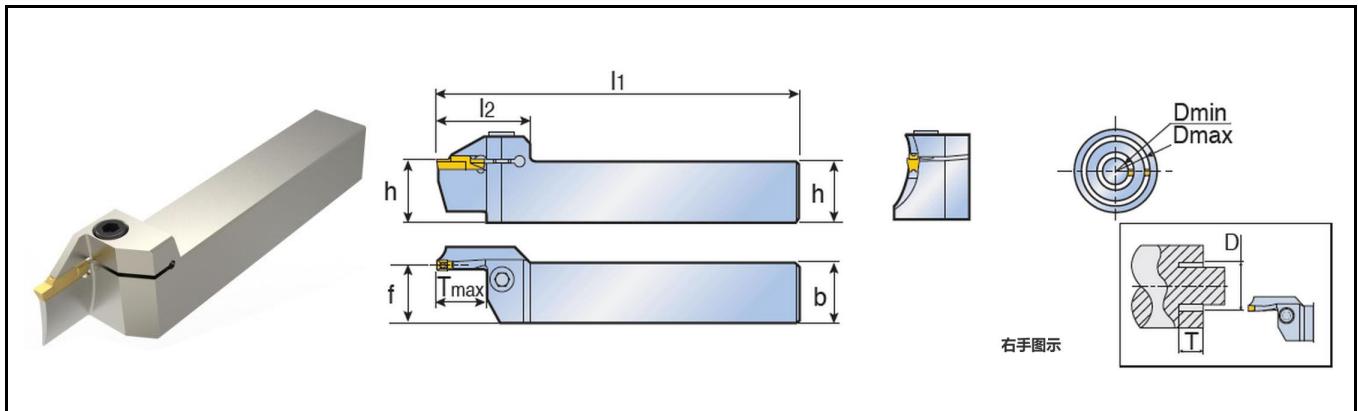
## ACCESSORY

PRODUCT MODEL	SCREW	WRENCH	PRODUCT MODEL	SCREW	WRENCH
TTER/L 1616-2/2.5/3	CLA0501608	CBL40	TTER/L 2020-4/5	CLA0602010	CBL50
TTER/L 2020-2/2.5/3	CLA0502008	CBL40	TTER/L 2525-4/5	CLA08020125	CBL60
TTER/L 2525-2/2.5/3	CLA0601610	CBL50	TTER/L 2020-6	CLA08020125	CBL60
TTER/L 1616-4/5	CLA0601610	CBL50	TTER/L 2525-6	CLA08020125	CBL60

# TTFR/L-RN



FACE DEEP GROOVING AND TURNING MILL



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	l1	f	l2	Tmax	Dmin	Dmax	
TTFR/L 20-21-30-3T10RN	3	20	20	125	19	31	10	21	30	TDGU TDGX TDGC TDEF
TTFR/L 20-24-35-3T10RN	3	20	20	125	19	31	10	24	35	
TTFR/L 20-29-40-3T10RN	3	20	20	125	19	31	10	29	40	
TTFR/L 20-34-50-3T10RN	3	20	20	125	19	31	10	34	50	
TTFR/L 20-44-70-3T15RN	3	20	20	125	19	35	15	44	70	
TTFR/L 20-64-100-3T15RN	3	20	20	125	19	35	15	64	100	
TTFR/L 20-19-30-4T10RN	4	20	20	125	18.6	31	10	19	30	
TTFR/L 20-22-36-4T10RN	4	20	20	125	18.6	31	10	22	36	
TTFR/L 20-28-42-4T16RN	4	20	20	125	18.6	36	16	28	42	
TTFR/L 20-34-50-4T16RN	4	20	20	125	18.6	36	16	34	50	
TTFR/L 20-42-70-4T16RN	4	20	20	125	18.6	36	16	42	70	
TTFR/L 20-62-120-4T16RN	4	20	20	125	18.6	36	16	62	120	
TTFR/L 20-112-200-4T16RN	4	20	20	125	18.6	36	16	112	200	
TTFR/L 25-30-3RN	3	25	25	150	24.0	38	10.0	24	35	
TTFR/L 25-35-3RN	3	25	25	150	24.0	38	10.0	29	40	
TTFR/L 25-40-3RN	3	25	25	150	24.0	38	10.0	34	50	
TTFR/L 25-50-3RN	3	25	25	150	24.0	38	15.0	44	70	
TTFR/L 25-70-3RN	3	25	25	150	24.0	38	15.0	64	100	
TTFR/L 25-30-4RN	4	25	25	150	23.6	39	10.0	22	36	
TTFR/L 25-36-4RN	4	25	25	150	23.6	39	20.0	28	42	
TTFR/L 25-42-4RN	4	25	25	150	23.6	39	20.0	34	50	
TTFR/L 25-50-4RN	4	25	25	150	23.6	39	20.0	42	70	
TTFR/L 25-70-4RN	4	25	25	150	23.6	39	20.0	62	120	

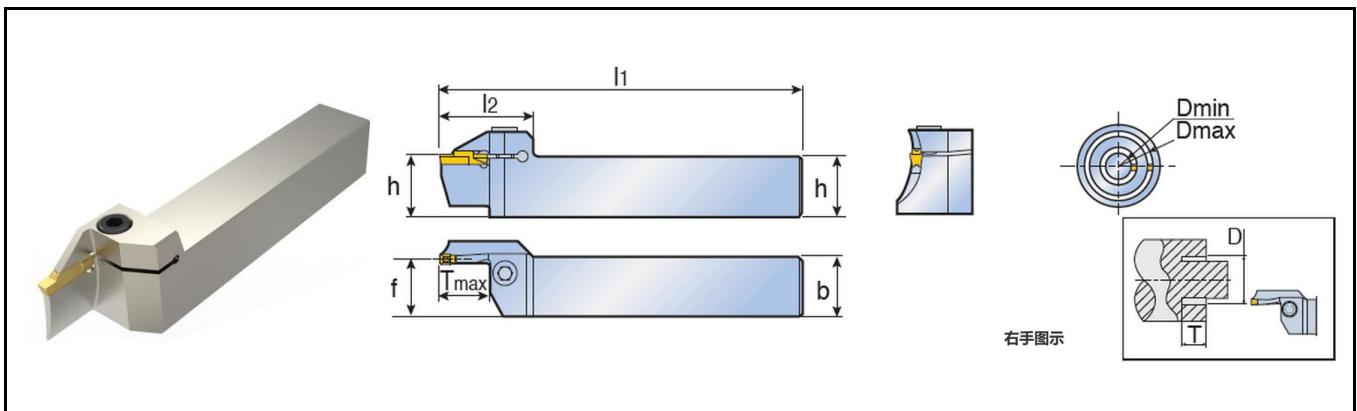
◎ INSERTS to be ordered

◎ This SHANK has no internal coolant

# TTFR/L-RN



FACE DEEP GROOVING AND TURNING MILL



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	l1	f	l2	Tmax	Dmin	Dmax	
TTFR/L 25-120-4RN	4	25	25	150	23.6	39	20.0	112	200	TDGU TDGX TDGC TDEF
TTFR/L 25-200-4RN	4	25	25	150	23.6	39	20.0	200	$\infty$	
TTFR/L 25-60-5RN	5	25	25	150	23.1	49	25.0	50	80	
TTFR/L 25-60-5T15RN	5	25	25	150	23.1	41	15.0	50	80	
TTFR/L 25-80-5RN	5	25	25	150	23.1	49	25.0	70	110	
TTFR/L 25-80-5T15RN	5	25	25	150	23.1	41	15.0	70	110	
TTFR/L 25-110-5RN	5	25	25	150	23.1	49	25.0	100	150	
TTFR/L 25-150-5RN	5	25	25	150	23.1	49	25.0	140	200	
TTFR/L 25-200-5RN	5	25	25	150	23.1	49	25.0	200	$\infty$	
TTFR/L 25-60-6RN	6	25	25	150	22.6	49	25.0	48	70	
TTFR/L 25-70-6RN	6	25	25	150	22.6	49	25.0	58	100	
TTFR/L 25-100-6RN	6	25	25	150	22.6	49	25.0	88	180	
TTFR/L 25-180-6RN	6	25	25	150	22.6	49	25.0	168	400	
TTFR/L 25-400-6RN	6	25	25	150	22.6	49	25.0	400	$\infty$	

◎ INSERTS to be ordered

◎ This SHANK has no internal coolant

## ACCESSORY

PRODUCT MODEL	SCREW	WRENCH
TTFR/L 20...RN	CLA0602010	CBL50
TTFR/L 25...3/4RN	CLA0602510	CBL50
TTFR/L 25...5/6RN	CLA08020125	CBL60

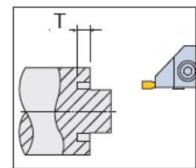
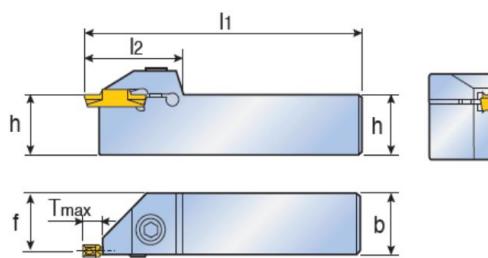
face machining	Note on insert selection	
		First, confirm the minimum machining diameter of end face GROOVING on page E04.

# TGFR/L



EXTERNAL FACE GROOVING & TURNING MILL

**NEW**



PRODUCT MODEL	HOLDER SIZE	DIMENSION						COMPATIBLE INSERT
		h	b	l1	f	L2	Tmax	
TGFR/L 1616-4	2/3/4	16	16	110	14.6	33	4.8	TDGU TDGX TDGC TDEF
TGFR/L 2020-4	2/3/4	20	20	125	18.6	33	4.8	
TGFR/L 2525-4	2/3/4	25	25	150	23.6	33	4.8	
TGFR/L 2020-6	5/6	20	20	125	17.6	37	4.8	
TGFR/L 2525-6	5/6	25	25	150	22.6	37	4.8	

◎ INSERTS to be ordered

◎ This SHANK has no internal coolant

## ACCESSORY

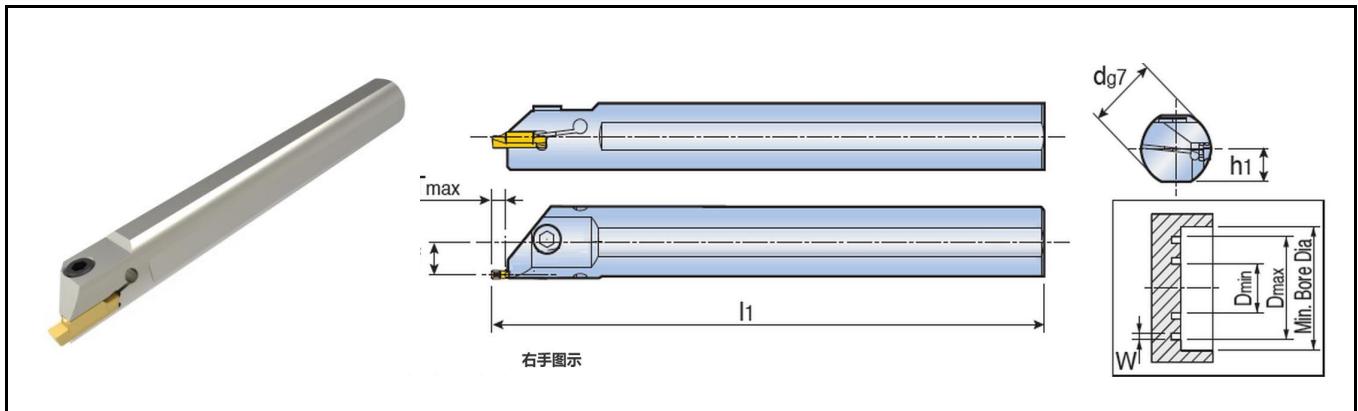
PRODUCT MODEL	SCREW	WRENCH
TGFR/L 1616	CLA0601610	CBL50
TGFR/L 2020	CLA0602010	CBL50
TGFR/L 2525	CLA0602510	CBL50

face machining	Note on insert selection
	First, confirm the minimum machining diameter of end face GROOVING on page E04.

# TGIFR/L



End face inner hole shallow groove and end face TURNING MILL SHANK



PRODUCT MODEL	HOLDER SIZE	DIMENSION					COMPATIBLE INSERT
		d	l1	f	h1	Tmax	
TGIFR/L 25-4C-T5.5	3, 4	25	200	11.3	11.5	5.5	TDGU TDGX TDGC TDEF
TGIFR/L 32-4C-T5.5	3, 4	32	250	14.8	15	5.5	
TGIFR/L 25-6C-T5.5	5, 6	25	200	10.3	11.5	5.5	
TGIFR/L 32-6C-T5.5	5, 6	32	250	13.8	15	5.5	

◎ INSERTS to be ordered

◎ This SHANK has no internal coolant

W	Min bore diameter		Dmin		Dmax
	d=25	d=32	TDGU	TDGU ROUND INSERT	
3	26.3	33.3	20	44	$\infty$
4	26.8	33.8	18	42	
5	26.3	33.3	20		
6	26.8	33.8	18		

## ACCESSORY

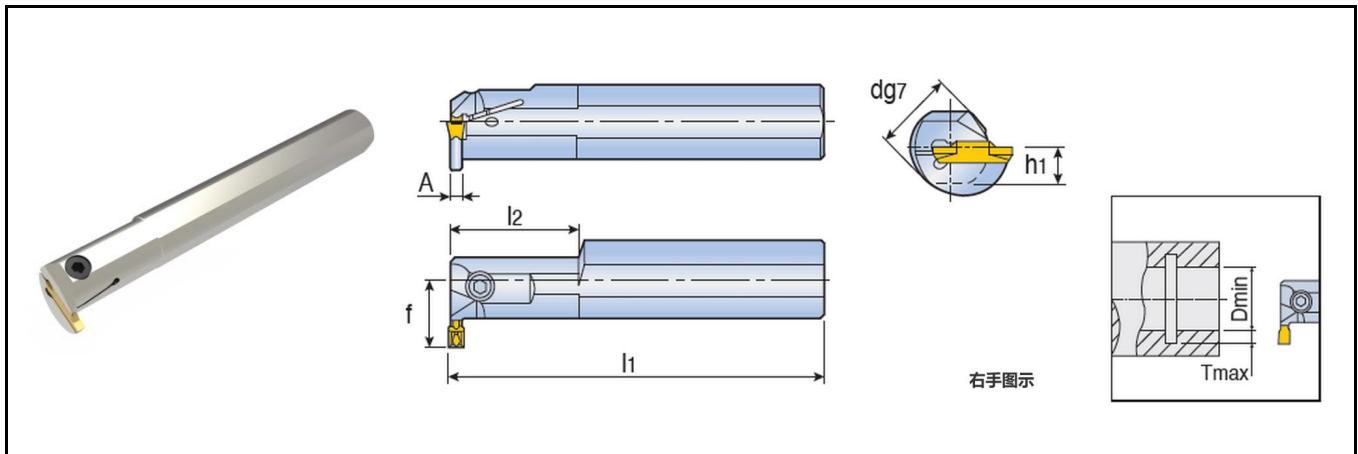
PRODUCT MODEL	SCREW	WRENCH
TGIFR/L 25	CLA0602010	CBL50
TGIFR/L 32	CLA0602510	CBL50

face machining	Note on insert selection	
		First, confirm the minimum machining diameter of end face GROOVING on page E04.

# TTIR/L



INNER HOLE TURNING MILL、GROOVING & PROFILING



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		d	11	12	f	h1	A	T <sub>max</sub>	D <sub>min</sub>	
TTIR/L 16-2	2	16	125	—	16.5	7.5	1.8	8.5	25	TDGU TDGX TDGC TDEF
TTIR/L 20-2	2	20	160	40	15.8	9.0	1.6	6.0	25	
TTIR/L 25-2	2	25	200	40	17.5	11.5	1.6	5.0	25	
TTIR/L 20-2.5	2.5	20	160	40	15.8	9.0	2.0	6.0	25	
TTIR/L 25-2.5	2.5	25	200	40	17.5	11.5	2.0	5.0	25	
TTIR/L 32-2.5	2.5	32	250	60	19.8	14.0	2.0	4.7	31	
TTIR/L 20-3	3	20	160	40	15.8	9.0	2.1	6.0	25	
TTIR/L 25-3	3	25	200	40	17.5	11.5	2.1	5.1	25	
TTIR/L 32-3	3	32	250	60	19.8	14.0	2.1	4.7	31	
TTIR/L 20-4	4	20	160	40	15.8	9.0	2.9	6.0	25	
TTIR/L 25-4	4	25	200	40	17.5	11.5	2.9	5.2	25	
TTIR/L 32-4	4	32	250	60	20.8	14.0	2.9	4.7	31	

◎ INSERTS to be ordered

◎ This SHANK has no internal coolant

## ACCESSORY

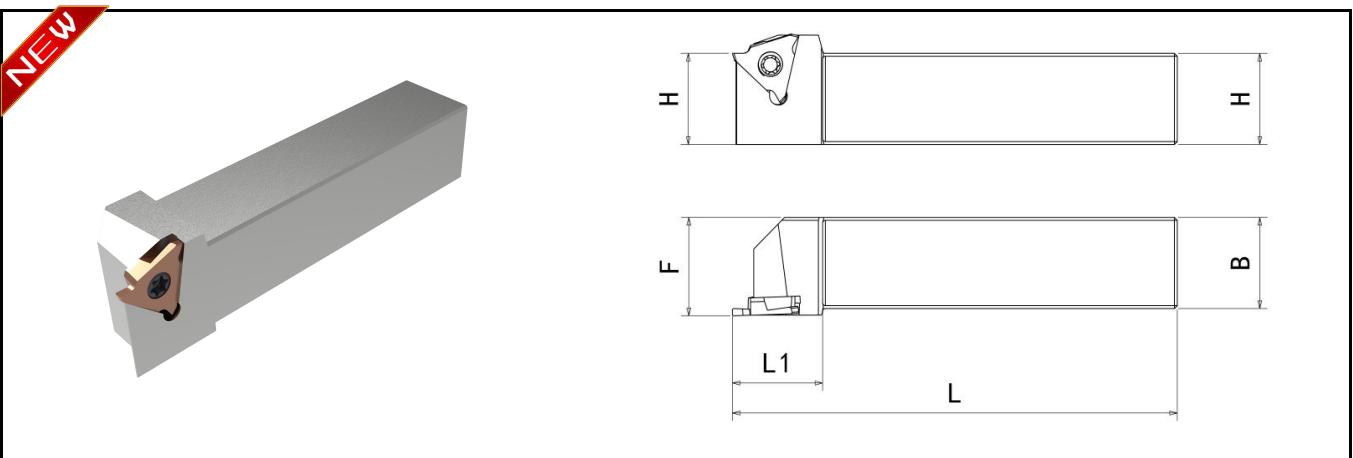
PRODUCT MODEL	SCREW	WRENCH
TTIR/L 16/20-2	CLA0501208	CBL40
TTIR/L 20-2.5/3/4	CLA0501608	CBL40
TTIR/L 25-2/2.5/3/4	CLA0502008	CBL40
TTIR/L 32-2.5/3/4	CLA0502508	CBL40

face machining	Note on insert selection
	First, confirm the minimum machining diameter of end face GROOVING on page E04.

# CQCR/L



External Shallow Grooving SHANK



◎RIGHT HAND

PRODUCT MODEL	DIMENSION						COMPATIBLE INSERT
	H	B	L	F	L1	CUT WIDTH	
CQCR/L 1616K16-15	16	16	125	21	25.5	1.1-1.8	3CGF 16R/L 110-180
CQCR/L 2020K16-15	20	20	125	25		1.8-3.0	3CGF 16R/L 180-300
CQCR/L 2525M16-15	25	25	150	30		1.0-2.3	3CGF 22R/L 100-230
CQCR/L 1616K16-25	16	16	125	21		2.3-3.3	3CGF 22R/L 230-330
CQCR/L 2020K16-25	20	20	125	25		3.3-4.8	3CGF 22R/L 330-480
CQCR/L 2525M16-25	25	25	150	30			
CQCR/L 2020K22-15	20	20	125	25			
CQCR/L 2525M22-15	25	25	150	30			
CQCR/L 2020K22-25	20	20	125	25			
CQCR/L 2525M22-25	25	25	150	30			

◎ INSERTS to be ordered

◎RIGHT SHANK FOR RIGHT INSERT, LEFT SHANK FOR LEFT INSERTS

◎This SHANK has no internal coolant

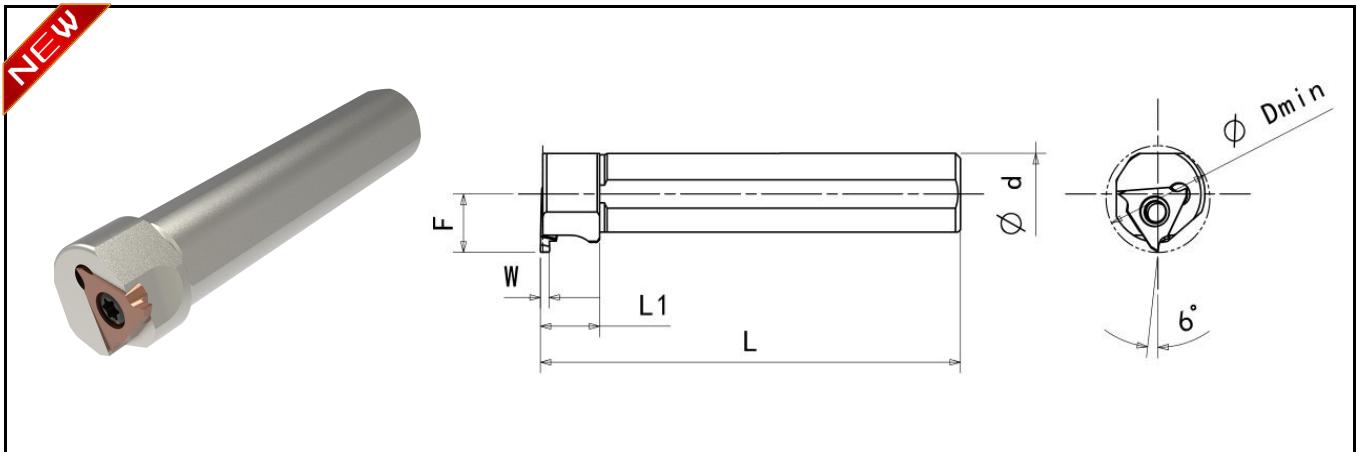
## ACCESSORY

PRODUCT MODEL	SCREW	WRENCH
CQCR/L**16	CSG4011-P	CTS15W-P
CQCR/L**22	CSG5012-P	CTS20W-P

# SQCR/L



Inner hole shallow groove turning tool holder



◎RIGHT HAND SHANK

PRODUCT MODEL	DIMENSION						COMPATIBLE INSERT
	$\phi D_{min}$	$\phi d$	L	F	L1	切宽	
S20M-QC1615R/L 25	26	20	150	12.5	15	1.1-1.8	3CGF 16R/L 110-180
S20M-QC1625R/L 25	26	20	150	12.5	15	1.8-3.0	3CGF 16R/L 180-300
S25M-QC2215R/L 35	35	25	150	18.2	15	1.0-2.3	3CGF 22R/L 100-230
S25M-QC2225R/L 35	35	25	150	18.2	20	2.3-3.3	3CGF 22R/L 230-330
S25M-QC2235R/L 35	35	25	150	18.2	20	3.3-4.8	3CGF 22R/L 330-480

◎INSERTS to be ordered

◎RIGHT SHANK FOR RIGHT INSERT, LEFT SHANK FOR LEFT INSERTS

◎This SHANK has no internal coolant

## ACCESSORY

PRODUCT MODEL	SCREW	WRENCH
S**QCR/L**16	CSG4011-P	CTS15W-P
S**QCR/L**22	CSG5012-P	CTS20W-P

# 3CGF\*\*16L/22L



## INSERT

INSERT	SHAPE					INTRODUCTION
PRODUCT MODEL	DIMENSION					GRADE
	S	L	ød	S1	r	CT5520
3CGF 16L110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16L125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16L145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16L150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16L175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16L185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16L200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16L250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16L300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22L125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22L145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22L150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22L175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22L185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22L200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22L230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22L250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22L265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22L280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22L300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22L320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22L330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22L350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22L400-R04	4.0	5.0	12.7	4.76	0.4	●
3CGF 22L430-R04	4.3	5.0	12.7	4.76	0.4	●
3CGF 22L450-R04	4.5	5.0	12.7	4.76	0.4	●
3CGF 22L480-R04	4.8	5.0	12.7	5.06	0.4	●

# MILLING INSERT



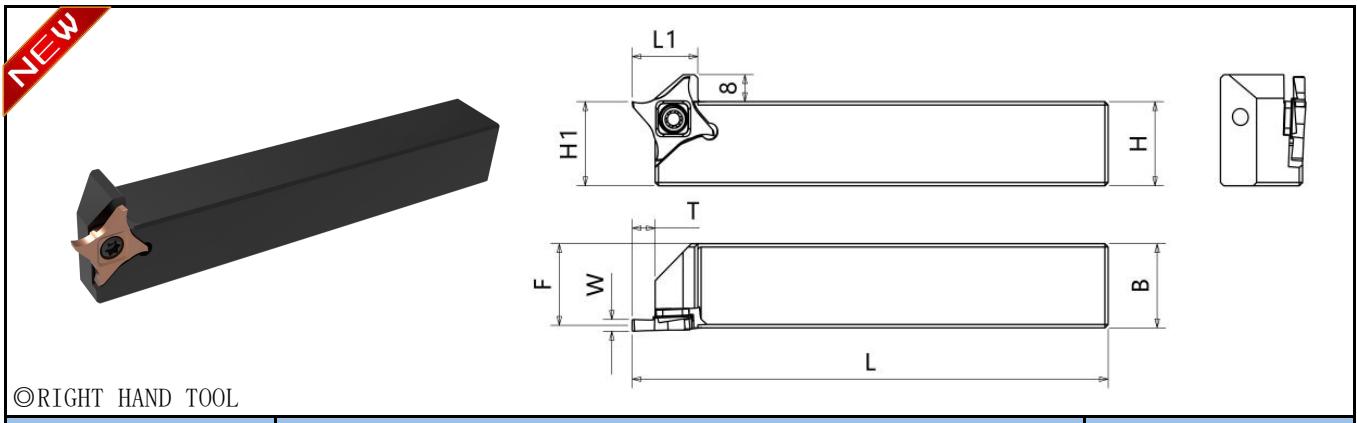
3CGF\*\*16R/22R

INSERT	SHAPE					INTRODUCTION
INSERT MODEL	DIMENSION					GRADE
	S	L	ød	S1	r	CT5520
3CGF 16R110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16R125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16R145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16R150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16R175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16R185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16R200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16R250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16R300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22R125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22R145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22R150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22R175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22R185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22R200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22R230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22R250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22R265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22R280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22R300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22R320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22R330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22R350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22R400-R04	4.0	5.0	12.7	4.76	0.4	●
3CGF 22R430-R04	4.3	5.0	12.7	4.76	0.4	●
3CGF 22R450-R04	4.5	5.0	12.7	4.76	0.4	●
3CGF 22R480-R04	4.8	5.0	12.7	5.06	0.4	●

## 4CH/4CHP



External Shallow Grooving Toolholder

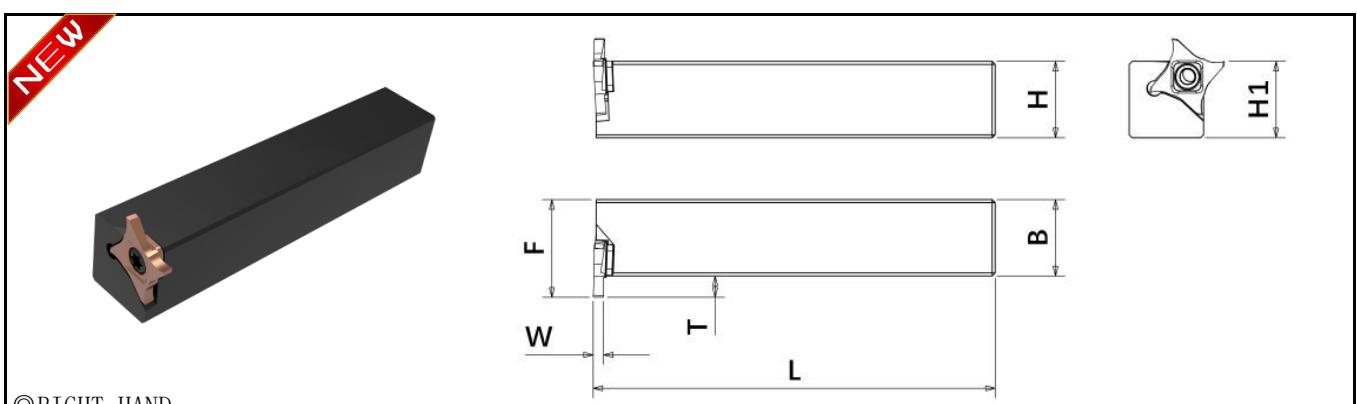


◎RIGHT HAND TOOL

PRODUCT MODEL	DIMENSION							COMPATIBLE INSERT
	H	B	L	F	L1	T	CUT WIDTH	
4CHR/L 10-27	10	10	120	21	—	4.5–6.5	2.0–3.5	4CGF 27
4CHR/L 12-27	12	12	120	25	—			
4CHR/L 16-27	16	16	120	30	—			
4CHR/L 20-27	20	20	120	25	—			
4CHR/L 25-27	25	25	135	30	—			

◎Inserts are ordered separately, this shank has no internal coolant.

◎RIGHT SHANK FOR RIGHT INSERT, LEFT SHANK FOR LEFT INSERTS



◎RIGHT HAND

PRODUCT MODEL	DIMENSION							COMPATIBLE INSERT
	H	B	L	F	—	T	切宽W	
4CHPR/L 16-27	16	16	120	24	4.5–6.5	2.0–3.5	4CGF 27	4CGF 27
4CHPR/L 20-27	20	20	120	28				
4CHPR/L 25-27	25	25	135	33				

◎Inserts are ordered separately, this shank has no internal coolant.

◎RIGHT SHANK FOR LEFT INSERTS, LEFT SHANK (L) FOR RIGHT INSERTS (R).

## GROOVING INSERT

INSERT	SHAPE				INTRODUCTION	
INSERT MODEL	DIMENSION				LEFT/RIGHT	GRADE
	$\phi D$	W	T	R		
4CGF 27L200-R02	27.0	2.0	4.5	0.2	L	●
4CGF 27L230-R02	27.0	2.3	5.5	0.2		●
4CGF 27L250-R03	27.0	2.5	5.5	0.3		●
4CGF 27L270-R03	27.0	2.7	5.5	0.3		●
4CGF 27L300-R03	27.0	3.0	6.5	0.3		●
4CGF 27L320-R03	27.0	3.2	6.5	0.3		●
4CGF 27L350-R03	27.0	3.5	6.5	0.3		●
4CGF 27R200-R02	27.0	2.0	4.5	0.2		●
4CGF 27R230-R02	27.0	2.3	5.5	0.2		●
4CGF 27R250-R03	27.0	2.5	5.5	0.3		●
4CGF 27R270-R03	27.0	2.7	5.5	0.3	R	●
4CGF 27R300-R03	27.0	3.0	6.5	0.3		●
4CGF 27R320-R03	27.0	3.2	6.5	0.3		●
4CGF 27R350-R03	27.0	3.5	6.5	0.3		●

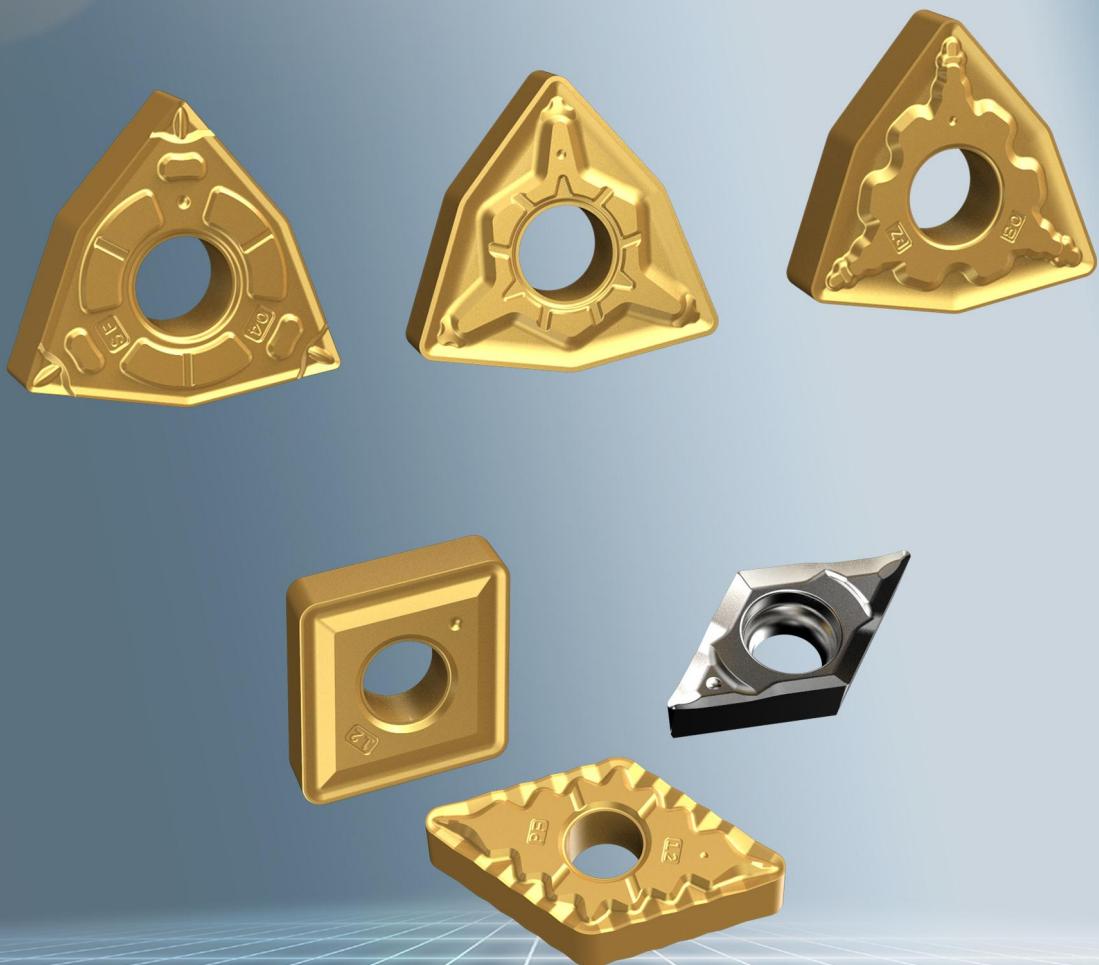
## ACCESSORY

PRODUCT MODEL	SCREW	WRENCH
		
4CH/4CHP-27	CSC5012	CTS20W



# 车刀片 系列

- 丰富的排屑槽类型设计, 兼备了刀尖的切削效果和刃口强度;
- 多种类的涂层效果, 使刀片在加工钢/不锈钢/铸铁以及难加工材料, 都有很好的应用



**Chai Tools**

# CHAI GRADE



## CHART

PROCESSED MATERIAL	P: STEEL	M : S.S	K: CAST IRON
	N: Non-ferrous metal	S: heat resi. alloy	H: hard material
GRADE	ISO	DIRECTIONS	
CT5215	P10 — P20	◇CVD strong textured coating ◇Strong textured coating sizing technology, inhibits the crack development of the coating, has impact toughness and Perfect combination of wear resistance, suitable for high-speed cutting of steel parts from finishing to semi-finishing; ◇Suitable for continuous and slightly intermittent processing of steel	
CT5225	P20 — P30	◇CVD strong textured coating ◇Strong textured coating sizing technology, inhibits the crack development of the coating, has excellent toughness and abrasion resistance; ◇Suitable for general processing of steel parts.	
CT5415	P10 — P20	◇CVD coating ◇ After special surface post-treatment process, excellent fusion resistance, impact resistance and wear resistance are obtained; ◇Suitable for continuous and slightly intermittent high-speed machining of steel materials.	
CT5425	P20 — P30	◇CVD coating ◇ After special surface post-treatment process, excellent fusion resistance, impact resistance and wear resistance are obtained; ◇Suitable for general processing of steel materials.	
CT7415	K10 — K20	◇CVD coating ◇ Suitable for continuous high-speed machining of cast iron materials.	
CT7425	K20 — K30	◇CVD coating ◇ Suitable for general machining of cast iron materials under continuous and intermittent conditions.	
CT8215	M10 — M30	◇PVD coating ◇Has good impact resistance and excellent edge safety; ◇For continuous and slightly interrupted processing of stainless steel materials.	
CT8225	M15 — M40	◇PVD coating ◇Has good edge strength and impact resistance and excellent wear resistance; ◇It is preferably used for semi-finishing and finishing of stainless steel materials under stable working conditions.	
CT101	K05 — K15 N05 — N15 S05 — S15	◇Uncoated carbide ◇Good wear resistance; ◇General turning of cast iron, special alloys and non-ferrous metals, including aluminum alloys and copper alloys.	

## Groove Description



chip breaker

Negative Inserts: Chipbreaker Name and Geometry			Applications and Features
SF			<ul style="list-style-type: none"> <li>Fine to semi-finishing of steel and stainless steel;</li> <li>Good chip evacuation at low feed and shallow depth of cut;</li> <li>Excellent chip control.</li> </ul>
PF			<ul style="list-style-type: none"> <li>Excellent overall performance of edge strength and sharpness;</li> <li>For semi-finish to medium processing of steel and alloy steels work;</li> <li>Good chip control.</li> </ul>
MS			<ul style="list-style-type: none"> <li>Fine to semi-finishing of stainless steel, mild steel, hard-to-cut materials</li> <li>Finishing geometry;</li> <li>High edge sharpness;</li> <li>Universal chipbreaker shape.</li> </ul>
TM			<ul style="list-style-type: none"> <li>Moderate finishing geometries for steels</li> <li>Positive rake design for sharpness and low cutting resistance force</li> <li>Universal chipbreaker with wide chip evacuation area</li> </ul>
PZ			<ul style="list-style-type: none"> <li>Medium machining geometry for steel;</li> <li>Rounding treatment, both cutting effect of cutting edge and cutting edge mouth strength, good overall performance;</li> <li>Good chip breaking in moderate machining.</li> </ul>

## Groove Description



chip breaker

Negative Inserts: Chipbreaker Name and Geometry			Applications and Features
PM			<ul style="list-style-type: none"> <li>Medium roughing geometry for steel;</li> <li>Negative chamfer design for enhanced blade edge strength and resistance impact performance;</li> <li>Double chip breaker design to expand the chip breaking range.</li> </ul>
MA			<ul style="list-style-type: none"> <li>Moderate loading of stainless steel, mild steel, hard-to-cut materials slot type;</li> <li>The cutting edge is sharp and takes into account a certain strength, with Good impact resistance;</li> <li>Long cutting life.</li> </ul>
General groove			<ul style="list-style-type: none"> <li>Universal geometry for cast iron machining;</li> <li>Good edge strength and versatility.</li> </ul>

## Groove Description



chip breaker

Positive Inserts: Chipbreaker Designation and Geometry			Applications and Features
PS			<ul style="list-style-type: none"> <li>Finishing to semi-finishing geometries for steel;</li> <li>Compact chipbreaker combines sharpness with low cutting resistance force</li> <li>Good chip control.</li> </ul>
PA			<ul style="list-style-type: none"> <li>Medium machining geometry for steel;</li> <li>Both the cutting effect of the cutting edge and the strength of the cutting edge;</li> <li>Preferred geometry for medium machining.</li> </ul>
GM			<ul style="list-style-type: none"> <li>Medium machining geometry for steel and stainless steel;</li> <li>It has both sharpness and edge strength, and is comprehensive;</li> <li>Geometry with low cutting resistance.</li> </ul>
AL			<ul style="list-style-type: none"> <li>Special geometry for aluminum alloy machining</li> <li>Sharp cutting edge with good chip breaking.</li> </ul>

# CNMG



Negative 80° diamond insert

	cutting edge length	dimension		
		d	t	r
	09	9.52	4.76	0.8-1.2
	12	12.7	4.76	0.1-1.6
	16	15.88	6.35	1.2-1.6
	19	19.05	6.35	0.4-1.6
	25	25.4	9.52	2.4

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	CNMG	120404 SF	0.05-0.30	0.2-2.5			●	○		
		120408 SF	0.08-0.35	0.3-2.5			●	○		
fine finishing	CNMG	120404 PF	0.10-0.40	0.5-4.0	○	●	○	●		
		120408 PF	0.10-0.40	0.5-4.0	○	●	○	●		
fine finishing	CNMG	120404 MS	0.10-0.40	0.5-4.0					●	●
		120408 MS	0.10-0.40	0.5-4.0					●	●
medium finishing	CNMG	120404 TM	0.17-0.55	1.2-5.0	○	●	○	●		
		120408 TM	0.17-0.55	1.2-5.0	○	●	○	●		
		120412 TM	0.20-0.55	1.5-5.0	○	●	○	●		
medium finishing	CNMG	120408 PZ	0.17-0.55	1.2-5.0	○	●	○	●		
		120412 PZ	0.20-0.55	1.5-5.0	○	●	○	●		

- HOT GRADE
- OPTIONAL GRADE

# CNMG



Negative 80° Rhombus insert

cutting edge length	dimension		
	d	t	r
09	9.52	4.76	0.8-1.2
12	12.7	4.76	0.1-1.6
16	15.88	6.35	1.2-1.6
19	19.05	6.35	0.4-1.6
25	25.4	9.52	2.4

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425	CT8215	CT8225	CT7415
medium finishing	CNMG	120404 MA	0.10-0.50	0.5-5.0				●	●	
		120408 MA	0.13-0.50	0.5-5.0				●	●	
		120412 MA	0.15-0.55	0.5-5.0				●	●	
Rough finishing	CNMG	120408	0.23-0.60	1.2-5.0					○	●
		120412	0.25-0.60	2.0-5.0					○	●
		120416	0.27-0.60	2.5-5.0					○	●
		160608	0.25-0.60	2.0-6.5					○	●
		160612	0.27-0.60	2.0-6.5					○	●
		160616	0.29-0.60	2.0-6.5					○	●
		190612	0.30-0.60	3.0-8.0					○	●
		190616	0.35-0.70	3.0-8.0					○	●

# DNMG



Negative 55° Rhombus insert

	cutting edge length	dimension		
		d	t	r
	11	9.52	4.76	0.8-1.2
	13	11.11	5.56	0.4-1.2
	15	12.7	4.76-6.35	0.1-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	DNMG	150404 SF	0.10-0.40	0.5-4.0			●	○		
		150408 SF	0.10-0.40	0.5-4.0			●	○		
fine finishing	DNMG	150404 PF	0.10-0.40	0.5-4.0	○	●	○	●		
		150408 PF	0.10-0.40	0.5-4.0	○	●	○	●		
		150412 PF	0.10-0.40	0.5-4.0	○	●	○	●		
fine finishing	DNMG	150404 MS	0.10-0.40	0.5-4.0					●	●
		150408 MS	0.10-0.40	0.5-4.0					●	●
medium finishing	DNMG	150404 TM	0.17-0.50	1.0-4.0			●	●		
		150408 TM	0.17-0.50	1.0-4.0			●	●		
medium finishing	DNMG	150412 PM	0.17-0.50	1.0-4.0		●		●		
Rough finishing	DNMG	150408	0.17-0.55	1.5-4.0					○	●
		150412	0.25-0.55	1.5-4.0					○	●
		150612	0.25-0.55	1.0-4.0					○	●

- HOT GRADE
- OPTIONAL GRADE

# SNMG



negative square insert

	cutting edge length	dimension		
		d	t	r
	12	12.7	4.76	0.4-1.6
	19	19.05	6.35	1.2-1.6
	25	25.4	7.94-9.52	1.6-2.4
	31	31.75	9.52	2.4

insert	model	feed (mm/rev)	cut depth (mm)	P			M/S	K	N
				CT5215	CT5225	CT5415	CT5425	CT8215	CT8225
medium finishing	SNMG	120404 TM	0.12-0.40	1.0-5.0	●	○	●		
		120408 TM	0.17-0.55	1.2-5.0	●	○	●		
medium finishing	SNMG	120404 MA	0.10-0.30	1.2-5.0				●	●
		120408 MA	0.17-0.55	1.2-5.0				●	●
		120412 MA	0.20-0.55	1.5-5.0				●	●
Rough finishing	SNMG	120404	0.17-0.45	1.0-5.0				○	●
		120408	0.23-0.60	1.5-5.0				○	●
		120412	0.25-0.60	2.0-5.0				○	●
		150608	0.25-0.60	1.5-6.0				○	●
		150612	0.25-0.60	2.0-6.0				○	●
		150616	0.35-0.70	2.0-6.0				○	●
		190612	0.30-0.60	3.0-8.0				○	●
		190616	0.35-0.70	3.0-8.0				○	●

# TNMG



negative triangle insert

	cutting edge length	dimension		
		d	t	r
	11	6.35	3.18	0.4
	13	7.94	4.76	0.2-1.2
	16	9.52	4.76	0.4-1.6
	22	12.7	4.76	0.4-4.6

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	TNMG	160404 SF	0.10-0.40	0.5-4.0			●	○		
		160408 SF	0.10-0.40	0.5-4.0			●	○		
		160404 PF	0.10-0.40	0.5-4.0	●	●	○	●		
		160408 PF	0.10-0.40	0.5-4.0	●	●	○	●		
fine finishing	TNMG	160404 MS	0.10-0.40	0.5-4.0					●	●
		160408 MS	0.10-0.40	0.5-4.0					●	●
		160404 PM	0.15-0.40	0.5-4.0	●		●			
		160408 PM	0.15-0.40	0.5-4.0	●		●			
		160412 PM	0.15-0.40	0.5-4.0	●		●			
medium finishing	TNMG	160404 TM	0.17-0.40	1.0-3.5		●		●		
		160408 TM	0.17-0.50	1.2-3.5		●		●		
		160412 TM	0.20-0.50	1.5-3.5		●		●		

- HOT GRADE
- OPTIONAL GRADE

# TNMG



negative triangle insert

	cutting edge length	dimension		
		d	t	r
	11	6.35	3.18	0.4
	13	7.94	4.76	0.2-1.2
	16	9.52	4.76	0.4-1.6
	22	12.7	4.76	0.4-4.6

insert	model	feed (mm/rev)	cut depth (mm)	P			M/S	K	N			
				CT5215	CT5225	CT5415	CT5425	CT8215	CT8225	CT7415	CT7425	CT101
 medium finishing	TNMG	160408 PZ	0.17-0.50	1.2-3.5	●	●						
 medium finishing	TNMG	160404 MA	0.13-0.50	0.8-4.5				●	●			
		160408 MA	0.15-0.55	0.8-4.5				●	●			
 Rough finishing	TNMG	160404	0.17-0.45	1.5-3.5				○	●			
		160408	0.17-0.55	2.0-3.5				○	●			
		160412	0.25-0.55	2.0-3.5				○	●			
		220408	0.17-0.55	2.0-5.0				○	●			
		220412	0.25-0.55	2.0-5.0				○	●			

# VNMG



Negative 35° DIAMOND insert

	cutting edge length	dimension		
		d	t	r
	13	7.94	4.76	0.4-0.8
	16	9.52	4.76	0.1-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P			M/S	K	N
				CT5215	CT5225	CT5415			
fine finishing	VNMG	160404 SF	0.05-0.30	0.5-2.0		●	○		
		160408 SF	0.07-0.30	0.5-2.0		●	○		
fine finishing	VNMG	160404 MS	0.05-0.30	0.5-2.0			●	●	
		160408 MS	0.07-0.30	0.5-2.0			●	●	
medium finishing	VNMG	160404 TM	0.15-0.36	0.8-3.0		●	●		
		160408 TM	0.17-0.36	1.0-2.5		●	●		
medium finishing	VNMG	160408 PZ	0.17-0.36	1.0-2.5		●	●		
medium finishing	VNMG	160404 MA	0.10-0.30	0.5-3.5			●	●	
		160408 MA	0.13-0.50	0.8-3.5			●	●	
Rough finishing	VNMG	160404	0.17-0.40	1.0-3.0			○	●	
		160408	0.17-0.50	1.5-3.0			○	●	

- HOT GRADE
- OPTIONAL GRADE

# WNMG



NEGATIVE 80° TRIANGLE insert

	cutting edge length	dimension		
		d	t	r
	06	9.52	4.76	0.4-1.2
	08	12.7	4.76	0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P			M/S	K	N
				CT5215	CT5225	CT5415			
fine finishing	WNMG	080404 SF	0.10-0.40	0.5-4.0		●	○	○	○
		080408 SF	0.10-0.40	0.5-4.0		●	○	○	○
fine finishing	WNMG	080404 MS	0.10-0.40	0.5-4.0				●	●
		080408 MS	0.10-0.40	0.5-4.0				●	●
medium finishing	WNMG	080404 PF	0.10-0.40	0.5-4.0	○	●	○	●	
		080408 PF	0.10-0.40	0.5-4.0	○	●	○	●	
medium finishing	WNMG	080404 PM	0.15-0.40	0.5-4.0	○	●	○	●	
		080408 PM	0.15-0.40	0.5-4.0	○	●	○	●	
		080412 PM	0.15-0.40	0.5-4.0	○	●	○	●	
medium finishing	WNMG	080408 TM	0.17-0.55	1.2-4.0	○	●	○	●	
		080412 TM	0.25-0.55	1.5-4.0	○	●	○	●	

# WNMA



NEGATIVE 80° TRIANGLE insert

cutting edge length	dimension		
	d	t	r
	06	9.52	4.76
08	12.7	4.76	0.4-1.6

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
medium finishing	WNMG	080408 PZ	0.17-0.55	1.2-4.0	○	●	○	●		
		080412 PZ	0.25-0.55	1.5-4.0	○	●	○	●		
medium finishing	WNMG	060408 MA	0.13-0.50	0.5-5.0					●	●
		060412 MA	0.15-0.55	0.5-5.0					●	●
		080404 MA	0.10-0.45	0.8-4.0					●	●
		080408 MA	0.12-0.45	0.8-4.0					●	●
		080412 MA	0.12-0.45	0.8-4.0					●	●
		080416 MA	0.12-0.45	0.8-4.0					●	●
Rough finishing	WNMG	080404	0.15-0.70	1.0-5.0					○	●
		080408	0.15-0.70	1.0-5.0					○	●
		080412	0.20-0.80	1.5-5.0					○	●
		080416	0.20-0.80	1.5-5.0					○	●

- HOT GRADE
- OPTIONAL GRADE

## POSITIVE7° REAR ANGLE RHOMBIC insert

	cutting edge length	dimension		
		d	t	r
	06	6.35	2.38	0.1-0.8
	09	9.52	3.97	0.1-0.8
	12	12.7	4.76	0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	 CCMT 09T304 PS	0.05-0.15	0.5-2.5	o	o		●	o	o	
		0.07-0.15	0.5-2.5	o	o		●	o	o	
medium finishing	 CCMT 060204 PA	0.07-0.20	0.5-2.0	o	o		●	o	o	
		0.13-0.30	0.7-2.0	o	o		●	o	o	
		0.10-0.25	0.7-3.5	o	o		●	o	o	
		0.13-0.30	1.0-3.5	o	o		●	o	o	
		0.10-0.25	1.0-5.0	o	o		●	o	o	
		0.13-0.30	1.3-5.0	o	o		●	o	o	
		0.17-0.35	1.5-5.0	o	o		●	o	o	
medium finishing	 CCMT 060204 GM	0.07-0.20	0.5-2.0	o	●		●	●	●	
		0.10-0.25	0.7-3.5	o	●		●	●	●	
		0.13-0.30	1.0-3.5	o	●		●	●	●	
		0.10-0.25	1.0-5.0	o	●		●	●	●	
		0.13-0.30	1.3-5.0	o	●		●	●	●	

# DCMT

POSITIVE 7° REAR ANGLE 55° RHOMBIC insert



cutting edge length	dimension		
	d	t	r
07	6.35	2.38	0.03–0.8
11	9.52	3.97	0.03–0.8

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	DCMT	11T304 PS	0.05–0.15	0.5–2.5	●	●		●	o	o
		11T308 PS	0.07–0.15	0.5–2.5	●	●		●	o	o
medium finishing	DCMT	070204 PA	0.06–0.18	0.3–2.0	●	●		●	o	o
		070208 PA	0.08–0.25	0.4–2.0	●	●		●	o	o
		11T304 PA	0.08–0.25	0.35–3.0	●	●		●	o	o
		11T308 PA	0.10–0.28	0.5–3.0	●	●		●	o	o
		11T312 PA	0.12–0.32	0.5–3.0	●	●		●	o	o
medium finishing	DCMT	070204 GM	0.06–0.18	0.3–2.0	●	●		●	●	●
		070208 GM	0.08–0.25	0.4–2.0	●	●		●	●	●
		11T304 GM	0.08–0.25	0.35–3.0	●	●		●	●	●
		11T308 GM	0.10–0.28	0.5–3.0	●	●		●	●	●
medium finishing	DCMT	11T308	0.10–0.28	0.5–3.0	●	●		●	o	o
fine finishing	DCGX	11T304 AL	0.10–0.28	0.5–3.0						●

- HOT GRADE
- OPTIONAL GRADE

## POSITIVE 7° REAR ANGLE 55° RHOMBIC insert

cutting edge length	dimension		
	d	t	r
	09	9.52	3.97
12	12.7	4.76	0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	SCMT	09T304 PS	0.05-0.15	0.5-2.5	o	●	o	o		
		09T308 PS	0.07-0.15	0.5-2.5	o	●	o	o		
medium finishing	SCMT	09T304 PA	0.25-0.50	1.5-4.0	o	●	o			
		09T308 PA	0.30-0.60	2.5-5.0	o	●	o			
		120404 PA	0.40-0.75	3.0-7.0	o	●	o			
		120408 PA	0.48-0.90	3.5-9.0	o	●	o			
		120412 PA	0.55-1.20	4.0-12.0	o	●	o			
medium finishing	SCMT	09T304 GM	0.25-0.50	1.5-4.0	o	●	o			
		09T308 GM	0.30-0.60	2.5-5.0	o	●	o			
		120404 GM	0.40-0.75	3.0-7.0	o	●	o			
		120408 GM	0.48-0.90	3.5-9.0	o	●	o			

## POSITIVE 7° REAR ANGLE TRIANGLE insert

	cutting edge length	dimension		
		d	t	r
	06	3.97	1.98	0.2
	09	5.56	2.38	0.4-0.8
	11	6.35	2.38-3.18	0.1-0.8
	16	9.52	3.97	0.4-1.2
	22	12.7	4.76	0.8

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	TCMT	16T304 PS	0.05-0.15	0.5-2.5	o	●	o	o		
		16T308 PS	0.07-0.15	0.5-2.5	o	●	o	o		
medium finishing	TCMT	090204 PA	0.10-0.25	0.6-2.0	●	●	●	o		
		090208 PA	0.13-0.30	0.8-2.0	●	●	●	o		
		110204 PA	0.10-0.25	0.6-3.0	●	●	●	o		
		110208 PA	0.13-0.30	0.8-3.0	●	●	●	o		
		16T304 PA	0.10-0.25	0.8-5.0	●	●	●	o		
		16T308 PA	0.10-0.30	1.0-5.0	●	●	●	o		
		16T312 PA	0.10-0.30	1.5-5.0	●	●	●	o		
medium finishing	TCMT	110204 GM	0.10-0.25	0.6-3.0	●	●	●	●	●	
		110208 GM	0.13-0.30	0.8-3.0	●	●	●	●	●	
		16T304 GM	0.10-0.25	0.8-5.0	●	●	●	●	●	
		16T308 GM	0.10-0.30	1.0-5.0	●	●	●	●	●	
		16T312 GM	0.10-0.30	1.5-5.0	●	●	●	●	●	

# VBMT

POSITIVE 5° REAR ANGLE 35° RHOMBIC insert



	cutting edge length	dimension		
		d	t	r
		16	9.52	4.76
				0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
fine finishing	VBMT	160404 PS	0.05-0.15	0.5-2.5	o	o		●	o	o
		160408 PS	0.07-0.15	0.5-2.5	o	o		●	o	o
medium finishing	VBMT	160404 PA	0.10-0.25	0.6-3.0	o	o		●	o	o
		160408 PA	0.13-0.30	0.9-3.0	o	o		●	o	o
		160412 PA	0.15-0.30	1.2-3.0	o	o		●	o	o
medium finishing	VBMT	160404 GM	0.10-0.25	0.6-3.0	●	o		●	o	o
		160408 GM	0.13-0.30	0.9-3.0	●	o		●	o	o
		160412 GM	0.15-0.30	1.2-3.0	●	o		●	o	o

# VCMT



POSITIVE 7° REAR ANGLE 35° RHOMBIC insert

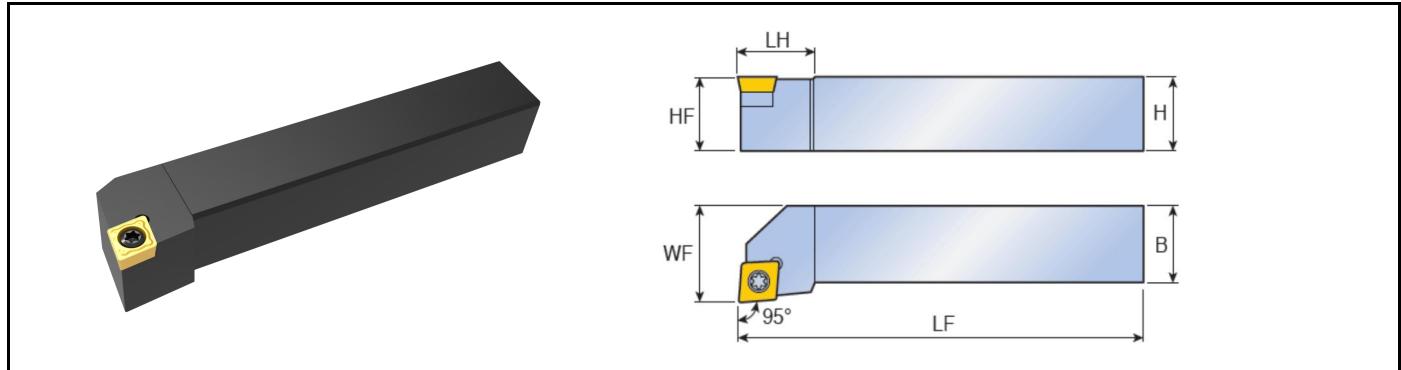
	cutting edge length	dimension		
		d	t	r
	08	4.76	2.38	0.2-0.4
	11	6.35	3.18	0.1-0.4
	16	9.52	4.76	0.4-0.8

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S	K	N
				CT5215	CT5225	CT5415	CT5425			
medium finishing	VCMT	160404 PA	0.08-0.20	0.5-2.0	o	o		●	o	o
		160408 PA	0.10-0.20	0.8-2.0	o	o		●	o	o
medium finishing	VCMT	160404 GM	0.08-0.20	0.5-2.0	o	o		●	o	o
		160408 GM	0.10-0.20	0.8-2.0	o	o		●	o	o

- HOT GRADE
- OPTIONAL GRADE

## SCLCR/L

ositive CC insert, S-screw compression, External turning shan



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SCLCR/L 0808 F06	95°	8	8	8	10	80	10	CC..0602
SCLCR/L 1010 F06		10	10	10	12	80	10	
SCLCR/L 1212 F09	95°	12	12	12	16	80	16	CC..09T3
SCLCR/L 1616 H09		16	16	16	20	100	16	
SCLCR/L 2020 K09	95°	20	20	20	25	125	20	
SCLCR/L 2525 M09		25	25	25	32	150	20	
SCLCR/L 2020 K12	95°	20	20	20	25	125	25	CC..1204
SCLCR/L 2525 M12		25	25	25	32	150	26	

◎ INSERTS TO BE ORDERED SEPARATELY

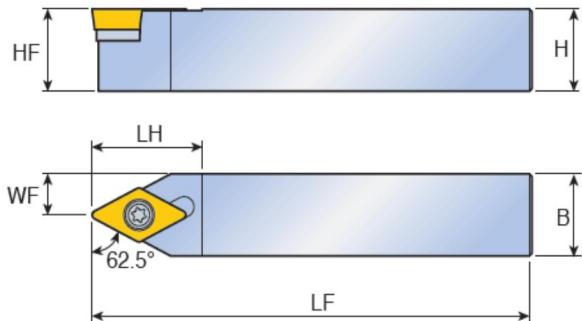
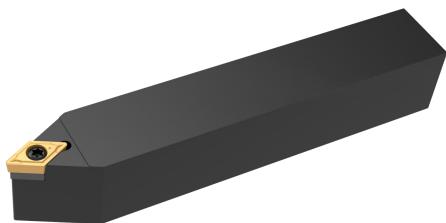
◎For INSERT selection, see INSERT details page E32

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHER SCREW	WRENCH
	CC..0602	CSC2560	—	—	CTS08W
	CC..09T3 (12刀方)	CSC4090	—	—	CTS15W
	CC..09T3	CSC3581	CDSC0903	CSD5035	CTS15W
	CC..1204	CSC4511	CDSC1204	CSD6045	CTS20W

## SDNCN、SDJCR/L

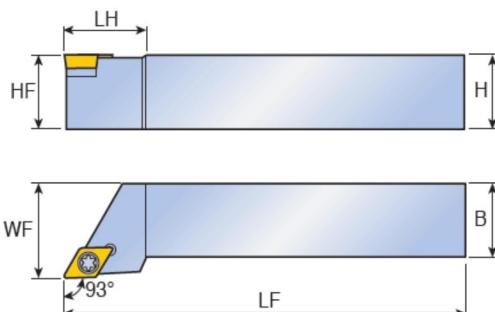
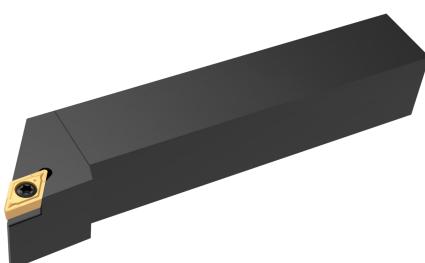


Positive DC insert, S-type SCREW compression, EXTERNAL turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SDNCN 0808 F07	62.5°	8	8	8	4	80	15	DC..0702
SDNCN 1010 F07		10	10	10	5	80	15	
SDNCN 1616 H11		16	16	16	8	100	22	DC..11T3
SDNCN 2525 M11		25	25	25	12.5	150	22	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E33



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SDJCR/L 1212 F07	93°	12	12	12	16	80	15	DC..0702
SDJCR/L 1616 H07		16	16	16	20	100	15	
SDJCR/L 2020 K07		20	20	20	25	125	20	
SDJCR/L 1616 H11	93°	16	16	16	20	100	24	DC..11T3
SDJCR/L 2020 K11		20	20	20	25	125	24	
SDJCR/L 2525 M11		25	25	25	32	150	28	

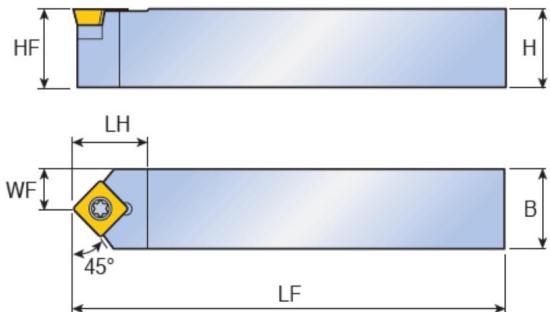
◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E33

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
DC..0702	CSC2560	—	—	—	CTS08W
DC..11T3	CSC3581	CDS1103	CSD5035	—	CTS15W

## SSDCN、SSSCR/L

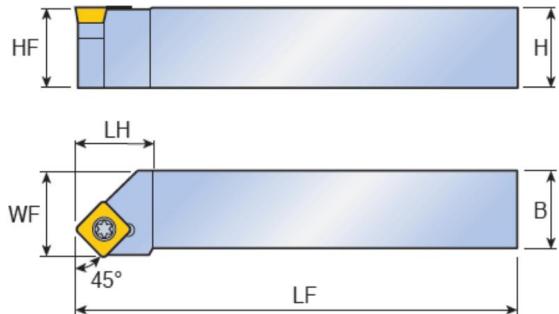


Positive SC inserts, S-type SCREW compaction, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SSDCN 1212 F09	45°	12	12	12	8	80	15.5	SC..09T3
SSDCN 1616 H09		16	16	16	8	100	15.5	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E34



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SSSCR/L 1212 F09	45°	12	12	12	14	80	15.5	SC..09T3
SSSCR/L 1616 H09		16	16	16	17	80	15.5	
SSSCR/L 2020 K12		20	20	20	22	100	24	SC..1204
SSSCR/L 2525 M12		25	25	25	27	150	24	

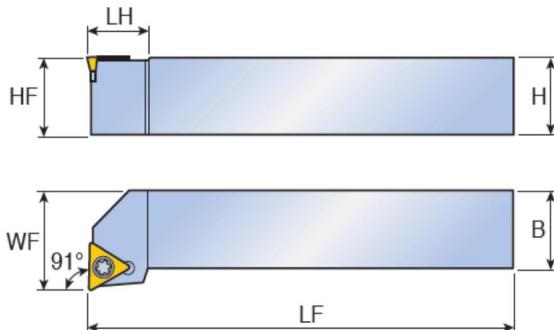
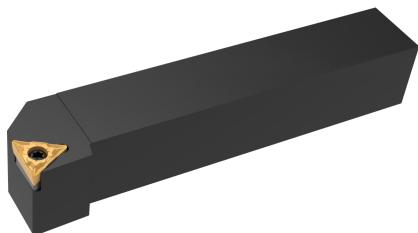
◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E34

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	SC..09T3(12刀方)	CSC4090	—	—	CTS15W
	SC..09T3	CSC3581	CDSS0903	CSD5035	CTS15W
	SC..1204	CSC4511	CDSS1204	CSD6045	CTS20W

## STFCR/L, STGCR/L

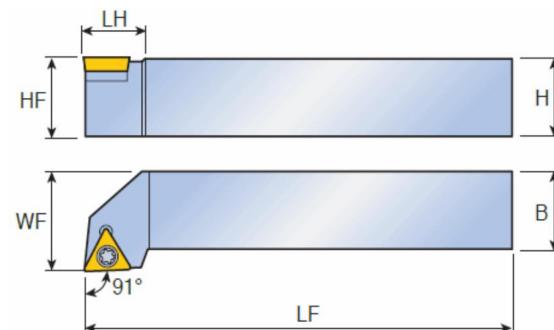


Positive TC insert, S-type SCREW compaction, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
STFCR/L 1212 F11	91°	12	12	12	16	80	14	TC..1102
STFCR/L 1616 H11		16	16	16	20	100	14	
STFCR/L 1616 H16	91°	16	16	16	20	100	19	TC..16T3
STFCR/L 2020 K16		20	20	20	25	125	19	
STFCR/L 2525 M16		25	25	25	32	150	20	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E35



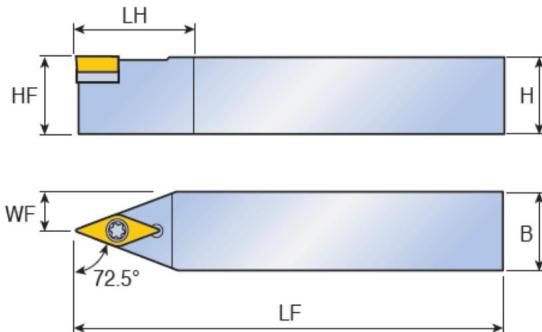
MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
STGCR/L 1010 E09	91°	10	10	10	12	70	11	TC..0902
STGCR/L 1212 F11		12	12	12	16	80	14.3	
STGCR/L 1616 H11	91°	16	16	16	20	100	14.3	TC..1102
STGCR/L 1616 H16		16	16	16	20	100	21	
STGCR/L 2020 K16	91°	20	20	20	25	125	21	TC..16T3
STGCR/L 2525 M16		25	25	25	32	150	21	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E35

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
TC..0902	CSC2250	—	—	—	CTS07W
TC..1102	CSC2560	—	—	—	CTS08W
TC..16T3	CSC3581	CDST1603	CSD5035	CTS15W	

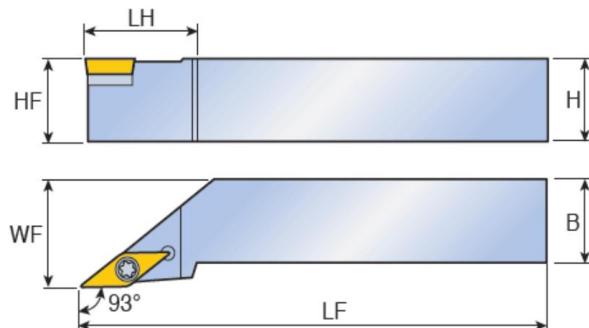
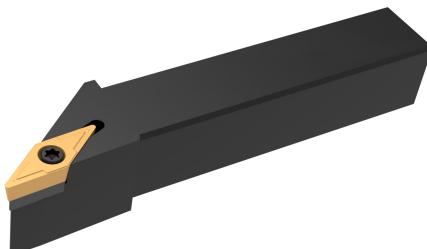
## SVVBN、SVJBR/L

Positive VB insert, S-type SCREW press, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SVVBN 2020 K16	72.5°	20	20	20	10.0	125	31.5	VB..1604
SVVBN 2525 M16		25	25	25	12.5	150	31.5	
SVVBN 3232 P16		32	32	32	12.5	170	31.5	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36



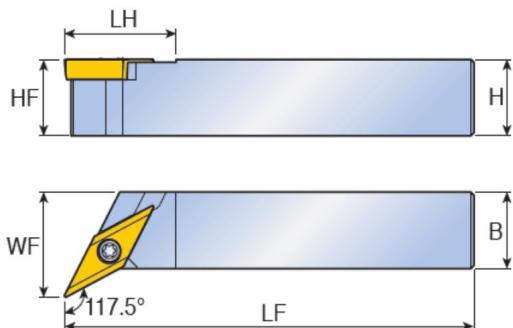
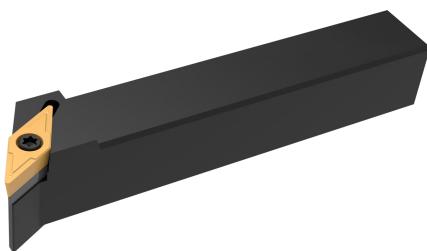
MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SVJBR/L 2020 K16	93°	20	20	20	25	125	35	VB..1604
SVJBR/L 2525 M16		25	25	25	32	150	35	
SVJBR/L 3225 P16		32	25	32	32	170	35	
SVJBR/L 3232 P16		32	32	32	40	170	35	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

配件	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VB..1604	CSC3581	CDSV1603	CSD5035	CTS15W

## SVPBR/L

Positive VB insert, S-type SCREW press, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SVPBR/L 2020 K16	117.5°	20	20	20	25	125	25	VB..1604
SVPBR/L 2525 M16		25	25	25	32	150	25	

◎ INSERTS TO BE ORDERED SEPARATELY

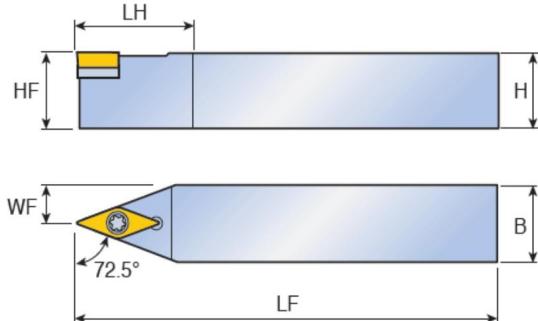
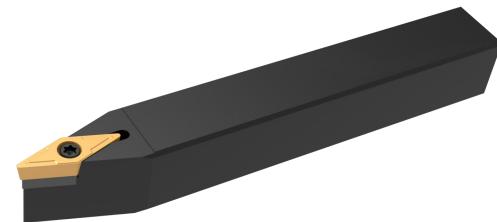
◎ For blade selection, see blade details page E36

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VB..1604	CSC3581	CDSV1603	CSD5035	CTS15W

## SVVCN、SVJCR/L

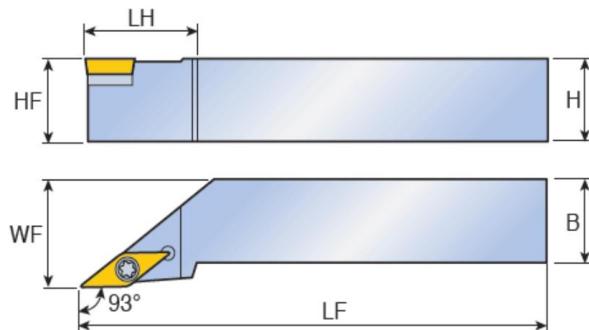
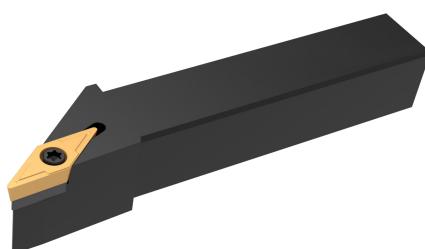


Positive VC insert, S-type SCREW compression, cylindrical turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SVVCN 2020 K16	72.5°	20	20	20	10.0	125	31.5	VC..1604
SVVCN 2525 M16		25	25	25	12.5	150	31.5	
SVVCN 3225 P16		32	32	32	12.5	170	31.5	
SVVCN 3232 P16		32	32	32	16.0	170	32.0	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SVJCR/L 2020 K16	93°	20	20	20	25	125	35	VC..1604
SVJCR/L 2525 M16		25	25	25	32	150	35	
SVJCR/L 3225 P16		32	25	32	32	170	35	
SVJCR/L 3232 P16		32	32	32	40	170	47	

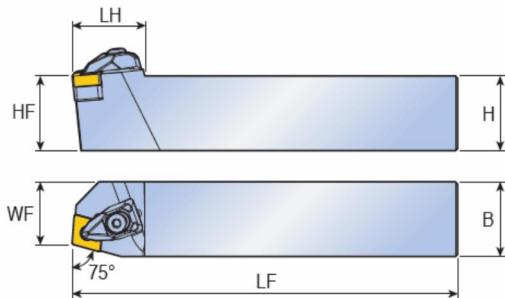
◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VC..1604	CSC3581	CDSV1603	CSD5035	CTS15W

## TCBNR/L、TCKNR/L

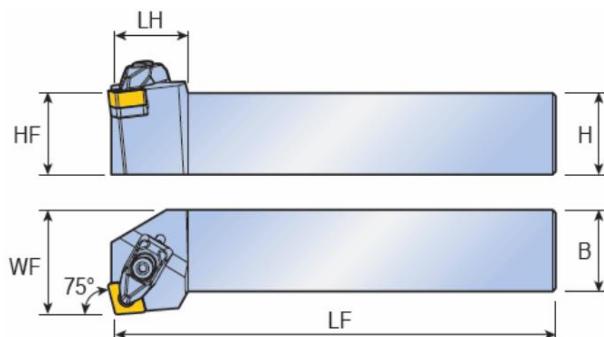
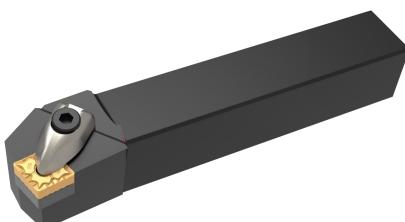


Negative CN insert, T-type pressure plate pressing, cylindrical turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TCBNR/L 2525 M12	75°	25	25	25	22.5	150	32	CN..1204
TCBNR/L 3232 P19		32	32	32	27	170	42	CN..1906

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E23



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TCKNR/L 2525 M12	75°	25	25	25	32	150	25	CN..1204

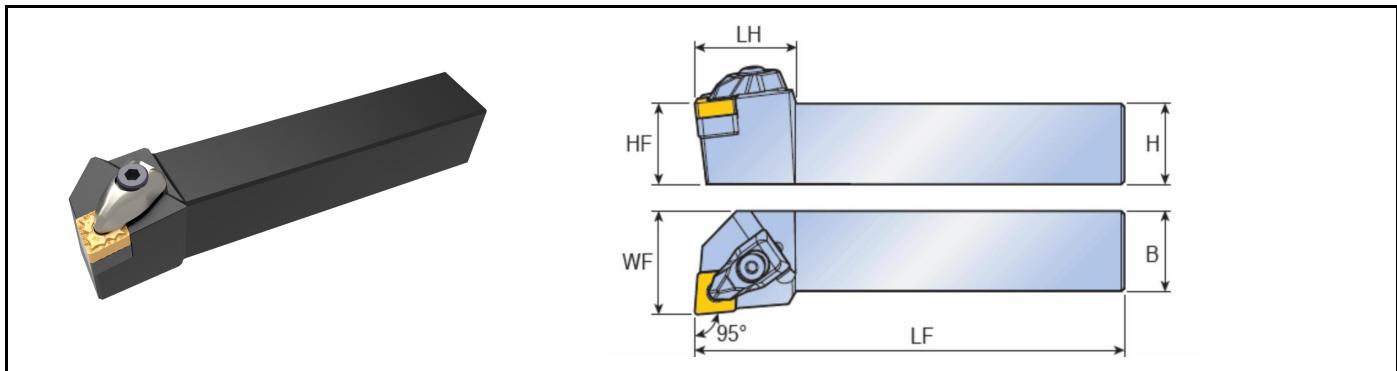
◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E23

ACC ESS ORY	INSERT MODEL	presse plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
		CN..1204	CYT4	CLT5023	CPT4	CDTC1206	CSC4090
	CN..1906		CYT6	CLT6026	CPT5	CDTC1904	CSC8018
							CBL40

## TCLNR/L



Negative CN insert, T-type pressure plate pressing, cylindrical turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TCLNR/L 2020 K12	95°	20	20	20	25	125	32	CN..1204
TCLNR/L 2525 M12		25	25	25	32	150		
TCLNR/L 3225 P12		32	25	32	32	170		
TCLNR/L 3232 P12		32	32	32	40	170		
TCLNR/L 2525 M16	95°	25	25	25	32	150	36	CN..1606
TCLNR/L 3232 P16		32	32	32	40	170		
TCLNR/L 3232 P16	95°	32	32	32	40	170	42	CN..1906
TCLNR/L 4040 S16		40	40	40	50	250		

◎ INSERTS TO BE ORDERED SEPARATELY

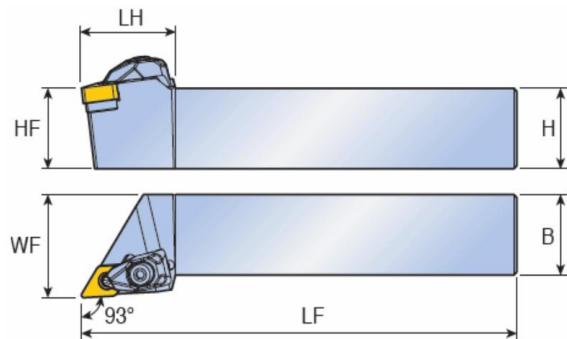
◎For blade selection, see blade details page E23

ACCESSORY	INSERT MODEL	presse plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	CN..1204	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
	CN..1606	CYT5	CLT6026	CPT5	CDTC1606	CSC5012	CBL40
	CN..1906	CYT6	CLT6026	CPT5	CDTC1904	CSC8018	CBL40

## TDJNR/L



Negative DN insert, T-type pressure plate pressing,  
cylindrical turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TDJNR/L 2020 K15	93°	20	20	20	25	125	39	DN..1504 DN..1506
TDJNR/L 2525 M15		25	25	25	32	150		
TDJNR/L 3232 P15		32	32	32	40	170		

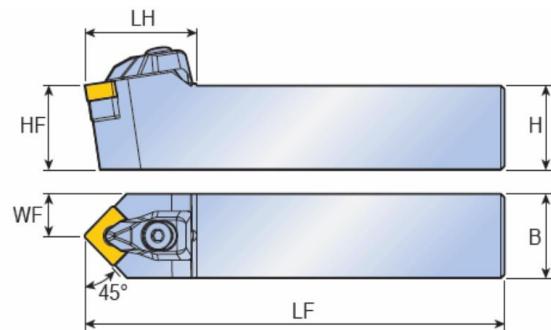
© INSERTS TO BE ORDERED SEPARATELY

©For blade selection, see blade details page E25

ACC ESS ORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	DN..1504	CYT4	CLT5023	CPT4	CDTD1506	CSC4090	CBL40
	DN..1506	CYT4	CLT5023	CPT4	CDTD1504	CSC4090	CBL40

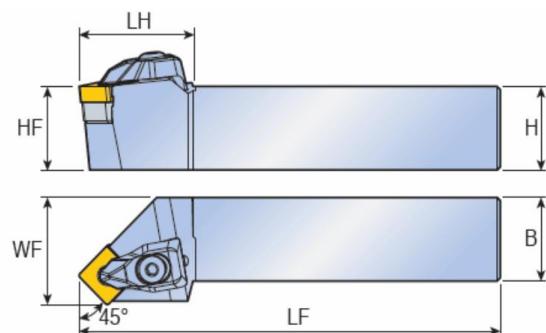
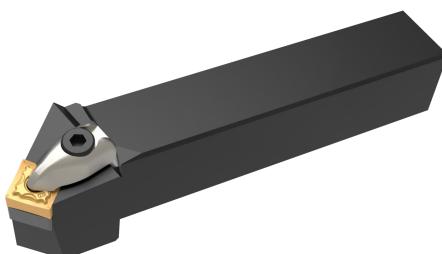
## TSDNN、TSSNR/L

Negative SN insert, T-type press plate, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TSDNN 2525 M12	45°	25	25	25	32	150	27	SN..1204
TSDNN 3232 P19		32	32	32	16	170	44	SN..1906

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E26



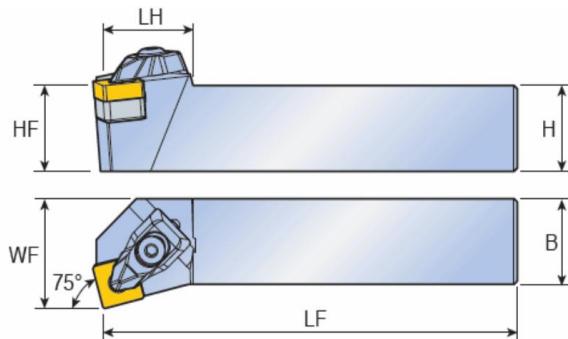
MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TSSNR/L 2525 M12	45°	25	25	25	32	150	35	SN..1204

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E26

ACC ESS ORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
		SN..1204	CYT4	CLT5023	CPT4	CDTS1206	CSC4090
	SN..1906		CYT6	CLT6026	CPT5	CDTS1904	CSC8018
							CBL40

## TSKNR/L

Negative SN insert, T-type press plate, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TSKNR/L 2525 M12	75°	25	25	25	32	150	27	SN..1204

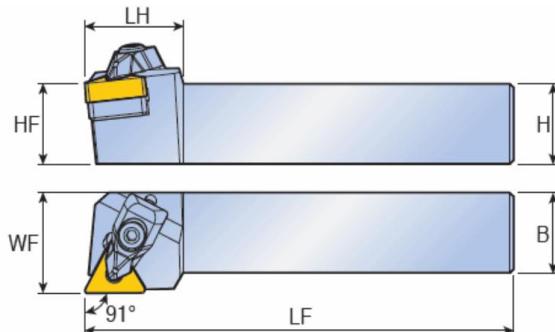
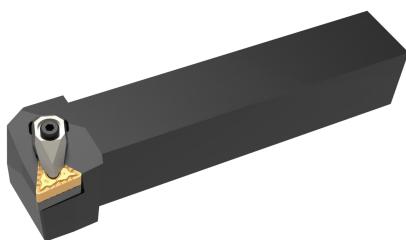
◎ INSERTS TO BE ORDERED SEPARATELY

◎ For insert selection, see insert details page E26

ACCESSORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	SN..1204						

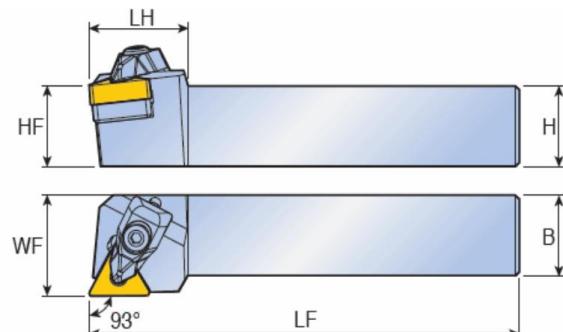
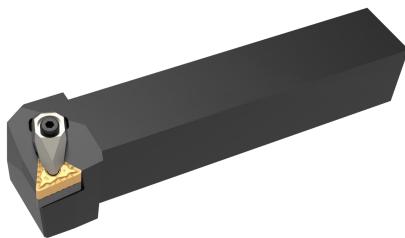
## TTGNR/L, TTJNR/L

Negative TN insert, T-type press plate, cylindrical turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TTGNR/L 2525 M16	91°	25	25	25	32	150	25	TN..1604

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E28



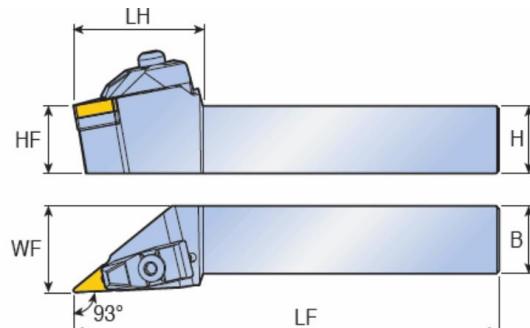
MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TTJNR/L 2020 K16	93°	20	20	20	25	125	25	TN..1604
TTJNR/L 2525 M16	93°	25	25	25	32	150	25	

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E28

ACCESSORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	TN..1604						

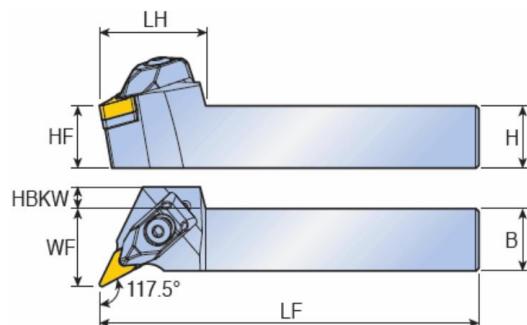
## TVJNR/L, TVQNR/L

Negative VN insert, T-type press plate, cylindrical turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TVJNR/L 2020 K16	93°	20	20	20	25	125	49	VN..1604
TVJNR/L 2525 M16		25	25	25	32	150	49	

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E29



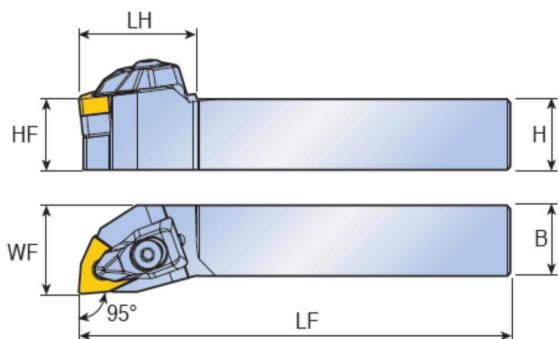
MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H=B	HF	WF	LF	LH	HBKW	
TVQNR/L 2020 K16	117.5°	20	20	25	125	42	8	VN..1604
TVQNR/L 2525 M16		25	25	32	150	42	2	

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E28

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
		CYT3	CLT4017	CPT3	CDTT1604	CSC3581	CBL25

## TWLNR/L

Negative VN insert, T-type press plate, cylindrical turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TWLNR/L 2020 K08	95°	20	20	20	25	125	34.2	WN..0804
TWLNR/L 2525 M08		25	25	25	32	150		
TWLNR/L 3232 P08		32	32	32	40	170		

© INSERTS TO BE ORDERED SEPARATELY

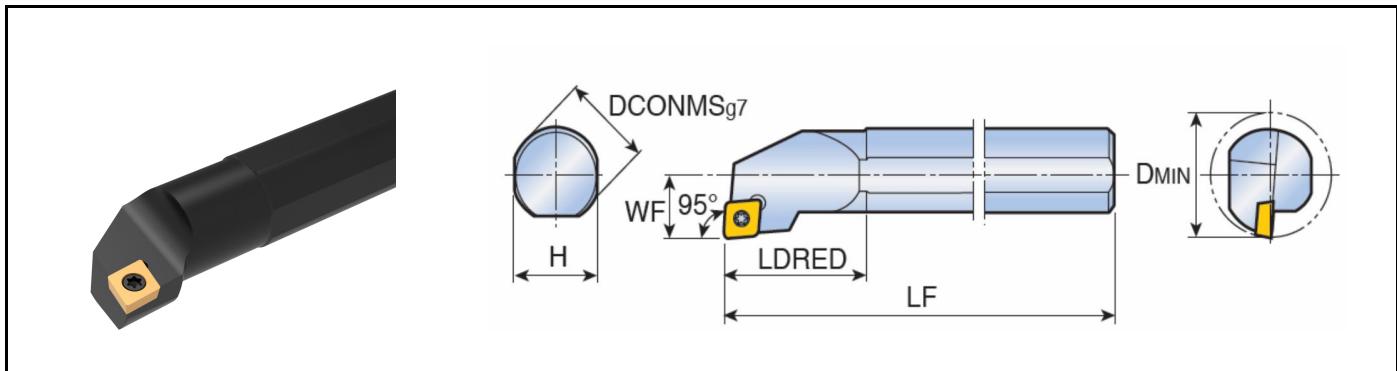
©For insert selection, see insert details page E30

ACC ESS ORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	WN..0804						



## S-SCLCR/L

Positive CC insert, S-type SCREW press, inner hole turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S08K SCLCR/L 06	95°	8	7	125	18	6	11	CC..0602
S10K SCLCR/L 06		10	9	125	20	7	13	
S12N SCLCR/L 06		12	11	160	25	9	16	
S16R SCLCR/L 06		16	15	200	30	11	20	
S12M SCLCR/L 09	95°	12	11	150	23	9	16	CC..09T3
S16N SCLCR/L 09		16	15	160	30	11	20	
S20Q SCLCR/L 09		20	18	180	32	13	25	
S25R SCLCR/L 12	95°	25	23	200	42	17	32	CC..1204
S32S SCLCR/L 12		32	30	250	45	22	40	
S40T SCLCR/L 12		40	37	300	55	27	50	

◎ INSERTS TO BE ORDERED SEPARATELY

◎ For INSERT selection, see INSERT details page E32

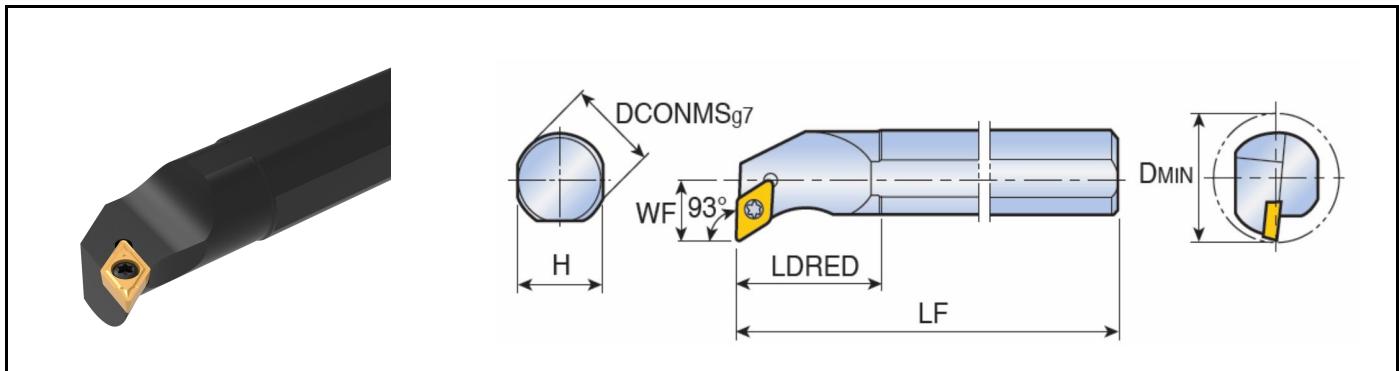
◎ Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
CC..0602	CSC2560	—	—	—	CTS08W
CC..09T3	CSC4090	—	—	—	CTS15W
CC..1204 (25 dia)	CSC5012	—	—	—	CTS20W
CC..1204	CSC4511	CDSC1204	CSD6045	CTS20W	

## S-SDUCR/L



Positive DC insert, S-type SCREW compression, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S10K SDUCR/L 07	93°	10	9	125	20	7	13	DC..0702
S12M SDUCR/L 07		12	11	150	23	9	16	
S16N SDUCR/L 07		16	15	160	30	11	20	
S16N SDUCR/L 11	93°	16	15	160	27	11	20	DC..11T3
S20Q SDUCR/L 11		20	18	180	32	13	25	
S25R SDUCR/L 11		25	23	200	42	17	32	
S32S SDUCR/L 11		32	30	250	55	22	40	

◎ INSERTS TO BE ORDERED SEPARATELY

◎For blade selection, see blade details page E33

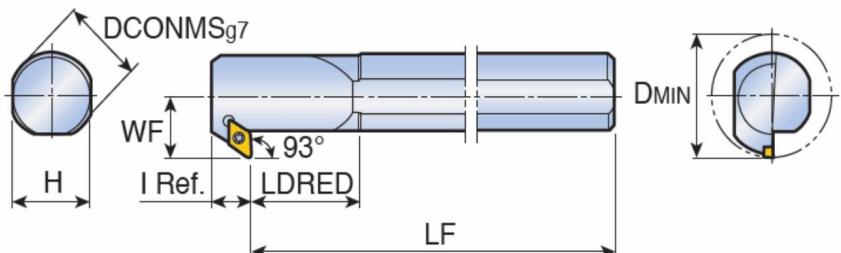
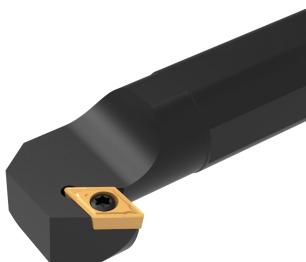
◎Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	DC..0702	CSC2560	—	—	CTS08W
	DC..11T3	CSC4090	—	—	CTS15W
	DC..11T3	CSC4090	—	—	CTS15W

## S-SDZCR/L



Positive DC insert, S-type SCREW compression, inner hole back turning tool holder



MODEL	KR	DIMENSION							COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	I Ref	
S16N SDZCR/L 07	93°	16	15	160	23	13	22	12	DC..0702
S20Q SDZCR/L 07		20	18	180	28	15	30	12	
S25R SDZCR/L 07		25	23	200	33	18	33	12	
S20Q SDZCR/L 11		20	18	180	24	15	27	16	DC..11T3
S32S SDZCR/L 11		32	30	250	34	22	40	16	

◎ INSERTS TO BE ORDERED SEPARATELY

◎For blade selection, see blade details page E33

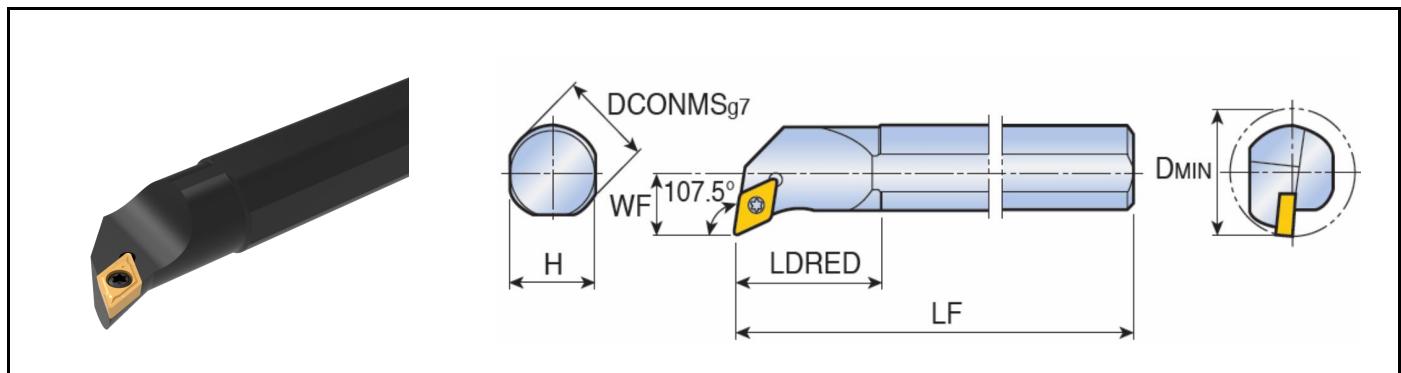
◎Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	DC..0702	CSC2560	—	—	CTS08W
	DC..11T3 (32柄径)	CSC3581	CDSD1103	CSD5035	CTS15W
	DC..11T3	CSC4090	—	—	CTS15W

## S-SDQCR/L



Positive DC insert, S-type SCREW compression, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S10K SDQCR/L 07	107.5°	10	9	125	20	7	13	DC..0702
S12M SDQCR/L 07		12	11	150	22	9	16	
S16N SDQCR/L 07		16	15	160	27	11	20	
S20Q SDQCR/L 11	107.5°	20	18	180	40	13	25	DC..11T3
S25S SDQCR/L 11		25	23	250	50	17	32	

◎ INSERTS TO BE ORDERED SEPARATELY

◎For blade selection, see blade details page E33

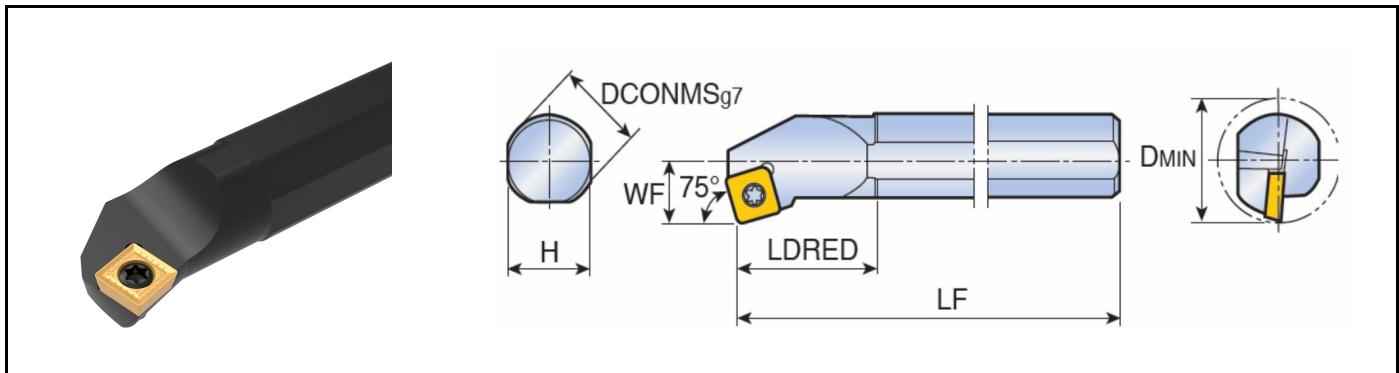
◎Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	DC..0702	CSC2560	—	—	CTS08W
	DC..11T3	CSC4090	—	—	CTS15W

## S-SSKCR/L



Positive SC insert, S-type SCREW compression, inner hole turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S16N SSKCR/L 09	75°	16	15	160	28	11	20	SC..09T3
S20Q SSKCR/L 09		20	18	180	30	13	25	
S25R SSKCR/L 12		25	23	200	39	17	32	SC..1204

◎ INSERTS TO BE ORDERED SEPARATELY

◎ For blade selection, see blade details page E34

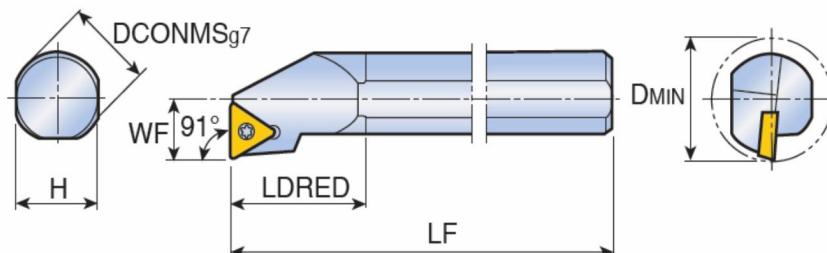
◎ Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	SC..09T3	CSC4090	—	—	CTS15W
	SC..1204	CSC5012	—	—	CTS20W

## S-STFCR/L



Positive TC insert, S-type SCREW compression, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S08K STFCR/L 09	91°	8	7	125	20	6	11	TC..0902
S10K STFCR/L 09		10	9	125	22.5	7	13	
S12M STFCR/L 09		12	11	150	30	9	16	
S16N STFCR/L 09		16	15	160	35	11	20	
S12M STFCR/L 11	91°	12	11	150	25	9	16	TC..1102
S16N STFCR/L 11		16	15	160	35	11	20	
S20Q STFCR/L 11		20	18	180	36	13	25	
S20Q STFCR/L 16	91°	20	18	180	36	13	25	TC..16T3
S25R STFCR/L 16		25	23	200	49	17	32	
S32S STFCR/L 16		32	30	250	45	22	40	
S40T STFCR/L 16		40	37	300	60	27	50	

◎ INSERTS TO BE ORDERED SEPARATELY

◎For blade selection, see blade details page E35

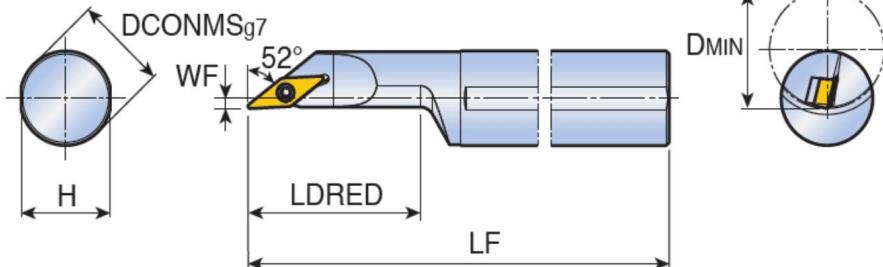
◎Standard shank without internal coolant

acc ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	TC..0902	CSC2250	—	—	CTS07W
	TC..1102	CSC2560	—	—	CTS08W
	TC..16T3(32dia)	CSC3581	CDST1603	CSD5035	CTS15W
	TC..16T3(40dia)	CSC3581	CDST1603	CSD5035	CTS15W
	TC..16T3	CSC4090	—	—	CTS15W

## S-SVJBR/L, S-SVUBR/L



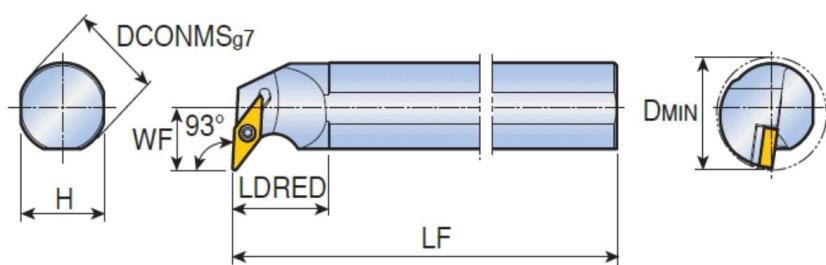
Positive type VB insert, S type SCREW press, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVJBR/L 16	52°	32	30	250	60	3.5	40	VB..1604
S40T SVJBR/L 16		40	37	300	75	4.5	50	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

◎ Standard shank without internal coolant



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVUBR/L 16	93°	32	30	250	45	22	40	VB..1604
S40T SVUBR/L 16		40	37	300	55	27	50	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

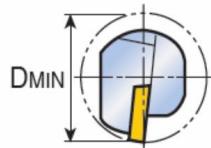
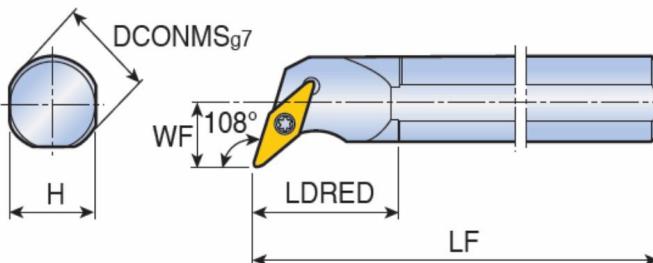
◎ Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VB..1604(25dia)	CSC4090	—	—	CTS15W
	VB..1604	CSC3581	CDSV1603	CSD5035	CTS15W

## S-SVQBR/L、S-SVPBR/L



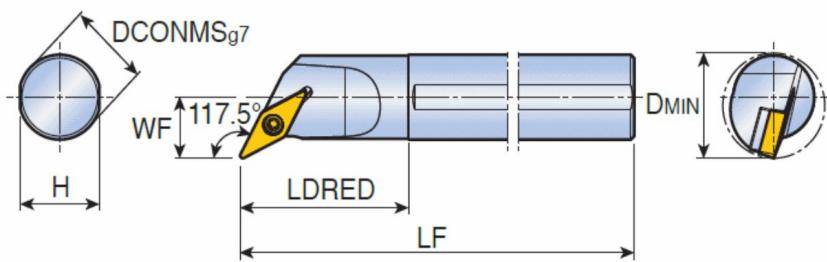
Positive type VB insert, S type SCREW press, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R SVQBR/L 16	108°	25	23	200	40	17	32	VB..1604
S32S SVQBR/L 16		32	30	250	45	22	40	
S40T SVQBR/L 16		40	37	300	55	27	50	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

◎ Standard shank without internal coolant



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R SVPBR/L 16	117.5°	25	23	200	51	18	31	VB..1604
S32S SVPBR/L 16		32	30	250	54	23	40	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

◎ Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VB..1604 (SVQBR/L, 25dia)	CSC4090	—	—	CTS15W
	VB..1604	CSC3581	CDSV1603	CSD5035	CTS15W

## S-SVUCR/L、S-SVQCR/L



Positive type VC insert, S type SCREW press, inner hole turning tool holder

MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVUCR/L 16	93°	32	30	250	35	22	40	VC..1604
S40T SVUCR/L 16		40	37	300	41	27	50	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37

◎ Standard shank without internal coolant

MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVQCR/L 16	108°	32	30	250	45	22	40	VC..1604
S40T SVQCR/L 16		40	37	300	55	27	50	

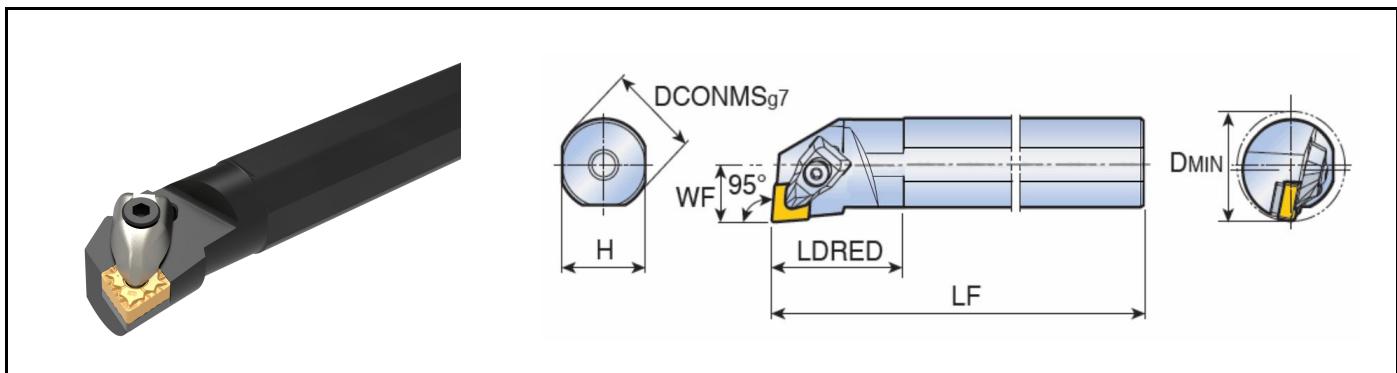
◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37

◎ Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VC..1604	CSC3581	CDSV1603	CSD5035	CTS15W

## S-TCLNR/L

Negative CN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TCLNR/L 12	95°	25	23	200	45	17	32	CN..1204
S32S TCLNR/L 12		32	30	250	45	22	40	
S40T TCLNR/L 12		40	37	300	45	27	50	
S50T TCLNR/L 12		50	47	350	45	35	63	

◎ INSERTS TO BE ORDERED SEPARATELY

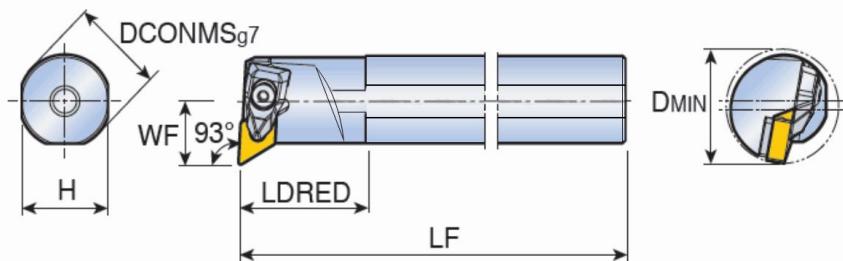
◎ For blade selection, see blade details page E23

◎ Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	CN..1204 (25柄径)	CYT4	CLT5023	CPT4	CDTC1203	CSC5012	CBL40
	CN..1204 (32柄径)	CYT4	CLT5023	CPT4	CDTC1203	CSC5012	CBL40
	CN..1204 (40柄径)	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
	CN..1204 (50柄径)	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40

## S-TDUNR/L, S-TDLNR/L

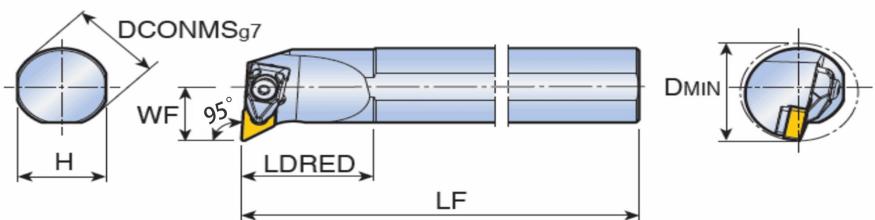
Negative DN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S TDUNR/L 15	93°	32	30	250	45	22	40	DN..1506
S40T TDUNR/L 15		40	37	300	45	27	50	
S50U TDUNR/L 15		50	47	350	45	35	63	

◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E25

◎ Standard shank without internal coolant



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TDLNR/L 15	95°	25	30	200	45	17	32	DN..1504
S32S TDLNR/L 15		32	30	250	45	22	40	
S40T TDLNR/L 15		40	37	300	45	27	50	
S50U TDLNR/L 15		50	47	350	45	35	63	DN..1506

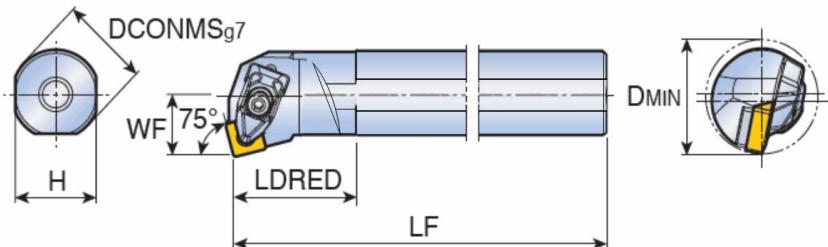
◎ INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E25

◎ Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	DN..1504 (25柄径)	CYT4	CLT5023	CPT4	—	—	CBL40
	DN..1506 (32柄径)	CYT4	CLT5023	CPT4	CDTD1503	CSC4090	CBL40
	DN..1506	CYT4	CLT5023	CPT4	CDTD1504	CSC4090	CBL40

## S-TSKNR/L

Negative SN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TSKNR/L 12	75°	25	23	200	45	17	32	SN..1204

◎ INSERTS TO BE ORDERED SEPARATELY

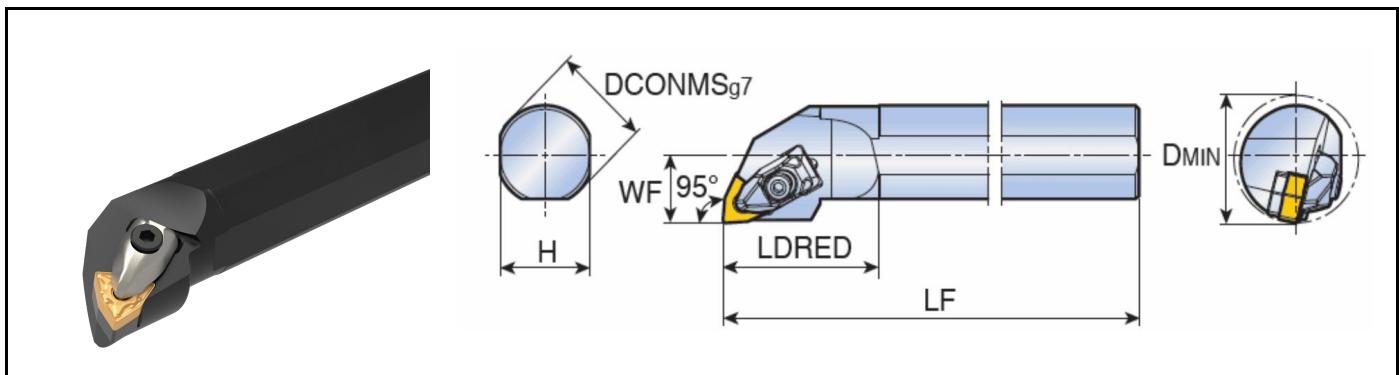
◎ For insert selection, see insert details page E26

◎ Standard shank without internal coolant

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	SN..1204						

## S-TWLNR/L

Negative WN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TWLNR/L 08	95°	25	23	200	40	17	32	WN..0804
S32S TWLNR/L 08		32	30	250	45	22	40	
S40T TWLNR/L 08		40	37	300	45	27	50	

◎ INSERTS TO BE ORDERED SEPARATELY

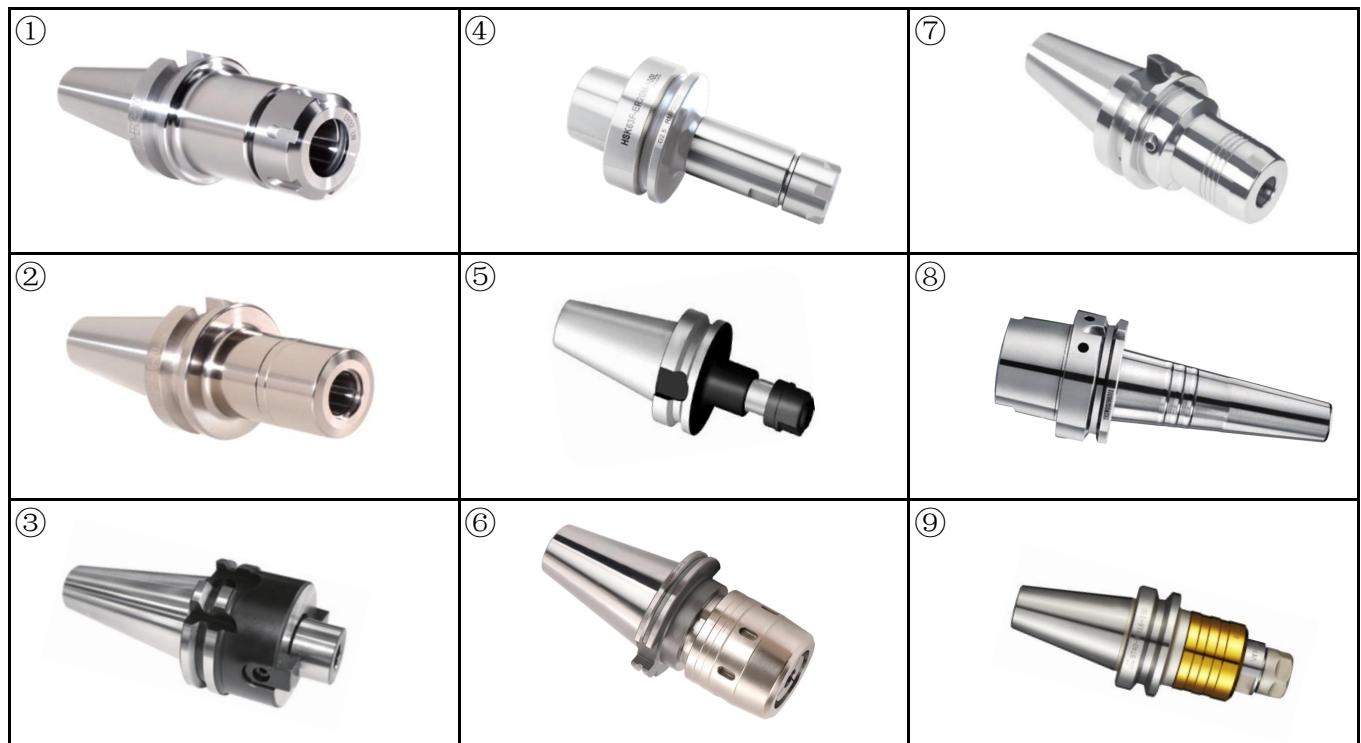
◎ For blade selection, see blade details page E31

◎ Standard shank without internal coolant

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
ACC ESS ORY	WN..0804	CYT4	CLT5023	CPT4	CDTW0804	CSC5012	CBL40
	WN..0804(40柄径)	CYT4	CLT5023	CPT4	CDTW0806	CSC4090	CBL40

# 工具系统-刀柄系列

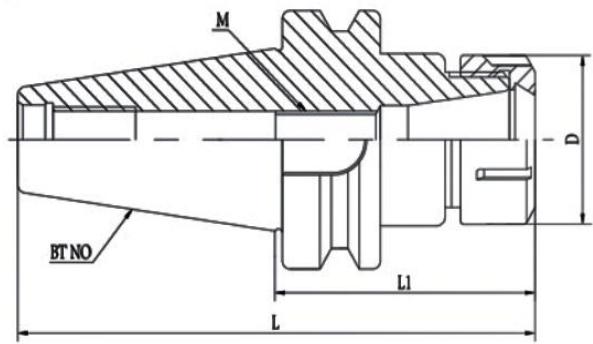




## BT-ER



Tool system tool holder series: elastic collet tool holder

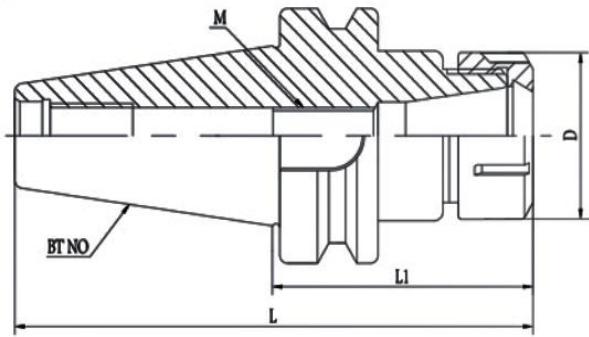


MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT30-ER11-60	60	108.4		19	0.5-7	ER11	OW/ER11
BT30-ER11-100	100	148.4					
BT30-ER16-60	60	108.4		28	1-10	ER16	ER16-A
BT30-ER16-100	100	148.4					OW/ER16
BT30-ER20-60	60	108.4		34	2-13	ER20	ER20-A
BT30-ER20-100	100	148.4					OW/ER20
BT30-ER25-60	60	108.4		42	2-16	ER25	ER25-UM
BT30-ER25-100	100	148.4					UW/ER25
BT30-ER32-60	60	108.4		50	3-20	ER32	ER32-UM
BT30-ER32-100	100	148.4					UW/ER32

BT40-ER11-70	70	135.4		19	0.5-7	ER11	ER11-A	OW/ER11
BT40-ER11-100	100	165.4						
BT40-ER16-70	70	135.4		28	1-10	ER16	ER16-A	OW/ER16
BT40-ER16-100	100	165.4						
BT40-ER16-150	150	215.4						
BT40-ER20-70	70	135.4		34	2-13	ER20	ER20-A	OW/ER20
BT40-ER20-100	100	165.4						
BT40-ER20-150	150	215.4						
BT40-ER25-70	70	135.4		42	2-16	ER25	ER25-UM	UW/ER25
BT40-ER25-100	100	165.4						
BT40-ER25-150	150	215.4						
BT40-ER32-70	70	135.4		50	3-20	ER32	ER32-UM	UW/ER32
BT40-ER32-100	100	165.4						
BT40-ER32-150	150	215.4						

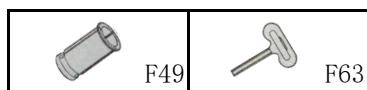
# BT-ER

elastic collet tool holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT40-ER40-80	80	145.4	63	3-26	ER40	ER40-UM	UW/ER40
BT40-ER40-100	100	165.4					
BT40-ER40-150	150	215.4					

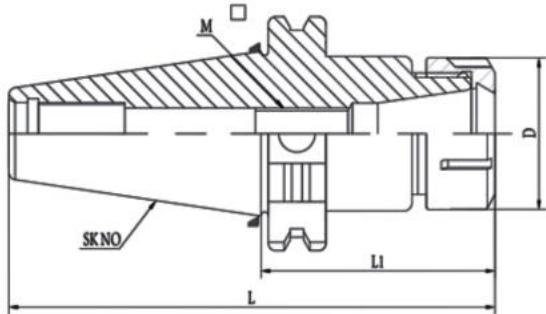
BT50-ER16-70	70	171.8	28	1-10	ER16	ER16-A	OW/ER16
BT50-ER16-100	100	201.8					
BT50-ER16-150	150	251.8					
BT50-ER20-70	70	171.8	34	2-13	ER20	ER20-A	OW/ER20
BT50-ER20-100	100	201.8					
BT50-ER20-150	150	251.8					
BT50-ER25-70	70	171.8	42	2-16	ER25	ER25-UM	UW/ER25
BT50-ER25-100	100	201.8					
BT50-ER25-150	150	251.8					
BT50-ER32-70	70	171.8	50	3-20	ER32	ER32-UM	UW/ER32
BT50-ER32-100	100	201.8					
BT50-ER32-150	150	251.8					
BT50-ER40-80	80	181.8	63	3-26	ER40	ER40-UM	UW/ER40
BT50-ER40-100	100	201.8					
BT50-ER40-150	150	251.8					
BT50-ER40-200	200	301.8					



# SK-ER



elastic collet tool holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
SK30-ER11-60	60	107.8		19	0.5-7	ER11	ER11-A
SK30-ER11-100	100	147.8					OW/ER11
SK30-ER16-60	60	107.8		28	1-10	ER16	ER16-A
SK30-ER16-100	100	147.8					OW/ER16
SK30-ER20-60	60	107.8		34	2-13	ER20	ER20-A
SK30-ER20-100	100	147.8					OW/ER20
SK30-ER25-60	60	107.8		42	2-16	ER25	ER25-A
SK30-ER25-100	100	147.8					UW/ER25
SK30-ER32-60	60	107.8		50	3-20	ER32	ER32-A
SK30-ER32-100	100	147.8					UW/ER32

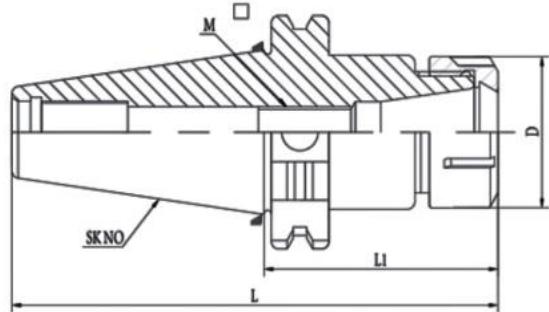
SK40-ER11-70	70	138.4		19	0.5-7	ER11	ER11-A	OW/ER11
SK40-ER11-100	100	168.4						
SK40-ER16-70	70	138.4		28	1-10	ER16	ER16-A	OW/ER16
SK40-ER16-100	100	168.4						
SK40-ER16-150	150	218.4						
SK40-ER20-70	70	138.4		34	2-13	ER20	ER20-A	OW/ER20
SK40-ER20-100	100	168.4						
SK40-ER20-150	150	218.4						
SK40-ER25-70	70	138.4		42	2-16	ER25	ER25-UM	UW/ER25
SK40-ER25-100	100	168.4						
SK40-ER25-150	150	218.4						



# SK-ER



elastic collet tool holder



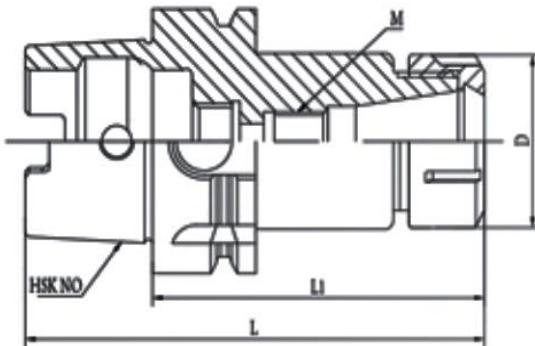
MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
SK40-ER32-70	70	138.4	50	3-20	ER32	ER32-UM	UW/ER32
SK40-ER32-100	100	168.4					
SK40-ER32-150	150	218.4					
SK40-ER40-80	80	148.4	63	3-26	ER40	ER40-UM	UW/ER40
SK40-ER40-100	100	168.4					
SK40-ER40-150	150	218.4					

SK50-ER16-70	70	171.8	28	1-10	ER16	ER16-A	OW/ER16
SK50-ER16-100	100	201.8					
SK50-ER16-150	150	251.8					
SK50-ER20-70	70	171.8	34	2-13	ER20	ER20-A	OW/ER20
SK50-ER20-100	100	201.8					
SK50-ER20-150	150	251.8					
SK50-ER25-70	70	171.8	42	2-16	ER25	ER25-UM	UW/ER25
SK50-ER25-100	100	201.8					
SK50-ER25-150	150	251.8					
SK50-ER32-70	70	171.8	50	3-20	ER32	ER32-UM	UW/ER32
SK50-ER32-100	100	201.8					
SK50-ER32-150	150	251.8					
SK50-ER40-80	80	171.8	63	3-26	ER40	ER40-UM	UW/ER40
SK50-ER40-100	100	201.8					
SK50-ER40-150	150	251.8					
SK50-ER40-200	200	301.8					

# HSK-ER



elastic collet tool holder



MODEL	DIMENSION		Clamping range	collet	SCREW
	L1	D			
HSK40A-ER11-80	80	19	0.5-7	ER11	ER11-A
HSK40A-ER11-100	100				
HSK40A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK40A-ER16-100	100				
HSK40A-ER20--80	80	34	1.0-12	ER20	ER20-A
HSK40A-ER20-100	100				
HSK40A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK40A-ER25-100	100				
HSK40A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK40A-ER32-100	100				

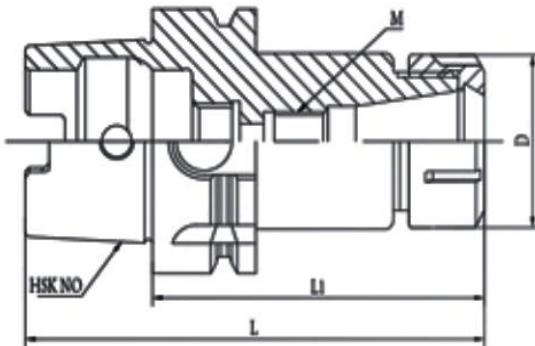
HSK50A-ER11-80	80	19	0.5-7	ER11	ER11-A
HSK50A-ER11-100	100				
HSK50A-ER11-120	120				
HSK50A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK50A-ER16-100	100				
HSK50A-ER16-120	120				
HSK50A-ER20-80	80	34	1.0-12	ER20	ER20-A
HSK50A-ER20-100	100				
HSK50A-ER20-120	120				
HSK50A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK50A-ER25-100	100				
HSK50A-ER25-120	120				
HSK50A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK50A-ER32-100	100				
HSK50A-ER32-120	120				



# HSK-ER



elastic collet tool holder



MODEL	DIMENSION		Clamping range	collet	SCREW
	L1	D			
HSK63A-ER11-75	75	19	0.5-7	ER11	ER11-A
HSK63A-ER16-80	80				
HSK63A-ER16-100	100				
HSK63A-ER16-120	120				
HSK63A-ER16-160	160				
HSK63A-ER20-80	80				
HSK63A-ER20-100	100				
HSK63A-ER20-120	120				
HSK63A-ER20-160	160				
HSK63A-ER25-80	80				
HSK63A-ER25-100	100				
HSK63A-ER25-120	120				
HSK63A-ER25-160	160				
HSK63A-ER32-80	80				
HSK63A-ER32-100	100				
HSK63A-ER32-120	120				
HSK63A-ER32-160	160				
HSK63A-ER40-80	80				
HSK63A-ER40-100	100				
HSK63A-ER40-120	120				
HSK63A-ER40-160	160				
HSK80A-ER16-100	100	28	0.5-10	ER16	ER16-A
HSK80A-ER20-100	100	34	1.0-12	ER20	ER20-A
HSK80A-ER25-100	100	42	1.0-16	ER25	ER25-UM
HSK80A-ER32-100	100	50	2.0-20	ER32	ER32-UM
		63	3.0-26	ER40	ER40-UM

◇ ERcollet PAGE E46

◇ ER WRENCH PAGE E60



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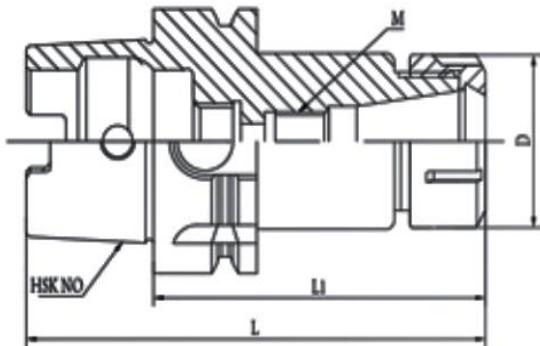


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# HSK-ER



elastic collet tool holder



MODEL	DIMENSION		Clamping range	collet	SCREW
	L1	D			
HSK100A-ER16-100	100	28	0.5-10	ER16	ER16-A
HSK100A-ER16-120	120				
HSK100A-ER16-160	160				
HSK100A-ER20-100	100	34	1.0-12	ER20	ER20-A
HSK100A-ER20-120	120				
HSK100A-ER20-160	160				
HSK100A-ER25-100	100	42	1.0-16	ER25	ER25-UM
HSK100A-ER25-120	120				
HSK100A-ER25-160	160				
HSK100A-ER32-100	100	50	2.0-20	ER32	ER32-UM
HSK100A-ER32-120	120				
HSK100A-ER32-160	160				
HSK100A-ER40-100	100	63	3.0-26	ER40	ER40-UM
HSK100A-ER40-120	120				
HSK100A-ER40-160	160				

◇ ERcollet PAGE E46

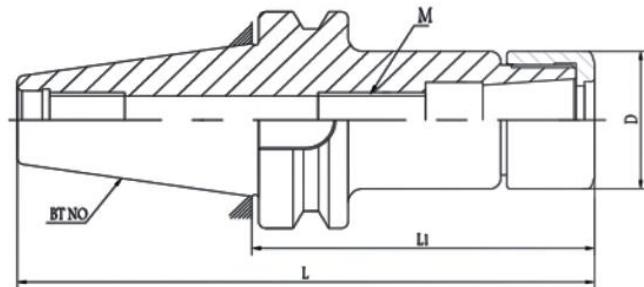
◇ ER WRENCH PAGE E60



# BT-GSK



High-speed precision collet holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT30-GSK06-60	60	108.4	20	2-6	GSK06	GSK06	OB/SK06
BT30-GSK06-80	80	128.4					
BT30-GSK10-70	70	118.4	27	2-10	GSK10	GSK10	OB/SK10
BT30-GSK10-95	95	143.4					
BT30-GSK16-60	60	108.4	40	3-16	GSK16	GSK16	OB/SK16
BT30-GSK16-80	80	128.4					
BT30-GSK16-100	100	148.4					
BT30-GSK25-80	80	128.4	54	6-25.4	GSK25	GSK25	OB/SK25

BT40-GSK06-65	65	130.4	20	2-6	GSK06	GSK06	OB/SK06
BT40-GSK06-85	85	150.4					
BT40-GSK10-55	55	120.4	27	2-10	GSK10	GSK10	OB/SK10
BT40-GSK10-80	80	145.4					
BT40-GSK10-100	100	165.4					
BT40-GSK10-150	150	215.4					
BT40-GSK16-55	55	120.4	40	3-16	GSK16	GSK16	OB/SK16
BT40-GSK16-80	80	145.4					
BT40-GSK16-100	100	165.4					
BT40-GSK16-150	150	215.4					
BT40-GSK25-70	70	135.4	54	6-25.4	GSK25	GSK25	OB/SK25
BT40-GSK25-95	95	160.4					
BT40-GSK25-110	110	175.4					



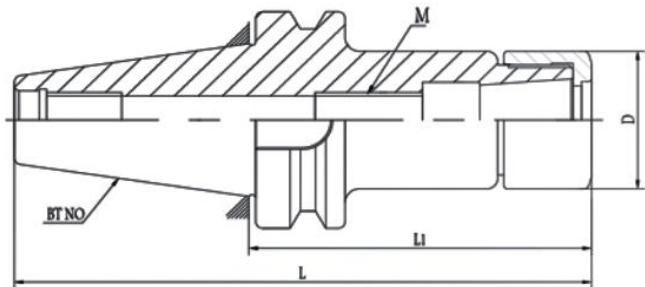
F56



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F09

## High-speed precision collet holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT50-GSK06-70	70	171.8		20	2-6	GSK06	OB/SK06
BT50-GSK06-100	100	201.8					
BT50-GSK10-100	100	201.8					
BT50-GSK10-130	130	231.8		27	2-10	GSK10	OB/SK10
BT50-GSK10-150	150	251.8					
BT50-GSK16-100	100	201.8					
BT50-GSK16-130	130	231.8		40	3-16	GSK16	OB/SK16
BT50-GSK16-150	150	251.8					
BT50-GSK25-100	100	201.8					
BT50-GSK25-130	130	231.8		54	6-25.4	GSK25	OB/SK25
BT50-GSK25-150	150	251.8					

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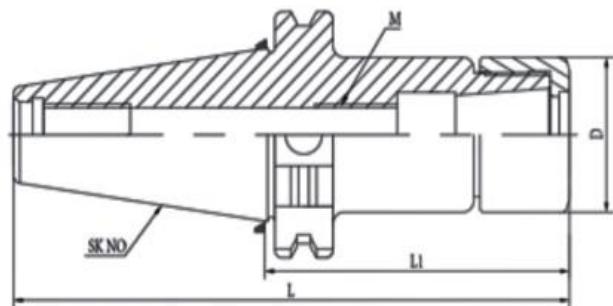


F56



F63

## High-speed precision collet holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
SK30-GSK06-55	60	102.8	20	2-6	GSK06	GSK06	OB/SK06
SK30-GSK10-70	80	117.8	27	2-10	GSK10	GSK10	OB/SK10
SK30-GSK10-95	70	142.8					
SK30-GSK16-85	95	132.8	40	3-16	GSK16	GSK16	OB/SK16
SK30-GSK16-100	60	147.8					
SK30-GSK25-85	80	132.8	54	6-25.4	GSK25	GSK25	OB/SK25
SK40-GSK06-70	70	138.4	20	2-6	GSK06	GSK06	OB/SK06
SK40-GSK06-100	100	168.4					
SK40-GSK10-80	80	148.4	27	2-10	GSK10	GSK10	OB/SK10
SK40-GSK10-100	100	168.4					
SK40-GSK16-80	80	148.4	40	3-16	GSK16	GSK16	OB/SK16
SK40-GSK16-100	100	168.4					
SK40-GSK25-95	95	163.4	54	6-25.4	GSK25	GSK25	OB/SK25
SK40-GSK25-100	110	178.4					
SK50-GSK06-80	80	181.75	20	2-6	GSK06	GSK06	OB/SK06
SK50-GSK10-100	100	201.75	27	2-10	GSK10	GSK10	OB/SK10
SK50-GSK10-130	130	231.75					
SK50-GSK16-100	100	201.75	40	3-16	GSK16	GSK16	OB/SK16
SK50-GSK16-130	130	231.75					
SK50-GSK16-150	150	251.75	54	6-25.4	GSK25	GSK25	OB/SK25
SK50-GSK25-100	100	201.75					
SK50-GSK25-130	130	231.75	54	6-25.4	GSK25	GSK25	OB/SK25
SK50-GSK25-150	150	251.75					



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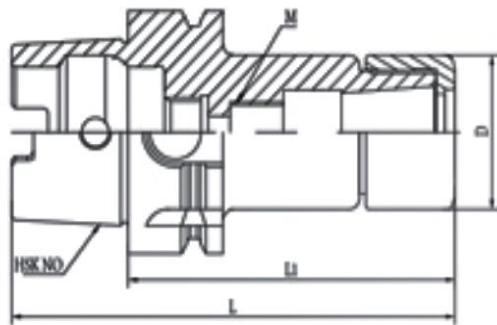


F63

# HSK-GSK



High-speed precision collet holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
HSK63A-GSK06-80	80	112	20	2-6	GSK06	GSK06	OB/SK06
HSK63A-GSK10-60	60	92					
HSK63A-GSK10-80	80	112	27	2-10	GSK10	GSK10	OB/SK10
HSK63A-GSK10-100	100	132					
HSK63A-GSK16-80	80	112	40	3-16	GSK16	GSK16	OB/SK16
HSK63A-GSK25-90	90	122	54	6-25.4	GSK25	GSK25	OB/SK25

F12



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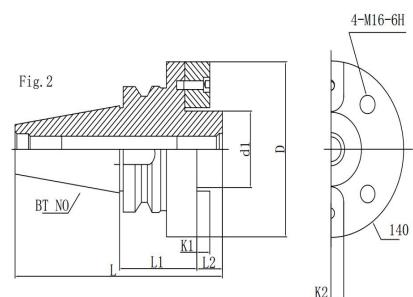
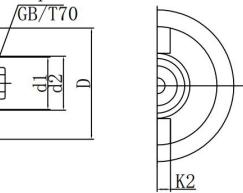
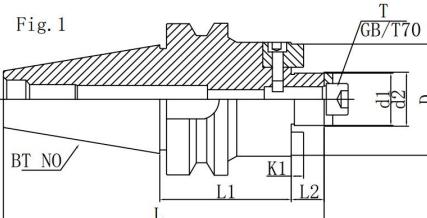


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# BT-FMB



face mill cutter holder



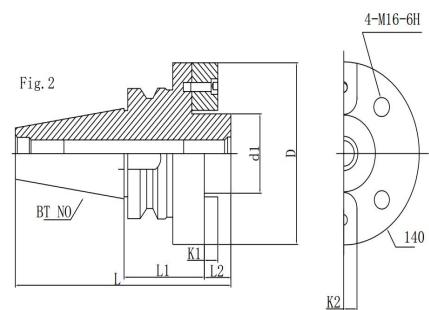
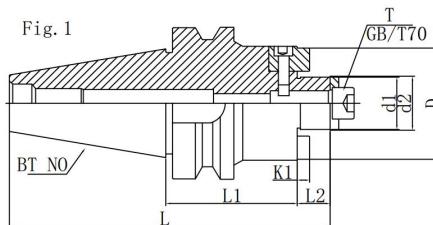
MODEL	DIMENSION								type	T
	L1	L	L2	d1	d2	D	K	K2		
BT30-FMB22-45	45	109. 9							Fig. 1	M10x30
BT30-FMB22-60	60	124. 9	16. 5	22	26	45	4. 8	10		
BT30-FMB27-45	45	111. 9								M12x30
BT30-FMB27-60	60	126. 9	18. 5	27	33	54	5. 8	12		
BT30-FMB32-60	60	130. 4	22	32	41	58	6. 8	14		M16x35

BT40-FMB22-45	45	126. 9	16. 5	22	26	48	4. 8	10	Fig. 1	M10x30
BT40-FMB22-60	60	141. 9								
BT40-FMB22-100	100	181. 9								
BT40-FMB22-150	150	231. 9								
BT40-FMB27-45	45	128. 9	18. 5	27	33	60	5. 8	12	Fig. 1	M12x30
BT40-FMB27-60	60	143. 9								
BT40-FMB27-100	100	183. 9								
BT40-FMB27-150	150	233. 9								
BT40-FMB27-200	200	283. 9								
BT40-FMB32-60	60	147. 4								
BT40-FMB32-100	100	187. 4	20	32	41	62	6. 8	14	Fig. 1	M16x35
BT40-FMB32-150	150	237. 4								
BT40-FMB32-200	200	287. 4								

# BT-FMB



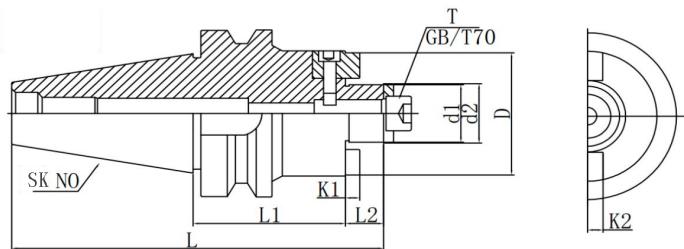
face mill cutter holder



MODEL	DIMENSION								type	T				
	L1	L2	d1	d2	D	K	K2	D3						
BT40-FMB40-60	60	23	40	48	80	8	16	\	Fig. 1	M16x35				
BT40-FMB40-100	100													
BT40-FMB40-150	150			\	98			66.7						
BT40-FMB40-200	200													
BT40-FMC40-60	60													
BT50-FMB22-60	60	16.5	22	26	48	4.8	10	\	Fig. 1	M10x30				
BT50-FMB22-100	100													
BT50-FMB22-150	150													
BT50-FMB22-200	200													
BT50-FMB27-60	60	18.5	27	33	60	5.8	12	\	Fig. 1	M12x30				
BT50-FMB27-100	100													
BT50-FMB27-150	150													
BT50-FMB27-200	200													
BT50-FMB32-60	60	20	32	41	73	6.8	14	\	Fig. 1	M16x35				
BT50-FMB32-100	100													
BT50-FMB32-150	150													
BT50-FMB32-200	200													
BT50-FMB40-60	60	23	40	48	80	8	16	\	Fig. 1	M16x35				
BT50-FMB40-100	100													
BT50-FMB40-150	150			\	98			66.7						
BT50-FMB40-200	200													
BT50-FMC40-60	60													
BT50-FMC60.129-75	75	25	60	\	129	12.5	25.4	101.6	Fig. 2	M16x35				
BT50-FMC60.129-100	100													

# SK-FMB

face mill cutter holder

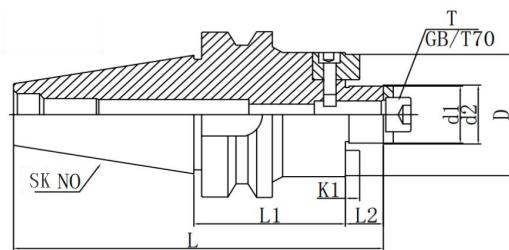


MODEL	DIMENSION								T
	L1	L	L2	d1	d2	D	K1	K2	
SK30-FMB22-45	45	109.3	16.5	22	26	45	4.8	10	M10x30
SK30-FMB22-60	60	124.3							
SK30-FMB27-45	45	111.3	18.5	27	33	54	5.8	12	M12x30
SK30-FMB27-60	60	126.3							
SK30-FMB32-60	60	130.3	22	32	41	58	6.8	14	M16x35

SK40-FMB22-45	45	129.9	16.5	22	26	48	4.8	10	M10x30
SK40-FMB22-60	60	144.9							
SK40-FMB22-100	100	184.9							
SK40-FMB22-150	150	234.9							
SK40-FMB27-45	45	131.9	18.5	27	33	60	5.8	12	M12x30
SK40-FMB27-60	60	146.9							
SK40-FMB27-100	100	186.9							
SK40-FMB27-150	150	236.9							
SK40-FMB27-200	200	286.9							
SK40-FMB32-60	60	150.4	20	32	41	62	6.8	14	M16x35
SK40-FMB32-100	100	190.4							
SK40-FMB32-150	150	240.4							
SK40-FMB32-200	200	290.4							
SK40-FMB40-60	60	153.4	23	40	48	80	8	16	M16x35
SK40-FMB40-100	100	193.4							
SK40-FMB40-150	150	243.4							
SK40-FMB40-200	200	293.4							

# SK-FMB

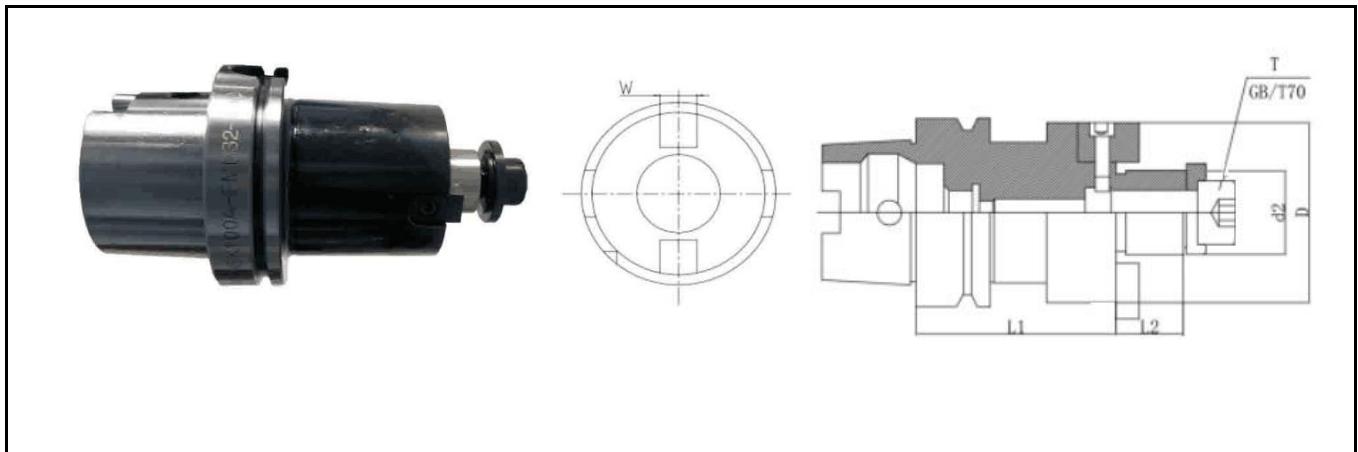
face mill cutter holder



MODEL	DIMENSION								T
	L1	L	d1	d2	D	L2	K1	K2	
SK50-FMB22-60	60	178.25	22	26	48	16.5	4.8	10	M10x30
SK50-FMB22-100	100	218.25							
SK50-FMB22-150	150	268.25							
SK50-FMB22-200	200	318.25							
SK50-FMB27-60	60	180.25	27	33	60	18.5	5.8	12	M12x30
SK50-FMB27-100	100	220.25							
SK50-FMB27-150	150	270.25							
SK50-FMB27-200	200	320.25							
SK50-FMB32-60	60	183.75	32	41	73	20	6.8	14	M16x35
SK50-FMB32-100	100	223.75							
SK50-FMB32-150	150	273.75							
SK50-FMB32-200	200	333.75							
SK50-FMB40-60	60	186.75	40	48	80	23	8	16	M16x35
SK50-FMB40-100	100	226.75							
SK50-FMB40-150	150	276.75							
SK50-FMB40-200	200	326.75							

# HSK-FMB

face mill cutter holder



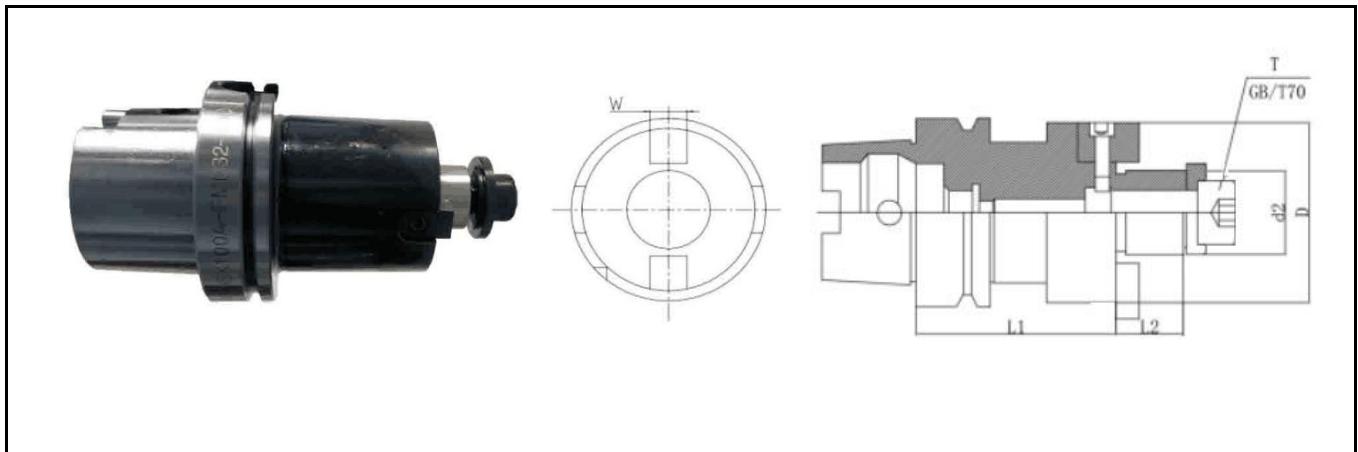
MODEL	DIMENSION					T
	L1	d2	D	L2	W	
HSK40A-FMB16-60	50	16	40	16.5	8	M8x25
HSK40A-FMB22-50	50	22	48	16.5	10	M10x30
HSK40A-FMB27-60	60	27	60	18.5	12	M12x30

HSK50A-FMB16-60	50	16	40	16.5	8	M8x25
HSK50A-FMB22-50	50	22	48	16.5	10	M10x30
HSK50A-FMB27-60	60	27	60	18.5	12	M12x30

HSK63A-FMB16-50	50	16	40	16.5	8	M8x25
HSK63A-FMB16-100	100					
HSK63A-FMB16-145	145					
HSK63A-FMB22-50	50	22	48	16.5	10	M10x30
HSK63A-FMB22-100	100					
HSK63A-FMB22-160	160					
HSK63A-FMB27-60	60	27	60	18.5	12	M12x30
HSK63A-FMB27-100	100					
HSK63A-FMB27-160	160					
HSK63A-FMB32-60	60	32	62	20	14	M16x35
HSK63A-FMB32-100	100					
HSK63A-FMB32-160	160					
HSK63A-FMB40-60	60	40	80	23	16	M16x35

# HSK-FMB

face mill cutter holder

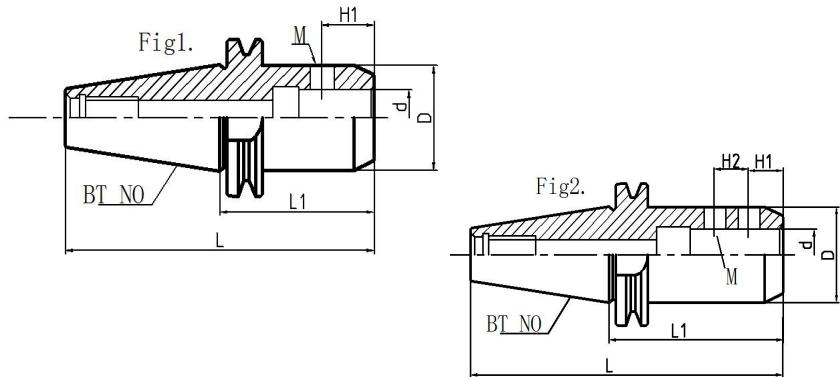


MODEL	DIMENSION					T
	L1	d2	D	L2	W	
HSK100A-FMB22-50	50	22	48	16.5	10	M10x30
HSK100A-FMB22-100	100					
HSK100A-FMB27-50	50	27	60	18.5	12	M12x30
HSK100A-FMB27-100	100					
HSK100A-FMB27-160	160	32	73	20	14	M16x35
HSK100A-FMB32-50	50					
HSK100A-FMB32-100	100	40	80	23	16	M16x35
HSK100A-FMB32-160	160					
HSK100A-FMB40-60	60	40	80	23	16	M16x35
HSK100A-FMB40-100	100					
HSK100A-FMB40-160	160					

# BT-SLN



SLN Side mount handle holder



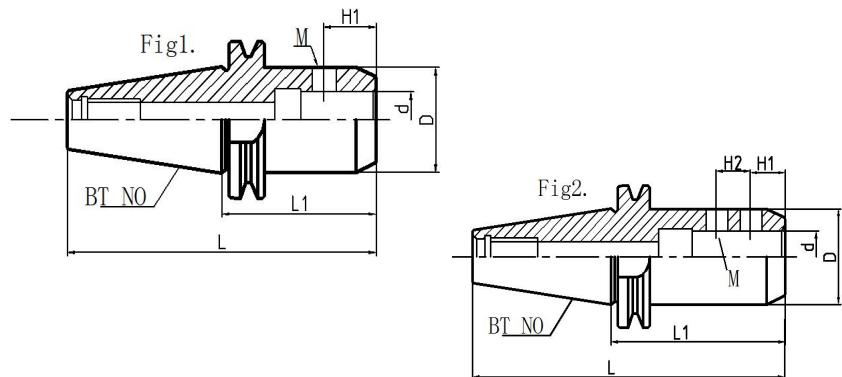
MODEL	DIMENSION						handle d	type
	D	M	L	L1	H1	H2		
BT30-SLN06-60	25	M6	108.4	60	18	—	6	Fig. 1
BT30-SLN08-60	28	M8			18		8	
BT30-SLN10-60	35	M10			20		10	
BT30-SLN12-60	42	M12			22.5		12	
BT30-SLN16-75	48	M12	123.4	75	24		16	
BT30-SLN20-63	52	M16	111.4	63	25		20	
BT30-SLN20-75	52	M16	123.4	75	25			
BT30-SLN25-80	65	M16	128.4	80	24	25	25	Fig. 2
BT30-SLN25-90	65	M16	138.4	90	24			
BT30-SLN25-100	65	M16	148.4	100	24			

BT40-SLN06-50	25	M6	115.4	50	18	—	6	Fig. 1
BT40-SLN08-50	28	M8			18		8	
BT40-SLN10-63	35	M10			20		10	
BT40-SLN12-63	42	M12			22.5		12	
BT40-SLN16-63	48	M12			24		16	
BT40-SLN20-63	52	M16			25		20	
BT40-SLN25-90	65	M16	155.4	90	24	25	25	Fig. 2
BT40-SLN25-100	65	M16	165.4	100	24			
BT40-SLN32-100	72	M20			24		28	
BT40-SLN40-105	80	M20			30		32	
BT40-SLN42-105	82	M20	170.4	105	30	32	40	Fig. 2
					30		42	

# BT-SLN

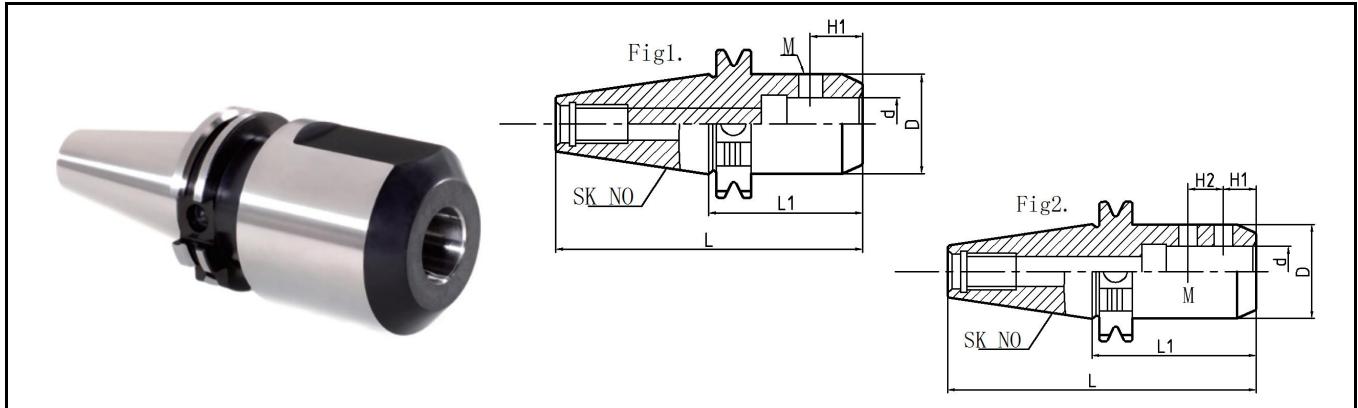


SLN Side mount handle holder



MODEL	DIMENSION						handle	type
	D	M	L	L1	H1	H2		
BT50-SLN06-63	25	M6	164.8	63	18	20	6	Fig. 1
BT50-SLN08-63	28	M8			18		8	
BT50-SLN10-63	35	M10			20		10	
BT50-SLN12-80	42	M12	181.8	80	22.5	25	12	
BT50-SLN16-80	48	M12			24		16	
BT50-SLN20-80	52	M16			25		20	
BT50-SLN25-100	65	M16	201.8	100	24	25	25	Fig. 2
BT50-SLN32-105	72	M20	206.8	105	24	28	32	
BT50-SLN40-115	80	M20	216.8	115	30	32	40	
BT50-SLN42-120	82	M20	221.8	120	30		42	

## Side mount handle holder



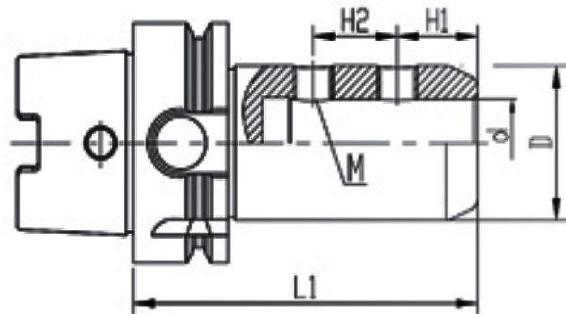
MODEL	DIMENSION							type
	D	M	d	L	L1	H1	H2	
SK30-SLN06-50	25	M6	6	97.8	50	18	—	Fig. 1
SK30-SLN08-50	28	M8	8			18		Fig. 1
SK30-SLN10-50	35	M10	10			20		Fig. 1
SK30-SLN12-50	42	M12	12			22.5		Fig. 1
SK30-SLN16-63	48	M12	16			24		Fig. 1
SK30-SLN20-63	52	M16	20			25		Fig. 1

SK40-SLN06-50	25	M6	6	118.4	50	18	—	Fig. 1
SK40-SLN08-50	28	M8	8			18		Fig. 1
SK40-SLN10-50	35	M10	10			20		Fig. 1
SK40-SLN12-50	42	M12	12			22.5		Fig. 1
SK40-SLN16-63	48	M12	16	131.4	63	24	—	Fig. 1
SK40-SLN20-63	52	M16	20			25		Fig. 1
SK40-SLN25-100	65	M16	25	168.4	100	24	25	Fig. 2
SK40-SLN32-100	72	M20	32			24	28	Fig. 2
SK50-SLN06-63	25	M6	6	164.75	63	18	—	Fig. 1
SK50-SLN08-63	28	M8	8			18		Fig. 1
SK50-SLN10-63	35	M10	10			20		Fig. 1
SK50-SLN12-63	42	M12	12			22.5		Fig. 1
SK50-SLN16-63	48	M12	16			24		Fig. 1
SK50-SLN20-63	52	M16	20			25		Fig. 1
SK50-SLN25-80	65	M16	25	181.75	80	24	25	Fig. 2
SK50-SLN32-100	72	M20	32	201.75	100	24	28	Fig. 2
SK50-SLN40-100	90	M20	40			30	32	Fig. 2
SK50-SLN42-100	100	M20	42			30	32	Fig. 2

# HSK-SLN



Side mount handle

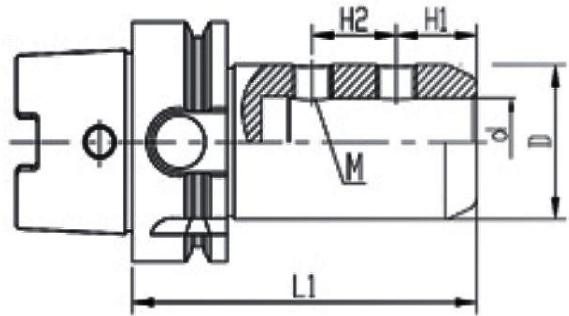


MODEL	DIMENSION					
	L1	d	D	H1	H2	M
HSK63A-SLN06-65	65	6	25	12	10	M6
HSK63A-SLN06-100	100					
HSK63A-SLN06-120	120					
HSK63A-SLN08-65	65	8	28	14	12	M8
HSK63A-SLN08-120	120					
HSK63A-SLN08-160	160					
HSK63A-SLN10-65	65	10	35	15	14	M10
HSK63A-SLN10-120	120					
HSK63A-SLN10-160	160					
HSK63A-SLN12-80	80	12	42	20	16	M12
HSK63A-SLN12-120	120					
HSK63A-SLN12-160	160					
HSK63A-SLN16-80	80	16	48	22	18	M12
HSK63A-SLN16-120	120					
HSK63A-SLN16-160	160					
HSK63A-SLN20-80	80	20	52	25	20	M16
HSK63A-SLN20-120	120					
HSK63A-SLN20-160	160					
HSK63A-SLN25-110	110	25	65	24	25	M16
HSK63A-SLN25-160	160					
HSK63A-SLN32-110	110	32	72	24	28	M20
HSK63A-SLN32-160	160					

# HSK-SLN



Side mount handle

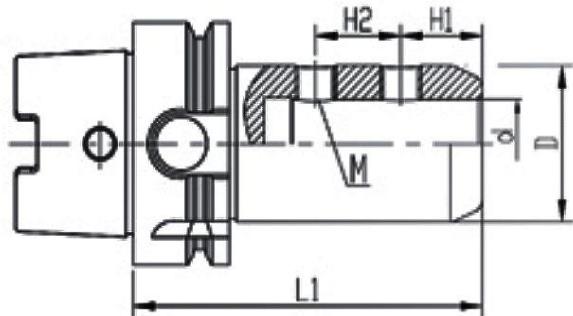


MODEL	DIMENSION					
	L1	d	D	H1	H2	M
HSK80A-SLN06-80	80	6	25	12	10	M6
HSK80A-SLN06-120	120					
HSK80A-SLN06-160	160					
HSK80A-SLN08-80	80	8	28	14	12	M8
HSK80A-SLN08-120	120					
HSK80A-SLN08-160	160					
HSK80A-SLN10-80	80	10	35	15	14	M10
HSK80A-SLN10-120	120					
HSK80A-SLN10-160	160					
HSK80A-SLN12-80	80	12	42	20	16	M12
HSK80A-SLN12-120	120					
HSK80A-SLN12-160	160					
HSK80A-SLN16-100	100	16	48	22	18	M12
HSK80A-SLN16-160	160					
HSK80A-SLN20-100	100	20	52	25	20	M16
HSK80A-SLN20-160	160					
HSK80A-SLN25-100	100	25	65	24	25	M16
HSK80A-SLN25-160	160					
HSK80A-SLN32-100	100	32	72	24	28	M20
HSK80A-SLN32-160	160					
HSK80A-SLN40-120	120	40	84	30	32	M20
HSK80A-SLN40-160	160					

# HSK-SLN



Side mount handle

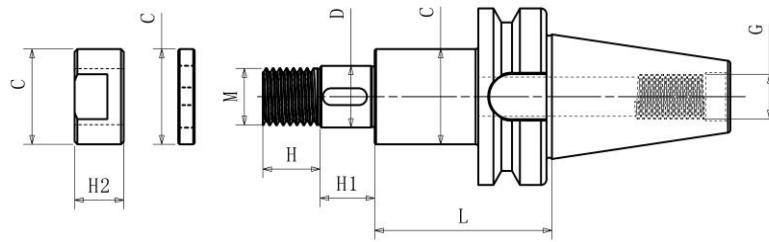


MODEL	DIMENSION					
	L1	d	D	H1	H2	M
HSK100A-SLN06-80	80	6	25	12	10	M6
HSK100A-SLN06-120	120					
HSK100A-SLN06-160	160					
HSK100A-SLN08-80	80	8	28	14	12	M8
HSK100A-SLN08-120	120					
HSK100A-SLN08-160	160					
HSK100A-SLN10-80	80	10	35	15	14	M10
HSK100A-SLN10-120	120					
HSK100A-SLN10-160	160					
HSK100A-SLN12-80	80	12	42	20	16	M12
HSK100A-SLN12-120	120					
HSK100A-SLN12-160	160					
HSK100A-SLN16-100	100	16	48	22	18	M12
HSK100A-SLN16-160	160					
HSK100A-SLN20-100	100	20	52	25	20	M16
HSK100A-SLN20-160	160					
HSK100A-SLN25-100	100	25	65	24	25	M16
HSK100A-SLN25-160	160					
HSK100A-SLN32-100	100	32	72	24	28	M20
HSK100A-SLN32-160	160					
HSK100A-SLN40-120	120	40	84	30	32	M20
HSK100A-SLN40-160	160					

# BT-XS



Side milling three-sided blade HOLDER



MODEL	DIMENSION						TYPE	M	G	<b>Kg</b>
	D	L	H	C	H1	H2				
BT30-XS13-75	13	75	15	20	30	12	BT30	M12×1.75	M12	0.6
BT30-XS16-75	16	75	16	26	30	13	BT30	M14×1.5	M12	0.7
BT30-XS22-75	22	75	21	34	30	18	BT30	M20×1.5	M12	0.8

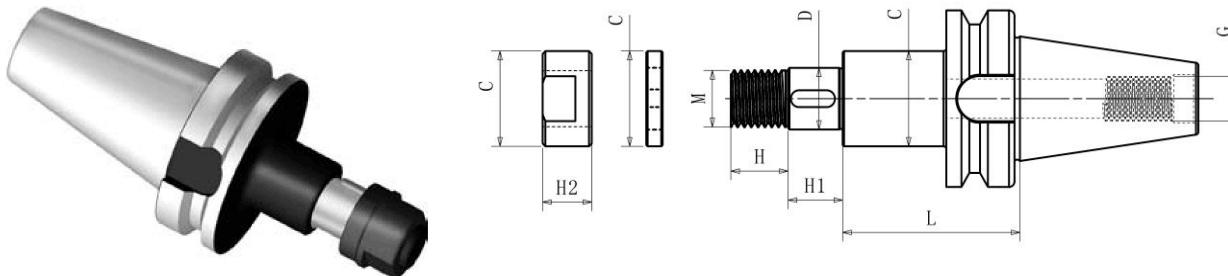
BT40-XS13-75	13	75	15	20	30	12	BT40	M12×1.75	M16	1.3
BT40-XS13-105	13	105	15	20	30	12	BT40	M12×1.75	M16	1.4
BT40-XS16-75	16	75	16	26	30	13	BT40	M14×1.5	M16	1.4
BT40-XS16-105	16	105	16	26	30	13	BT40	M14×1.5	M16	1.5
BT40-XS22-75	22	75	21	34	30	18	BT40	M20×1.5	M16	1.6
BT40-XS22-105	22	105	21	34	30	18	BT40	M20×1.5	M16	1.9
BT40-XS27-75	27	75	25	40	30	21	BT40	M24×2.0	M16	2.1
BT40-XS27-120	27	120	25	40	30	21	BT40	M24×2.0	M16	2.5
BT40-XS32-90	32	90	30	45	30	26	BT40	M30×2.0	M16	2.6

BT50-XS13-75	13	75	15	20	30	12	BT50	M12×1.75	M24	3.7
BT50-XS13-105	13	105	15	20	30	12	BT50	M12×1.75	M24	3.8
BT50-XS16-90	16	90	16	26	30	13	BT50	M14×1.5	M24	4.0
BT50-XS16-120	16	120	16	26	30	13	BT50	M14×1.5	M24	4.1
BT50-XS22-90	22	90	21	34	30	18	BT50	M20×1.5	M24	4.3
BT50-XS22-135	22	135	21	34	30	18	BT50	M20×1.5	M24	4.6
BT50-XS27-90	27	90	25	40	30	21	BT50	M24×2.0	M24	4.7
BT50-XS27-135	27	135	25	40	30	21	BT50	M24×2.0	M24	5.1
BT50-XS32-90	32	90	30	46	30	26	BT50	M30×2.0	M24	5.1
BT50-XS32-135	32	135	30	46	30	26	BT50	M30×2.0	M24	5.7

# BT-XS



Side milling three-sided blade shank



MODEL	DIMENSION						TYPE	M	G	Kg
	D	L	H	C	H1	H2				
BT50-XS40-90	40	90	36	55	30	31	BT50	M36×2.0	M24	5.8
BT50-XS40-135	40	135	36	55	30	31	BT50	M36×2.0	M24	6.8
BT50-XS50-100	50	100	40	70	40	36	BT50	M48×2.0	M24	7.0
BT50-XS50-150	50	150	40	70	40	36	BT50	M48×2.0	M24	8.5

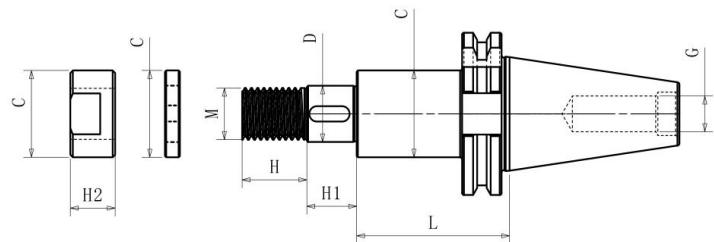
## ACCESSORY

MODEL	FLAT KEY	LOCK SCREW	spacer
XS13	-	LM M12×1.75	FJ XS13×5/10/20
XS16	PL08 4×4×25	LM M14×1.5	FJ XS16×5/10/20
XS22	PL08 6×6×25	LM M20×1.5	FJ XS22×5/10/20
XS27	PL08 7×7×25	LM M24×2.0	FJ XS27×5/10/20
XS32	PL08 8×7×25	LM M30×2.0	FJ XS32×5/10/20
XS40	PL08 10×8×25	LM M36×2.0	FJ XS40×5/10/20
XS50	PL08 12×8×25	LM M48×2.0	FJ XS50×5/10/20

# SK-XS



Side milling three-sided blade HOLDER



MODEL	DIMENSION						M	G	<b>Kg</b>
	D	L	H	C	H1	H2			
SK30-XS13-75	13	75	15	20	30	12	M12×1.75	M12	0.6
SK30-XS16-75	16	75	16	26	30	13	M14×1.5	M12	0.7
SK30-XS22-75	22	75	21	34	30	18	M20×1.5	M12	0.8

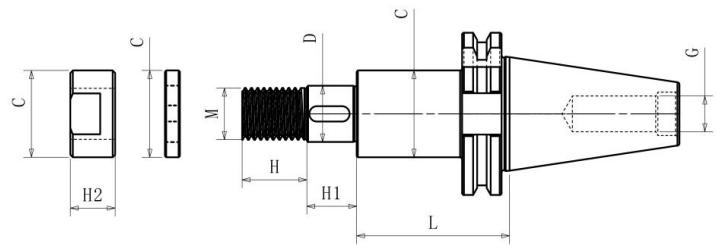
SK40-XS13-75	13	75	15	20	30	12	M12×1.75	M16	1.3
SK40-XS13-105	13	105	15	20	30	12	M12×1.75	M16	1.4
SK40-XS16-75	16	75	16	26	30	13	M14×1.5	M16	1.4
SK40-XS16-105	16	105	16	26	30	13	M14×1.5	M16	1.5
SK40-XS22-75	22	75	21	34	30	18	M20×1.5	M16	1.6
SK40-XS22-105	22	105	21	34	30	18	M20×1.5	M16	1.9
SK40-XS27-75	27	75	25	40	30	21	M24×2.0	M16	2.1
SK40-XS27-120	27	120	25	40	30	21	M24×2.0	M16	2.5
SK40-XS32-90	32	90	30	46	30	26	M30×2.0	M16	2.6

SK50-XS13-75	13	75	15	20	30	12	M12×1.75	M24	3.7
SK50-XS13-105	13	105	15	20	30	12	M12×1.75	M24	3.8
SK50-XS16-90	16	90	16	26	30	13	M14×1.5	M24	4.0
SK50-XS16-120	16	120	16	26	30	13	M14×1.5	M24	4.1
SK50-XS22-90	22	90	21	34	30	18	M20×1.5	M24	4.3
SK50-XS22-135	22	135	21	34	30	18	M20×1.5	M24	4.6
SK50-XS27-90	27	90	25	40	30	21	M24×2.0	M24	4.7
SK50-XS27-135	27	135	25	40	30	21	M24×2.0	M24	5.1
SK50-XS32-90	32	90	30	46	30	26	M30×2.0	M24	5.1
SK50-XS32-135	32	135	30	46	30	26	M30×2.0	M24	5.7

# SK-XS



Side milling three-sided blade HOLDER



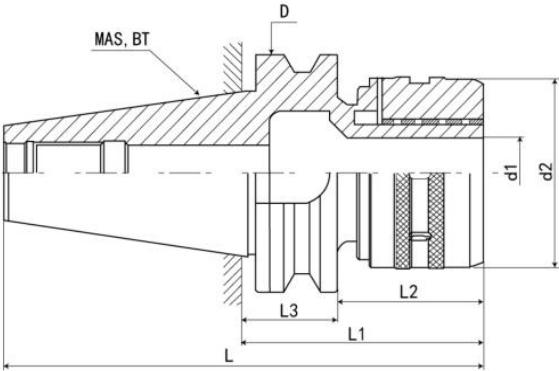
MODEL	DIMENSION						M	G	Kg
	D	L	H	C	H1	H2			
SK50-XS40-90	40	90	36	55	30	31	M36×2.0	M24	5.8
SK50-XS40-135	40	135	36	55	30	31	M36×2.0	M24	6.8
SK50-XS50-150	50	150	40	70	40	36	M48×2.0	M24	8.5

## ACCESSORY

MODEL	FLAT KEY	LOCK SCREW	spacer
XS13	-	LM M12×1.75	FJ XS13×5/10/20
XS16	PL08 4×4×25	LM M14×1.5	FJ XS16×5/10/20
XS22	PL08 6×6×25	LM M20×1.5	FJ XS22×5/10/20
XS27	PL08 7×7×25	LM M24×2.0	FJ XS27×5/10/20
XS32	PL08 8×7×25	LM M30×2.0	FJ XS32×5/10/20
XS40	PL08 10×8×25	LM M36×2.0	FJ XS40×5/10/20
XS50	PL08 12×8×25	LM M48×2.0	FJ XS50×5/10/20

BT-C

## High-precision powerful tool holder

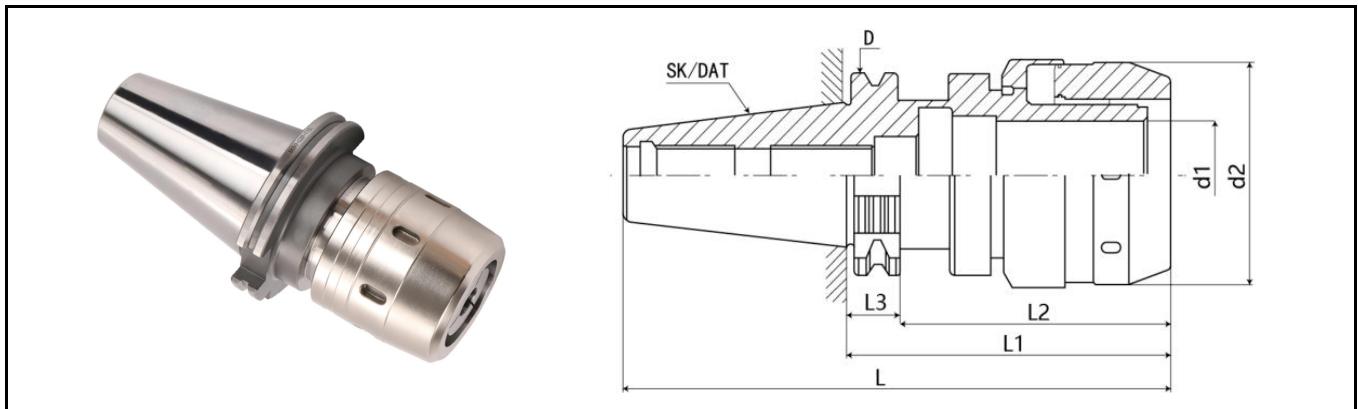


MODEL	handl e	DIMENSION							collet	Kg
		L	L1	L2	L3	D	d1	d2		
BT30-C20-80L	BT30	128.4	80	58	22	46	20	56	SC20	1.3
BT30-C25-100L		148.4	100	78	22	46	25	61	SC25	1.6
BT30-C32-105L		153.4	105	83	22	46	32	68	SC32	2.3
BT40-C20-100L	BT40	165.4	100	73	27	63	20	56	SC20	2.0
BT40-C25-100L		165.4	100	73	27	63	25	61	SC25	2.2
BT40-C25-135L		200.4	135	108	27	63	25	61		3.1
BT40-C32-105L		170.4	105	78	27	63	32	68	SC32	2.5
BT40-C32-135L		200.4	135	108	27	63	32	68		3.1
BT40-C32-165L		230.4	165	138	27	63	32	68		3.9
BT40-C32-200L		265.4	200	173	27	63	32	68		4.6
BT40-C32-250L		315.4	250	223	27	63	32	68		5.7
BT40-C42-130L		195.4	130	103	27	63	42	87	SC42	—
BT50-C25-110L	BT50	211.8	110	72	38	100	25	61	SC25	—
BT50-C25-165L		236.8	165	127	38	100	25	61		6.1
BT50-C32-110L		211.8	110	72	38	100	32	68		—
BT50-C32-135L		236.8	135	97	38	100	32	68	SC32	6.1
BT50-C32-165L		266.8	165	127	38	100	32	68		6.9
BT50-C32-200L		301.8	200	162	38	100	32	68		7.8
BT50-C32-250L		351.8	250	212	38	100	32	68		9.45
BT50-C32-300L		401.8	300	262	38	100	32	68		11.75
BT50-C32-350L		451.8	350	312	38	100	32	68		12.3
BT50-C32-400L		501.8	400	362	38	100	32	68		—
BT50-C32-450L		551.8	450	412	38	100	32	68		—
BT50-C42-135L		236.8	135	97	38	100	42	87	SC42	6.2
BT50-C42-165L		266.8	165	127	38	100	42	87		7.6
BT50-C42-200L		301.8	200	162	38	100	42	87		9.0

# SK-C



High-precision powerful tool holder

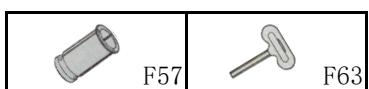


MODEL	handl e	DIMENSION							collet
		L	L1	L2	L3	d1	d2	D	
SK30-C20-85L	SK30	132.8	85	69	19.1	20	56	50	SC20
SK30-C20-100L		147.8	100	84	19.1	20	56	50	
SK30-C32-105L		152.8	105	89	19.1	32	68	63.55	SC32

SK40-C20-85L	SK40	132.8	85	69	19.1	20	56	63.55	SC20
SK40-C20-100L		147.8	100	84	19.1	20	56	63.55	
SK40-C20-135L		182.8	135	119	19.1	20	56	63.55	
SK40-C25-100L		147.8	100	84	19.1	25	61	63.55	SC25
SK40-C25-135L		182.8	135	119	19.1	25	61	63.55	
SK40-C32-105L		152.8	105	89	19.1	32	68	63.55	SC32
SK40-C32-135L		182.8	135	119	19.1	32	68	63.55	

SK50-C20-105L	SK50	206.75	105	89	19.1	20	56	97.5	SC20
SK50-C20-150L		251.75	150	134	19.1	20	56	97.5	
SK50-C25-105L		206.75	105	89	19.1	25	61	97.5	SC25
SK50-C25-165L		266.75	165	149	19.1	25	61	97.5	
SK50-C32-110L		211.75	110	94	19.1	32	68	97.5	SC32
SK50-C32-165L		266.75	165	149	19.1	32	68	97.5	
SK50-C32-200L		301.75	200	184	19.1	32	68	97.5	
SK50-C42-110L		211.75	110	94	19.1	42	87	97.5	SC42
SK50-C42-150L		251.75	150	134	19.1	42	87	97.5	

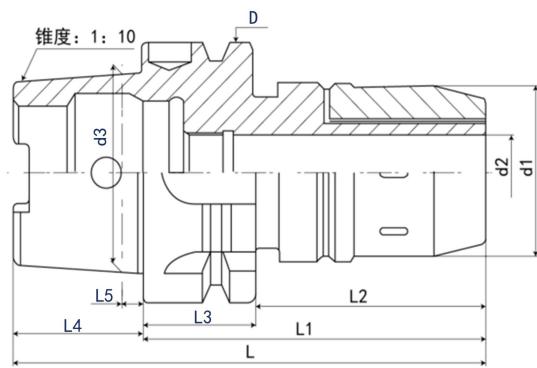
F30



HSK-C



High-precision powerful tool holder



MODEL	handl e	DIMENSION										colle ct
		D	L	L1	L2	L3	L4	L5	d1	d2	d3	
HSK50A-C20-120L	HSK50A	38	145	120	94	26	25	5	55	20	38	SC20
HSK50A-C25-120L		38	145	120	94	26	25	5	60	25	38	SC25

HSK63A-C20-95L	HSK63A	63	127	95	69	26	32	6.3	55	20	48	SC20
HSK63A-C20-110L		63	142	110	84	26	32	6.3	55	20	48	
HSK63A-C25-100L		63	132	100	74	26	32	6.3	60	25	48	
HSK63A-C25-130L		63	162	130	104	26	32	6.3	60	25	48	SC25
HSK63A-C32-110L		63	142	110	108	26	32	6.3	73	32	48	
HSK63A-C32-130L		63	162	130	104	26	32	6.3	73	32	48	
HSK63A-C32-150L		63	182	150	124	26	32	6.3	73	32	48	

HSK80A-C20-105L	HSK80A	80	145	105	79	26	40	8	55	20	60	SC20
HSK80A-C25-105L		80	145	105	79	26	40	8	60	25	60	SC25
HSK80A-C32-120L		80	160	120	94	26	40	8	73	32	60	SC32
HSK80A-C42-130L		80	170	130	104	26	40	8	95	42	60	SC42



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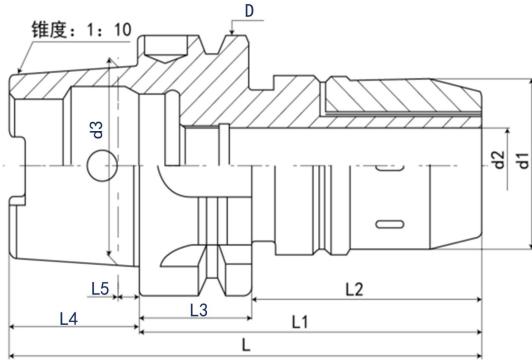


F63

HSK-C



## High-precision powerful tool holder



MODEL	handle	DIMENSION									collect
		D	L	L1	L2	L3	L4	L5	d1	d2	
HSK100A-C20-100L	HSK 100A	100	150	100	71	29	50	10	55	20	75
HSK100A-C20-110L		100	160	110	81	29	50	10	55	20	75
HSK100A-C20-130L		100	180	130	101	29	50	10	55	20	75

HSK100A-C25-100L	HSK 100A	100	150	100	71	29	50	10	60	25	75	SC25
HSK100A-C25-110L		100	160	110	81	29	50	10	60	25	75	
HSK100A-C25-130L		100	180	130	101	29	50	10	60	25	75	
HSK100A-C25-160L		100	210	160	130	29	50	10	60	25	75	

HSK100A-C32-100L	HSK 100A	100	150	100	71	29	50	10	73	32	75	SC32
HSK100A-C32-110L		100	160	110	81	29	50	10	73	32	75	
HSK100A-C32-130L		100	180	130	101	29	50	10	73	32	75	
HSK100A-C32-160L		100	210	160	131	29	50	10	73	32	75	
HSK100A-C32-200L		100	250	200	171	29	50	10	73	32	75	
HSK100A-C32-250L		100	300	250	221	29	50	10	73	32	75	
HSK100A-C32-300L		100	350	300	271	29	50	10	73	32	75	

HSK100A-C42-110L	HSK 100A	100	160	110	81	29	50	10	95	42	75	SC42
HSK100A-C42-130L		100	180	130	101	29	50	10	95	42	75	
HSK100A-C42-160L		100	210	160	131	29	50	10	95	42	75	
HSK100A-C42-200L		100	250	200	171	29	50	10	95	42	75	
HSK100A-C42-250L		100	300	250	221	29	50	10	95	42	75	
HSK100A-C42-300L		100	350	300	271	29	50	10	95	42	75	



# BT-CY



hydraulic tool holder

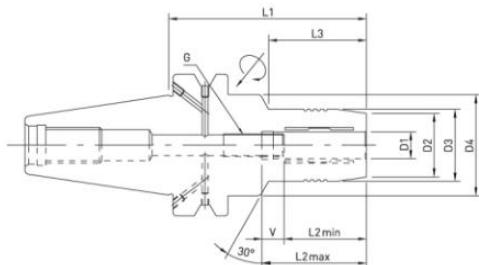


Fig1

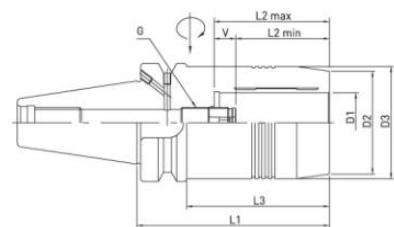


Fig2

MODEL	DIMENSION										TYPE		
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G			
BT40-CY06-65	6	25	28	50	65	37.5	27.5	10	23	M5X0.8	Fig1		
BT40-CY06-90					90				44				
BT40-CY06-140					140				44				
BT40-CY08-65		8	30		65				23	M6X1.0			
BT40-CY08-90					90				39				
BT40-CY08-140					140				44				
BT40-CY10-65		10	29		65				23	M6X1.0			
BT40-CY10-90					90		42.5	32.5	44				
BT40-CY10-140					140				44				
BT40-CY12-65	12	31	34		65	47.5	37.5		23	M8X1.0	Fig1		
BT40-CY12-90					90				44				
BT40-CY12-140					140				44				
BT40-CY14-65		14	36		65				23				
BT40-CY14-90					90				44				
BT40-CY14-140					140				44				
BT40-CY16-65	16	35	38		65	52.5	42.5		23	M8X1.0	Fig1		
BT40-CY16-90					90				48				
BT40-CY16-140					140				48				
BT40-CY18-75		18	41		75				30				
BT40-CY18-90					90				48				
BT40-CY18-140					140				48				
BT40-CY20-75	20	40	43		75				30				
BT40-CY20-90					90				48				
BT40-CY20-140					140				48				
BT40-CY25-100	25	53	57	—	100	61	51		73	M16X1.0	Fig2		
BT40-CY25-135					135				108				
BT40-CY32-105	32	58	63		105	65	55		—				
BT40-CY32-135					135				—				



# BT-CY



hydraulic tool holder

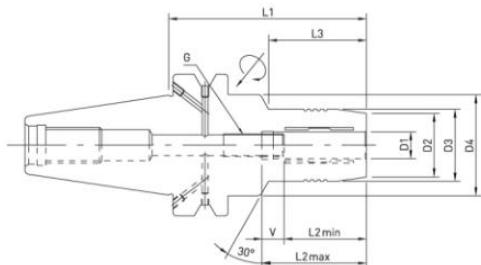


Fig1

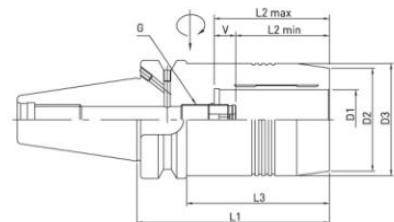
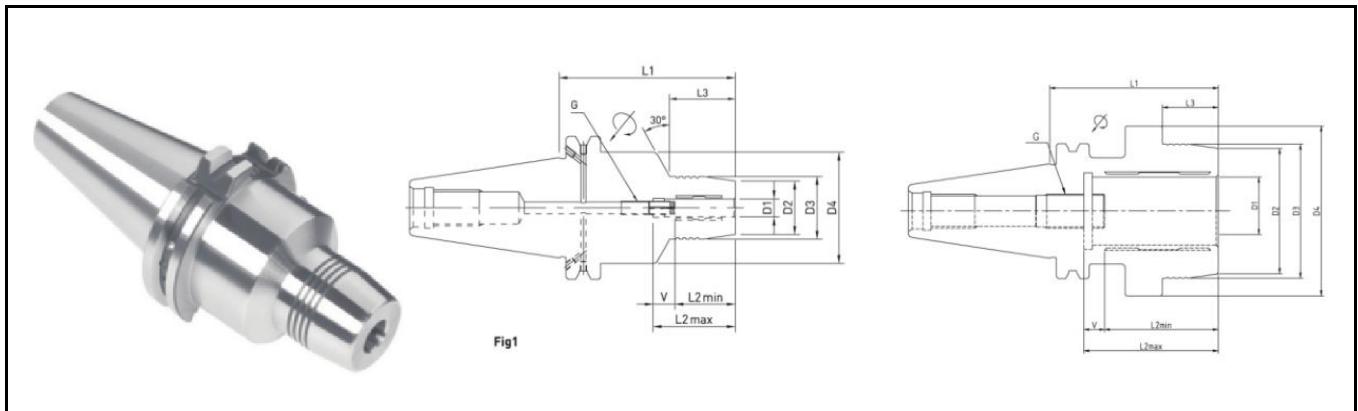


Fig2

MODEL	DIMENSION										TYPE		
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G			
BT50-CY06-90	6	25	28	50	90	37.5	27.5	10	32	M5X0.8	Fig1		
BT50-CY06-120					120				44				
BT50-CY06-140					140				44				
BT50-CY08-90		8	27		90				32				
BT50-CY08-120					120				40				
BT50-CY08-140					140				44				
BT50-CY10-90	10	29	32		90	42.5	32.5		32	M6X1.0	Fig1		
BT50-CY10-120					120				44				
BT50-CY10-140					140				44				
BT50-CY12-90	12	31	34		90	47.5	37.5		32				
BT50-CY12-120					120				44				
BT50-CY12-140					140				44				
BT50-CY14-90	14	33	36		90	52.5	42.5		32	M8X1.0	Fig1		
BT50-CY14-120					120				44				
BT50-CY14-140					140				44				
BT50-CY16-90	16	35	38		90	52.5	42.5		32				
BT50-CY16-120					120				48				
BT50-CY16-140					140				48				
BT50-CY18-90	18	38	41		90				32				
BT50-CY18-120					120				48				
BT50-CY18-140					140				48				
BT50-CY20-90	20	40	43		90	61	51		32				
BT50-CY20-120					120				48				
BT50-CY20-140					140				48				
BT50-CY25-105	25	53	57	—	105	61	51		67	M16X1.0	Fig2		
BT50-CY25-150					150				112				
BT50-CY32-115	32	58	63		115	65	55		77				
BT50-CY32-150					150				112				



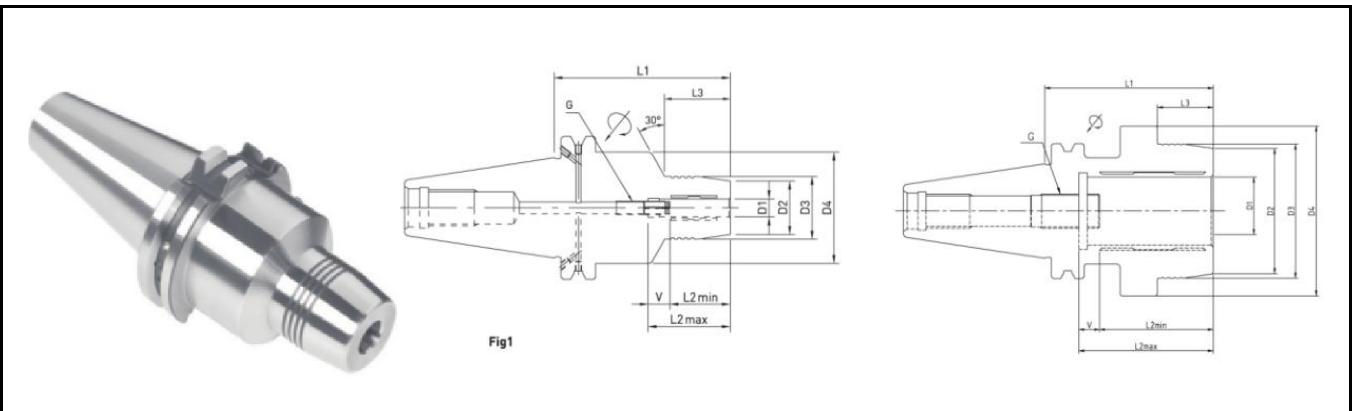
## hydraulic tool holder



MODEL	DIMENSION										TYPE			
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G				
SK40-CY06-65	6	25	28	50	65	37.5	27.5	10	23	M5X0.8	Fig1			
SK40-CY06-80.5					80.5				44					
SK40-CY06-110					110				44					
SK40-CY08-65		8	27		65				23	M6X1.0				
SK40-CY08-80.5					80.5				44					
SK40-CY08-110					110				44					
SK40-CY10-65	10	29	32		65	42.5	32.5		23	M6X1.0				
SK40-CY10-80.5					80.5				44					
SK40-CY10-110					110				44					
SK40-CY12-65	12	31	34		65	47.5	37.5		23	M8X1.0				
SK40-CY12-80.5					80.5				44					
SK40-CY12-110					110				44					
SK40-CY14-75	14	33	36		75	52.5	42.5		30	M8X1.0				
SK40-CY14-80.5					80.5				44					
SK40-CY14-110					110				44					
SK40-CY16-75	16	35	38		75	52.5	42.5		30	M16X1.0				
SK40-CY16-80.5					80.5				48					
SK40-CY16-110					110				48					
SK40-CY18-75	18	38	41		75	52.5	42.5		30	M16X1.0				
SK40-CY18-80.5					80.5				30					
SK40-CY18-135					135				48					
SK40-CY20-75	20	40	43		75	52.5	42.5		30	M16X1.0				
SK40-CY20-80.5					80.5				48					
SK40-CY20-110					110				48					
SK40-CY25-80.5	25	53	57	66	80.5	61.0	51	26	M16X1.0	Fig2	F35			
SK40-CY32-80.5	32	60	63	80	80.5	65.0	55							



## hydraulic tool holder

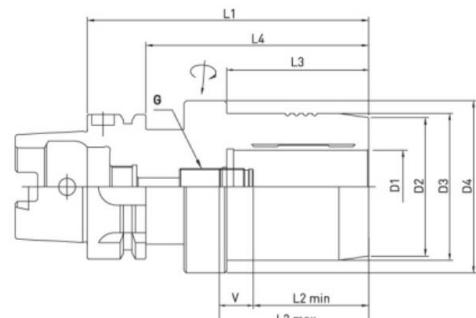
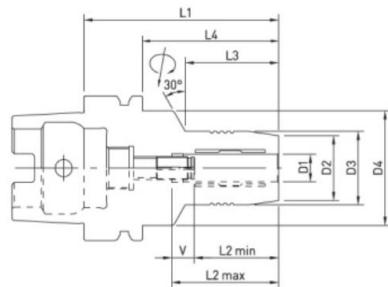


MODEL	DIMENSION										TYPE		
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G			
SK50-CY06-90	6	25	28	50	90	37.5	27.5	10	44	M5X0.8	Fig1		
SK50-CY06-140					140				44				
SK50-CY08-90					90				44	M6X1.0			
SK50-CY08-140					140				44				
SK50-CY10-90					90	42.5	32.5		44	M6X1.0			
SK50-CY10-140					140				44				
SK50-CY12-90					90	47.5	37.5		44				
SK50-CY12-140					140				44				
SK50-CY14-90					90				47				
SK50-CY14-140					140				47				
SK50-CY16-90					90	52.5	42.5		48	M8X1.0			
SK50-CY16-140					140				48				
SK50-CY18-90					90				48				
SK50-CY18-140					140				48				
SK50-CY20-80.5					80.5				44				
SK50-CY20-90					90				48				
SK50-CY20-110					110				48				
SK50-CY20-140					140				48				
SK50-CY25-105	25	53	57	43	105	61.0	51.0	120.9	85.9	M16X1.0	Fig2		
SK50-CY25-140					140				120.9				
SK50-CY32-115					115	65.0	55.0		95.9	M16X1.0			
SK50-CY32-140					140				120.9				

# HSK-CY



hydraulic tool holder



MODEL	DIMENSION											TYPE
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	
HSK40A-CY06-70	6	25	28	34	70	37.5	27.5	10	28	50	M5X0.8	Fig1
HSK40A-CY08-70	8	27	30		75	42.5	32.5		34	55		
HSK40A-CY10-75	10	29	32		85	47.5	37.5		—	65	M6X1.0	
HSK40A-CY12-85	12	31	34									

HSK50A-CY06-70	6	25	28	40	70	37.5	27.5	10	28	44	M5X0.8	Fig1	
HSK50A-CY08-70	8	27	30		80	42.5	32.5		34	54	M6X1.0		
HSK50A-CY10-80	10	29	32		85	47.5	37.5		44	59			
HSK50A-CY12-85	12	31	34		90	52.5	42.5		30	64	Fig2		
HSK50A-CY14-85	14	33	36	60					—		Fig1		
HSK50A-CY16-90	16	35	38						—				
HSK50A-CY18-90	18	38	41						—				
HSK50A-CY20-90	20	40	42						—				

HSK63A-CY06-70	6	25	28	50	70	37.5	27.5	10	24	44	M5X0.8	Fig1
HSK63A-CY08-70	8	27	30		80	42.5	32.5		35	54	M6X1.0	
HSK63A-CY10-80	10	29	32		85	47.5	37.5		40	59	M6X1.0	
HSK63A-CY12-85	12	31	34		90	52.5	42.5		46	64	M8X1.0	
HSK63A-CY14-85	14	33	36						47			
HSK63A-CY16-90	16	35	38	63					48			
HSK63A-CY18-90	18	38	41						59	94	M16 X1.0	Fig2
HSK63A-CY20-90	20	40	43						63	99	X1.0	
HSK63A-CY25-120	25	53	57		120	61	51					
HSK63A-CY32-125	32	58	63	75	125	65	55					



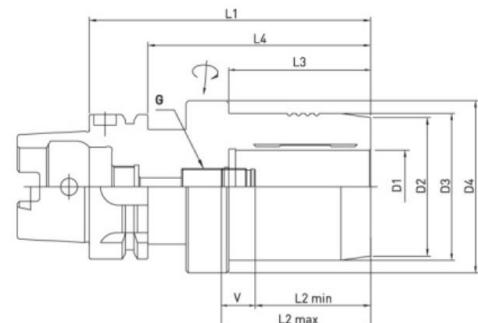
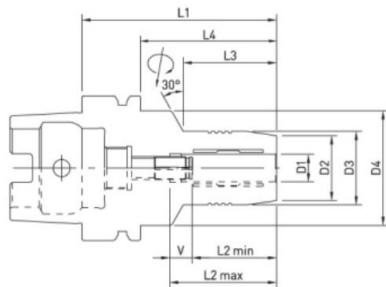
F58

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# HSK-CY



hydraulic tool holder

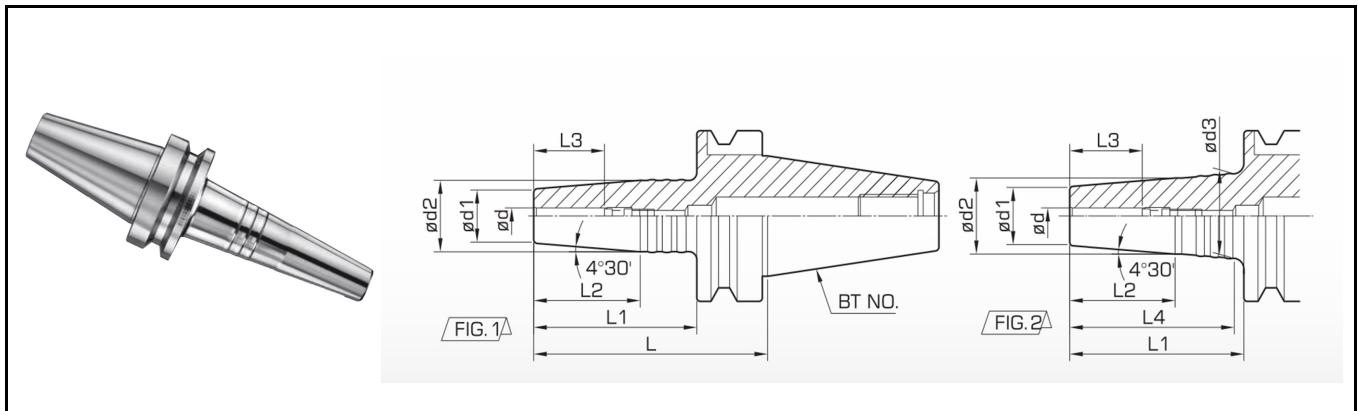


MODEL	DIMENSION											TYPE					
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G						
HSK100A-CY06-75	6	25	28	54	75	37.5	27.5	10	26	46	M5X0.8	Fig1					
HSK100A-CY08-75	8	27	30	50	90	42.5	32.5		42	61	M6X1.0						
HSK100A-CY10-90	10	29	32		95	47.5	37.5		47	66	M8X1.0						
HSK100A-CY12-95	12	31	34		100	52.5	42.5		53	71	M8X1.0						
HSK100A-CY14-95	14	33	36		105				59	76							
HSK100A-CY16-100	16	35	38		110	61	51		62	81	M8X1.0						
HSK100A-CY18-100	18	38	41			65	55				M8X1.0						
HSK100A-CY20-105	20	40	43	75													
HSK100A-CY25-110	25	53	57														
HSK100A-CY32-110	32	58	63														

# BT-RS



heat shrink tool holder



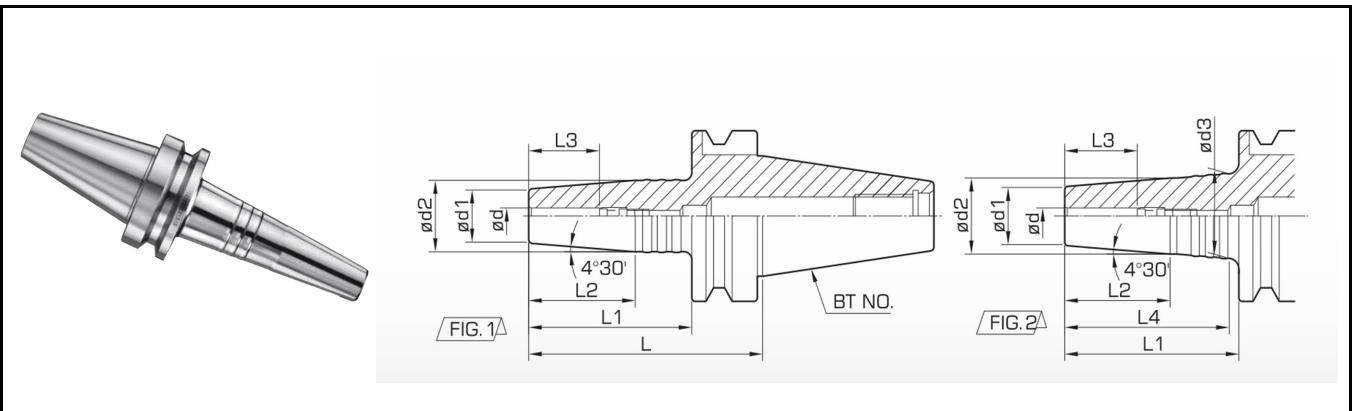
MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
BT30-RS04-080	1	4	16	23	—	80	58	40.7	—	min18	—
BT30-RS06-080	1	6	20	27		80	58	40.7		25.5-35.5	HY06
BT30-RS08-080	1	8	20	27		80	58	40.7		25.5-35.5	HY08
BT30-RS10-080	1	10	24	32		80	58	50.8		31.5-41.5	HY08
BT30-RS12-080	1	12	24	32		80	58	50.8		36.5-46.5	HY14
BT30-RS16-080	1	16	27	34		80	58	40.7		39.5-49.5	HY18

BT40-RS04-090	1	4	16	23	—	90	63	40.7	—	min18	—
BT40-RS04-130	2				27.1	130	103	44.5	100.2		
BT40-RS04-160	2				30.3	160	133	44.5	130.2		
BT40-RS06-090	1	6	21	27	—	90	63	40.7	—	25.5-35.5	HY06
BT40-RS06-130	2				33.3	130	103	44.5	100.2		
BT40-RS06-160	2				38.1	160	133	44.5	130.2		
BT40-RS08-090	1	8	21	27	—	90	63	40.7	—	31.5-41.5	HY08
BT40-RS08-130	2				33.3	130	103	44.5	100.2		
BT40-RS08-160	2				38.1	160	133	44.5	130.2		
BT40-RS10-090	1	10	24	32	—	90	63	47.0	—	36.5-46.5	HY14
BT40-RS10-130	2				37.5	130	103	50.8	100.2		
BT40-RS10-160	2				42.6	160	133	50.8	132.1		
BT40-RS12-090	1	12	24	32	—	90	63	—	—	36.5-46.5	HY18
BT40-RS12-130	2				40.3	130	103	50.8	100.2		
BT40-RS12-160	2				45.3	160	133	50.8	132.1		
BT40-RS16-090	1	16	27	34	—	90	63	40.7	—		
BT40-RS16-130	2				47	130	103	44.5	100.2		
BT40-RS16-160	2				48.6	160	133	44.5	132.1		

# BT-RS



heat shrink tool holder

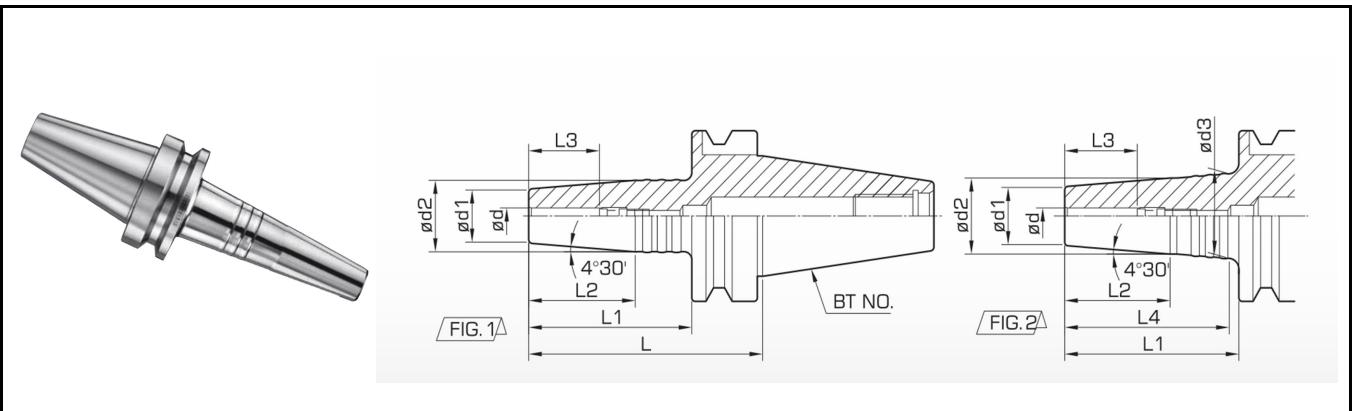


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
BT40-RS20-090	1	20	33	42	—	90	63	57.2	—	41.5–51.5	HY18
BT40-RS20-130	2				47	130	103	57.2	102.1		
BT40-RS20-160	2				48.6	160	133	57.2	132.1		
BT40-RS25-100	1	25	44	53	—	100	73	51.5	—	47.5–57.5	HY25
BT40-RS25-130	1				—	130	103	51.5	—		
BT40-RS25-160	1				—	160	133	51.5	—		
BT40-RS32-100	1	32	44	53	—	100	73	51.5	—	50.5–60.5	
BT40-RS32-130	1				—	130	103	51.5	—		
BT40-RS32-160	1				—	160	133	51.5	—		

# BT-RS



heat shrink tool holder

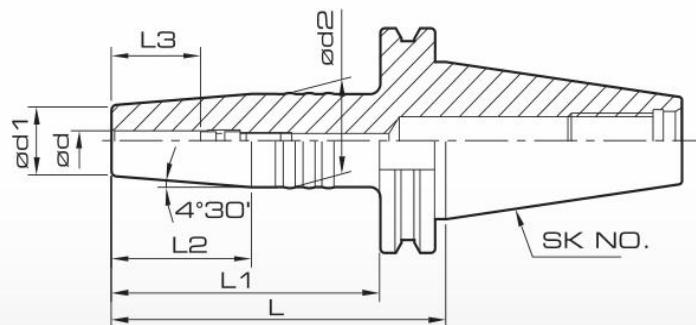


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
BT50-RS06-100	1	6	21	27	—	100	62	34.3	—	25.5-35.5	HY06
BT50-RS06-130	2				30.6	130	92	38.1	82.8		
BT50-RS06-160	2				35.3	160	122	38.1	112.8		
BT50-RS08-100	1	8	21	27	—	100	62	34.3	—	31.5-41.5	HY08
BT50-RS08-130	2				30.6	130	92	38.1	82.8		
BT50-RS08-160	2				35.3	160	122	38.1	112.8		
BT50-RS10-100	1	10	24	32	—	100	62	47.0	—	36.5-46.5	HY14
BT50-RS10-130	2				35.6	130	92	50.8	82.8		
BT50-RS10-160	2				39.5	160	122	50.8	112.8		
BT50-RS12-100	1	12	24	32	—	100	62	47.0	—	41.5-57.5	HY18
BT50-RS12-130	2				35.6	130	92	50.8	82.8		
BT50-RS12-160	2				39.5	160	122	50.8	112.8		
BT50-RS16-100	1	16	27	34	—	100	62	40.7	—	47.5-57.5	HY25
BT50-RS16-130	2				37.6	130	92	44.5	82.8		
BT50-RS16-160	2				42.3	160	122	44.5	112.8		
BT50-RS20-100	1	20	33	42	—	100	62	57.2	—	50.5-60.5	
BT50-RS20-130	2				44.8	130	92	57.2	82.8		
BT50-RS20-160	2				47.2	160	122	57.2	112.8		
BT50-RS25-100	1	25	44	53	—	100	62	55.9	—	47.5-57.5	
BT50-RS25-130	1				—	130	92	52.1	—		
BT50-RS25-160	2				58.7	160	122	55.9	117.4		
BT50-RS32-100	1	32			—	100	62	55.9	—	50.5-60.5	
BT50-RS32-130	1				—	130	92	52.1	—		
BT50-RS32-160	2				58.7	160	122	55.9	117.4		

# SK-RS



heat shrink tool holder



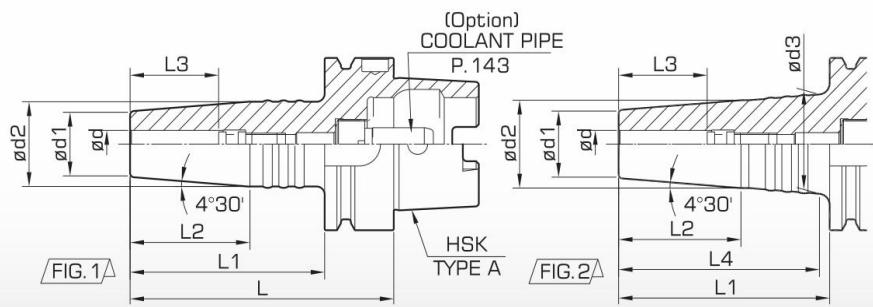
MODEL	DIMENSION								Clamping depth	SCREW
	d	d1	d2	L	L1	L2				
SK40-RS04-080	4	16	23	80	57				min18	—
SK40-RS06-080	6	20	27	80	57	40			25.5-35.5	HY06
SK40-RS06-130				130	107				25.5-35.5	
SK40-RS08-080				80	57				25.5-35.5	HY08
SK40-RS08-130	8	24	32	130	107	47			25.5-35.5	
SK40-RS10-080				80	57				31.5-41.5	HY14
SK40-RS10-130				130	107				36.5-46.5	
SK40-RS10-160				160	137					
SK40-RS12-080	12	24	32	80	57	47			36.5-46.5	HY14
SK40-RS12-130				130	107					
SK40-RS12-160				160	137					

SK50-RS06-100	6	20	27	80	57	40			25.5-35.5	HY06
SK50-RS06-130				130	107					
SK50-RS06-160				160	137					
SK50-RS08-100	8	24	32	80	57	47			31.5-41.5	HY08
SK50-RS08-130				130	107					
SK50-RS08-160				160	137					
SK50-RS10-100	10	24	32	80	57	47			36.5-46.5	HY14
SK50-RS10-130				130	107					
SK50-RS10-160				160	137					
SK50-RS12-100	12	24	32	80	57	47			36.5-46.5	HY14
SK50-RS12-130				130	107					
SK50-RS12-160				160	137					

# HSK-RS



heat shrink tool holder

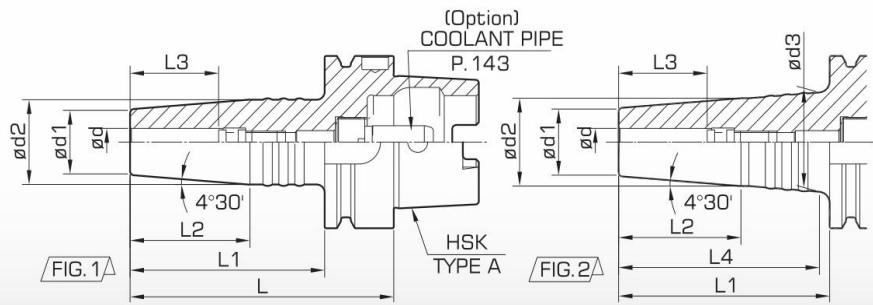


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
HSK50A-RS04-080	1	4	16	21.2	—	60	34	—	—	min18	—
HSK50A-RS06-080		4	16	23	—	80	54	40	—		—
HSK50A-RS06-130		6	21	27	—	80	54	34.3	—	25.5-35.5	HY06
HSK50A-RS08-080		8	21	27	—	80	54	34.3	—		HY08
HSK50A-RS08-130		10	24	32	—	85	59	47	—		31.5-41.5
HSK50A-RS10-080		12	24	32	—	90	64	47	—	36.5-46.5	HY14
HSK50A-RS10-130		16	27	34	—	95	69	40.7	—	39.5-49.5	HY18

# HSK-RS



heat shrink tool holder

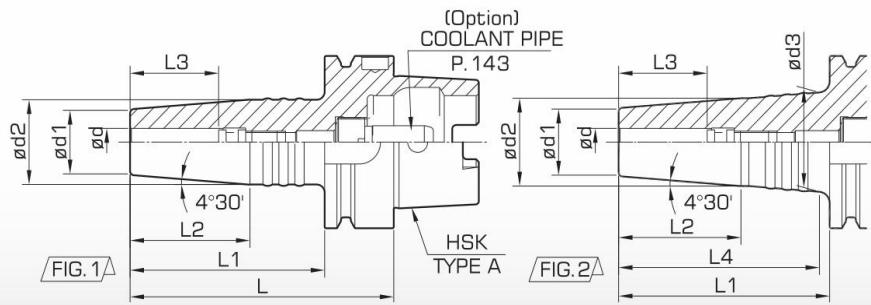


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
HSK63A-RS04-080	1	4	16	23	—	80	54	40	—	min18	—
HSK63A-RS06-100	1				—	80	54	34.3	—		
HSK63A-RS06-130	2	6			33.5	130	104	38.1	101.2		HY06
HSK63A-RS06-160	2				38.2	160	134	38.1	131.2		
HSK63A-RS08-080	1				—	80	54	34.3	—		
HSK63A-RS08-130	2	8			33.5	130	104	38.1	101.2		
HSK63A-RS08-160	2				38.2	160	134	38.1	131.2		HY08
HSK63A-RS10-085	1				—	85	59	50.8	—		
HSK63A-RS10-130	2	10			37.7	130	104	50.8	101.2		31.5-41.5
HSK63A-RS10-160	2				42.4	160	134	50.8	131.2		
HSK63A-RS12-090	1				—	90	64	50.8	—		
HSK63A-RS12-130	2	12			37.7	130	104	50.8	101.2		36.5-46.5
HSK63A-RS12-160	2				42.4	160	134	50.8	131.2		HY14
HSK63A-RS16-095	1				—	95	69	40.6	—		
HSK63A-RS16-130	2	16	27	34	40.5	130	104	44.5	101.2		39.5-49.5
HSK63A-RS16-160	2				45.2	160	134	44.5	131.2		HY18
HSK63A-RS20-085	1				—	100	74	53.4	—		
HSK63A-RS20-130	2	20	33	42	47.2	130	104	57.2	103.1		41.5-51.5
HSK63A-RS20-160	2				48.8	160	134	57.2	133.1		HY18
HSK63A-RS25-115	1				—	115	89	51.5	—		
HSK63A-RS25-130	1	25			—	130	104	51.5	—		47.5-57.5
HSK63A-RS25-160	1				—	160	134	51.5	—		HY25
HSK63A-RS32-120	1				—	120	94	51.5	—		
HSK63A-RS32-160	1	32			—	160	134	51.5	—		50.5-60.5

# HSK-RS



heat shrink tool holder

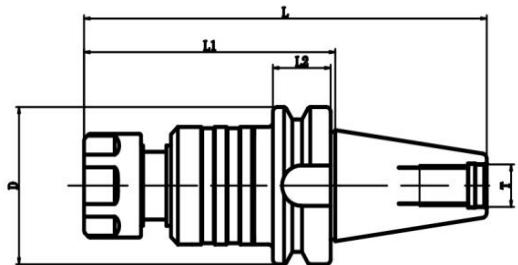


MODEL	FIG	DIMENSION								Clamping depth	SCREW			
		d	d1	d2	d3	L	L1	L2	L4					
HSK100A-RS06-085	1	6	21	27	—	85	56	34.3	—	25.5-35.5	HY06			
HSK100A-RS06-130	2				32	130	101	38.1	91.8					
HSK100A-RS06-160	2				36.7	160	131	38.1	121.8					
HSK100A-RS08-085	1				—	85	56	34.3	—					
HSK100A-RS08-130	2				32	130	101	38.1	91.8					
HSK100A-RS08-160	2				36.7	160	131	38.1	121.8					
HSK100A-RS10-090	1	10	24	32	—	90	61	47	—	31.5-41.5	HY08			
HSK100A-RS10-130	2				36.2	130	101	50.8	91.8					
HSK100A-RS10-160	2				40.9	160	130	50.8	121.8					
HSK100A-RS12-095	1				—	95	66	47	—					
HSK100A-RS12-130	2	12	32	32	36.2	130	101	50.8	91.8	36.5-46.5	HY14			
HSK100A-RS21-160	2				40.9	160	131	50.8	121.8					
HSK100A-RS16-100	1	16	27	34	—	100	71	40.7	—	39.5-49.5	HY18			
HSK100A-RS16-130	2				39	130	101	45.5	91.8					
HSK100A-RS16-160	2				43.7	160	131	45.5	121.8					
HSK100A-RS20-105	1	20	33	42	—	105	76	53.4	—	41.5-51.5	HY18			
HSK100A-RS20-130	2				45.4	130	101	57.2	91.8					
HSK100A-RS20-160	2				47	160	131	57.5	121.8					
HSK100A-RS25-115	1	25	44	53	—	115	86	52.1	—	47.5-57.5	HY25			
HSK100A-RS25-160	2				60.1	160	131	55.9	126.4					
HSK100A-RS32-120	1	32			—	120	91	52.1	—	50.5-60.5				
HSK100A-RS32-160	2				60.1	160	161	55.9	126.4					

## BT-VER



Micro telescopic rigid tapping body



MODEL	Tapping range	DIMENSION					handle	collet model
		D	L2	L	L1	T		
BT30-VER16-100	M2-M12	46	20	150	100	M10	BT30	ETP-ER16
BT30-VER20-102	M2-M16				102			ETP-ER20
BT30-VER25-103	M2-M22				103			ETP-ER25
BT30-VER32-105	M2-M30			154	105	M12		ETP-ER32
BT40-VER16-105	M2-M12	63	25	170	105	M16	BT40	ETP-ER16
BT40-VER20-106	M2-M16				106			ETP-ER20
BT40-VER25-108	M2-M22				108			ETP-ER25
BT40-VER32-110	M2-M30			174	110			ETP-ER32
BT50-VER16-110	M2-M22	100	35	215	110	M24	BT50	ETP-ER16
BT50-VER20-112	M2-M30				112			ETP-ER20
BT50-VER25-113	M2-M22				113			ETP-ER25
BT50-VER32-115	M2-M30			219	115			ETP-ER32

◎Small synchronous telescopic compensation during tapping

◎can be corrected to avoid the synchronization error caused by the mechanical stop and reverse rotation.

◎The telescopic system adopts imported accessories, its stability and longer service life

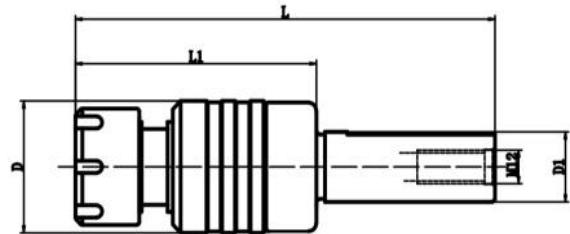
◎Adopt internal water-through structure design

◎Greatly increases the tap usage time and work efficiency

## C-VER



straight handle Micro telescopic rigid tapping body



MODEL	Tapping range	DIMENSION				handle	collet model
		D	D1	L	L1		
C20-60-VER16-86	M2-M12	20	20	146	86	C20	ETP-ER16
C20-60-VER20-87	M2-M16			147	87		ETP-ER20
C20-60-VER25-88	M2-M22			148	88		ETP-ER25
C20-60-VER32-90	M2-M30			150	90		ETP-ER32
C25-60-VER16-86	M2-M12	25	25	146	86	C25	ETP-ER16
C25-60-VER20-87	M2-M16			148	87		ETP-ER20
C25-60-VER25-88	M2-M22			148	88		ETP-ER25
C25-60-VER32-90	M2-M30			150	90		ETP-ER32
C32-60-VER16-86	M2-M12	32	32	146	86	C32	ETP-ER16
C32-60-VER20-87	M2-M16			147	87		ETP-ER20
C32-60-VER25-88	M2-M22			148	88		ETP-ER25
C32-60-VER32-90	M2-M30			150	90		ETP-ER32

◎ Small synchronous telescopic compensation during tapping

◎ corrected instantly to avoid the synchronization error caused by the mechanical stop and reverse rotation.

◎ The telescopic system adopts imported accessories, its stability and longer service life

◎ Adopt internal water-through structure design

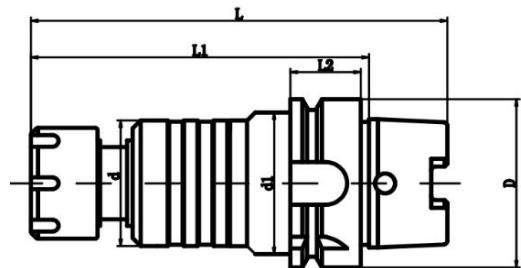
◎ Greatly increases the tap usage time and work efficiency



# HSK-VER



Micro telescopic rigid tapping body

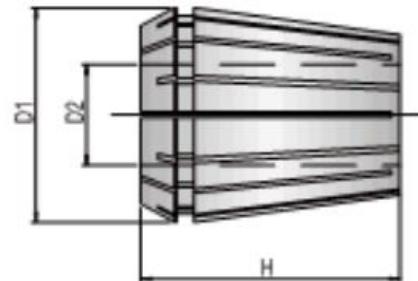


MODEL	Tapping range	DIMENSION					handle	collet model
		D	L	L1	L2	d		
HSK63A-VER16-116	M2-M12	63	149	116	26	47	HSK63	TER16
HSK63A-VER20-117	M2-M16		150	117				TER20
HSK63A-VER25-118	M2-M22		151	118				TER25
HSK63A-VER32-119	M2-M30		153	120				TER32

## ER collet



collet



ER11		ER16		ER20	
MODEL	CLAMP RANGE	MODEL	CLAMP RANGE	MODEL	CLAMP RANGE
ER11-1	1-0.5	ER16-1	1-0.5	ER20-1	1-0.5
ER11-1.5	1.5-1	ER16-1.5	1.5-1	ER20-1.5	1.5-1
ER11-2	2-1.5	ER16-2	2-1.5	ER20-2	2-1.5
ER11-2.5	2.5-2	ER16-2.5	2.5-2	ER20-2.5	2.5-2
ER11-3	3-2.5	ER16-3	3-2	ER20-3	3-2
ER11-3.5	3.5-3	ER16-4	4-3	ER20-4	4-3
ER11-4	4-3.5	ER16-5	5-4	ER20-5	5-4
ER11-4.5	4.5-4	ER16-6	6-5	ER20-6	6-5
ER11-5	5-4.5	ER16-7	7-6	ER20-7	7-6
ER11-5.5	5.5-5	ER16-8	8-7	ER20-8	8-7
ER11-6	6-5.5	ER16-9	9-8	ER20-9	9-8
ER11-6.5	6.5-6	ER16-10	10-9	ER20-10	10-9
ER11-7	7-6.5			ER20-11	11-10
				ER20-12	12-11
				ER20-13	13-12

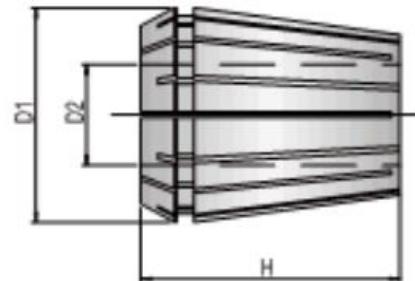
◇ For high-precision collets, please add AA after the model number, such as ER16-10AA

◇ In the range of 4 times the diameter, the accuracy of ordinary collets is less than 0.01mm, and the accuracy of high-precision collets is less than 0.005mm

## ER collet



collet



ER25		ER32		ER40	
MODEL	CLAMP RANGE	MODEL	CLAMP RANGE	MODEL	CLAMP RANGE
ER25-1	1-0.5	ER32-1	1-0.5	ER40-3	3-2
ER25-1.5	1.5-1	ER32-1.5	1.5-1	ER40-4	4-3
ER25-2	2-1.5	ER32-2	2-1.5	ER40-5	5-4
ER25-2.5	2.5-2	ER32-2.5	2.5-2	ER40-6	6-5
ER25-3	3-2	ER32-3	3-2	ER40-7	7-6
ER25-4	4-3	ER32-4	4-3	ER40-8	8-7
ER25-5	5-4	ER32-5	5-4	ER40-9	9-8
ER25-6	6-5	ER32-6	6-5	ER40-10	10-9
ER25-7	7-6	ER32-7	7-6	ER40-11	11-10
ER25-8	8-7	ER32-8	8-7	ER40-12	12-11
ER25-9	9-8	ER32-9	9-8	ER40-13	13-12
ER25-10	10-9	ER32-10	10-9	ER40-14	14-13
ER25-11	11-10	ER32-11	11-10	ER40-15	15-14
ER25-12	12-11	ER32-12	12-11	ER40-16	16-15
ER25-13	13-12	ER32-13	13-12	ER40-17	17-16
ER25-14	14-13	ER32-14	14-13	ER40-18	18-17
ER25-15	15-14	ER32-15	15-14	ER40-19	19-18
ER25-16	16-15	ER32-16	16-15	ER40-20	20-19
		ER32-17	17-16	ER40-21	21-20
		ER32-18	18-17	ER40-22	22-21
		ER32-19	19-18	ER40-23	23-22
		ER32-20	20-19	ER40-24	24-23
				ER40-25	25-24
				ER40-26	26-25

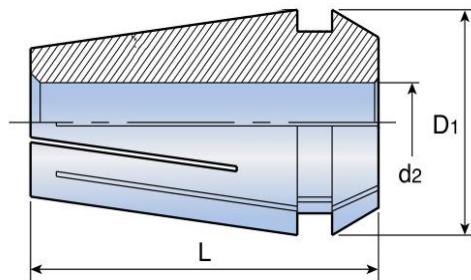
◇ For high-precision collets, please add AA after the model number, such as ER16-10AA

◇ 4 times the diameter, less 0.01mm high-precision collets less than 0.005mm

## ER Water stop collet



Water stop collet

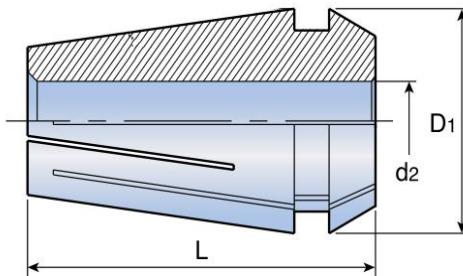


ER11C		ER16C		ER20C	
MODEL	CLAMP RANGE	MODEL	CLAMP RANGE	MODEL	CLAMP RANGE
ER11-3C	3-2.9	ER16-3C	3-2.9	ER20-3C	3-2.9
ER11-4C	4-3.9	ER16-4C	4-3.9	ER20-4C	4-3.9
ER11-4.5C	4.5-4.4	ER16-4.5C	4.5-4.4	ER20-5C	5-4.9
ER11-5C	5-4.9	ER16-5C	5-4.9	ER20-5.5C	5.5-5.4
ER11-5.5C	5.5-5.4	ER16-5.5C	5.5-5.4	ER20-6C	6-5.5
ER11-6C	6-5.9	ER16-6C	6-5.5	ER20-6.5C	6.5-6
ER11-6.5C	6.5-6.4	ER16-6.5C	6.5-6	ER20-7C	7-6.5
ER11-7C	7-6.9	ER16-7C	7-6.5	ER20-7.5C	7.5-7
		ER16-7.5C	7.5-7	ER20-8C	8-7.5
		ER16-8C	8-7.5	ER20-8.5C	8.5-8
		ER16-8.5C	8.5-8	ER20-9C	9-8.5
		ER16-9C	9-8.5	ER20-9.5C	9.5-9
		ER16-9.5C	9.5-9	ER20-10C	10-9.5
		ER16-10C	10-9.5	ER20-10.5C	10.5-10
				ER20-11C	11-10.5
				ER20-11.5C	11.5-11
				ER20-12C	12-11.5
				ER20-12.5C	12.5-12
				ER20-13C	13-12.5

## ER Water stop collet



Water stop collet

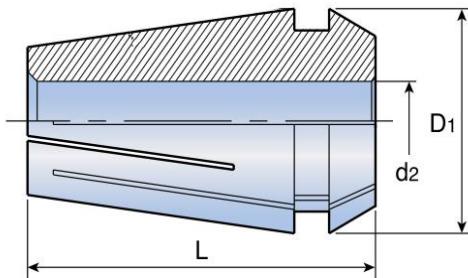


ER25C		ER32C		ER40C	
MODEL	CLAMP RANGE	MODEL	CLAMP RANGE	MODEL	CLAMP RANGE
ER25-3C	3-2.9	ER32-3C	3-2.9	ER40-4C	4-3.9
ER25-4C	4-3.9	ER32-4C	4-3.9	ER40-5C	5-4.9
ER25-5C	5-4.9	ER32-5C	5-4.9	ER40-6C	6-5.9
ER25-6C	6-5.5	ER32-6C	6-5.9	ER40-7C	7-6.9
ER25-6.5C	6.5-6	ER32-7C	7-6.9	ER40-8C	8-7.9
ER25-7C	7-6.5	ER32-8C	8-7.5	ER40-9C	9-8.9
ER25-7.5C	7.5-7	ER32-8.5C	8.5-8	ER40-10C	10-9.5
ER25-8C	8-7.5	ER32-9C	9-8.5	ER40-10.5C	10.5-10
ER25-8.5C	8.5-8	ER32-9.5C	9.5-9	ER40-11C	11-10.5
ER25-9C	9-8.5	ER32-10C	10-9.5	ER40-11.5C	11.5-11
ER25-9.5C	9.5-9	ER32-10.5C	10.5-10	ER40-12C	12-11.5
ER25-10C	10-9.5	ER32-11C	11-10.5	ER40-12.5C	12.5-12
ER25-10.5C	10.5-10	ER32-11.5C	11.5-11	ER40-13C	13-12.5
ER25-11C	11-10.5	ER32-12C	12-11.5	ER40-13.5C	13.5-13
ER25-11.5C	11.5-11	ER32-12.5C	12.5-12	ER40-14C	14-13.5
ER25-12C	12-11.5	ER32-13C	13-12.5	ER40-14.5C	14.5-14
ER25-12.5C	12.5-12	ER32-13.5C	13.5-13	ER40-15C	15-14.5
ER25-13C	13-12.5	ER32-14C	14-13.5	ER40-15.5C	15.5-15
ER25-13.5C	13.5-13	ER32-14.5C	14.5-14	ER40-16C	16-15.5
ER25-14C	14-13.5	ER32-15C	15-14.5	ER40-16.5C	16.5-16
ER25-14.5C	14.5-14	ER32-15.5C	15.5-15	ER40-17C	17-16.5
ER25-15C	15-14.5	ER32-16C	16-15.5	ER40-17.5C	17.5-17
ER25-15.5C	15.5-15	ER32-16.5C	16.5-16	ER40-18C	18-17.5
ER25-16C	16-15.5	ER32-17C	17-16.5	ER40-18.5C	18.5-18
		ER32-17.5C	17.5-17	ER40-19C	19-18.5

## ER Water stop collet



Water stop collet

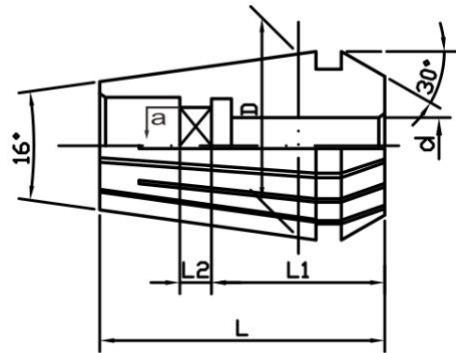


ER25C		ER32C		ER40C	
MODEL	CLAMP RANGE	MODEL	CLAMP RANGE	MODEL	CLAMP RANGE
		ER32-18C	18-17.5	ER40-19.5C	19.5-19
		ER32-18.5C	18.5-18	ER40-20C	20-19.5
		ER32-19C	19-18.5	ER40-20.5C	20.5-20
		ER32-19.5C	19.5-19	ER40-21C	21-20.5
		ER32-20C	20-19.5	ER40-21.5C	21.5-21
				ER40-22C	22-21.5
				ER40-22.5C	22.5-22
				ER40-23C	23-22.5
				ER40-23.5C	23.5-23
				ER40-24C	24-23.5
				ER40-24.5C	24.5-24
				ER40-25C	25-24.5
				ER40-25.5C	25.5-25
				ER40-26C	26-25.5

# ETP-ER



## ETP Rigid Tapping Collet



PRODUCT MODEL	DIMENSIONS					
	d	a	L1	L2	D	L
ETP-ER16-M2	2.5	2.0	15	3	16	27.5
ETP-ER16-M3	3.15	2.5	15	3	16	27.5
ETP-ER16-M4	4.0	3.15	15	3	16	27.5
ETP-ER16-M5	5.0	4.0	18	3	16	27.5
ETP-ER16-M6-8	6.3	5.0	18	4	16	27.5
ETP-ER16-M10	8.0	6.3	18	5	16	27.5
ETP-ER16-M12	9.0	7.1	18	5	16	27.5

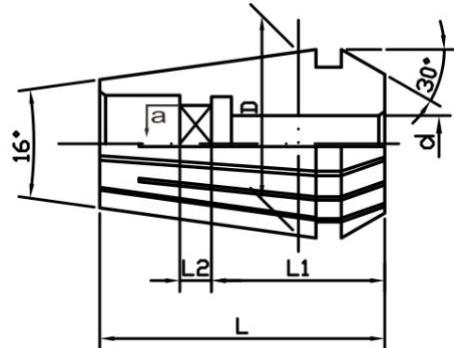
ETP-ER20-M2	2.5	2.0	15	3	20	31.5
ETP-ER20-M3	3.15	2.5	15	3	20	31.5
ETP-ER20-M4	4.0	3.15	15	3	20	31.5
ETP-ER20-M5	5.0	4.0	18	4	20	31.5
ETP-ER20-M6-8	6.3	5.0	18	4	20	31.5
ETP-ER20-M10	8.0	6.3	18	5	20	31.5
ETP-ER20-M12	9.0	7.1	22	6	20	31.5
ETP-ER20-M14	11.2	9.0	22	6	20	31.5
ETP-ER20-M16	12.5	10.0	23	7	20	31.5

ETP-ER25-M2	2.5	2.0	15	3	25	34.0
ETP-ER25-M2.5	2.8	2.24	15	3	25	34.0
ETP-ER25-M3	3.15	2.5	15	3	25	34.0
ETP-ER25-M4	4.0	3.15	18	4	25	34.0
ETP-ER25-M5	5.0	4.0	18	4	25	34.0
ETP-ER25-M6-8	6.3	5.0	18	5	25	34.0
ETP-ER25-M10	8.0	6.3	22	6	25	34.0
ETP-ER25-M12	9.0	7.1	22	6	25	34.0

# ETP-ER



ETPRigid Tapping Collet

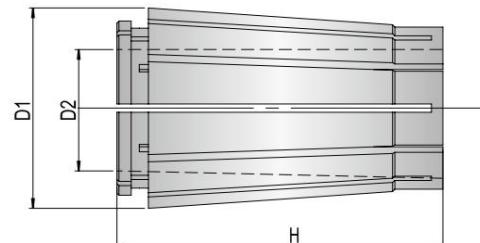


PRODUCT MODEL	DIMENSIONS					
	d	a	L1	L2	D	L
ETP-ER25-M14	11.2	9.0	23	7	25	34
ETP-ER25-M16	12.5	10.0	23	8	25	34
ETP-ER25-M18-20	14.0	11.2	23	8	25	34
ETP-ER25-M22	16.0	12.5	25	9	25	34
ETP-ER32-M1	2.5	2.0	18	3	32	40
ETP-ER32-M2	2.5	2.0	18	3	32	40
ETP-ER32-M2.5	2.8	2.24	18	3	32	40
ETP-ER32-M3	3.15	2.5	18	4	32	40
ETP-ER32-M4	4.0	3.15	18	4	32	40
ETP-ER32-M5	5.0	4.0	18	5	32	40
ETP-ER32-M6-8	6.3	5.0	22	6	32	40
ETP-ER32-M10	8.0	6.3	22	6	32	40
ETP-ER32-M12	9.0	7.1	25	7	32	40
ETP-ER32-M14	11.2	9.0	25	8	32	40
ETP-ER32-M16	12.5	10.0	25	8	32	40
ETP-ER32-M18-20	14.0	11.2	25	10	32	40
ETP-ER32-M22	16.0	12.5	25	10	32	40
ETP-ER32-M24	18.0	14.0	25	10	32	40
ETP-ER32-M27-30	20.0	16.0	28	12	32	40

# GSKPrecision collet



collet

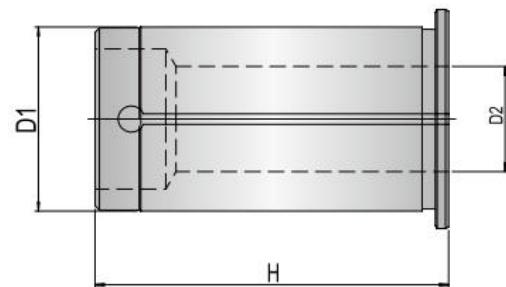


GSK 06		GSK 10		GSK 16		GSK 25	
MODEL	夹持 RANGE	MODEL	CLAMP RANGE	MODEL	CLAMP RANGE	MODEL	CLAMP RANGE
GSK06-2	2-1.75	GSK10-2	2-1.75	GSK16-3	3-2.75	GSK25-6	6-5.5
GSK06-2.5	2-2.25	GSK10-2.5	2-2.25	GSK16-3.175	3.175-2.7	GSK25-8	8-7.5
GSK06-3	3-2.75	GSK10-3	3-2.75	GSK16-3.5	3.5-3	GSK25-10	10-9.5
GSK06-3.5	3.5-3	GSK10-3.175	3.175-2.7	GSK16-4	4-3.5	GSK25-12	12-11.5
GSK06-4	4-3.5	GSK10-3.5	3.5-3	GSK16-4.5	4.5-4	GSK25-14	14-13.5
GSK06-4.5	4.5-4	GSK10-4	4-3.5	GSK16-5	5-4.5	GSK25-16	16-15.5
GSK06-5	5-4.5	GSK10-4.5	4.5-4.4	GSK16-5.5	5.5-5	GSK25-16.5	16.5-16
GSK06-5.5	5.5-5	GSK10-5	5-4.5	GSK16-6	6-5.5	GSK25-17	17-16.5
GSK06-6	6-5.5	GSK10-5.5	5.5-5	GSK16-6.5	6.5-6	GSK25-17.5	17.5-17
		GSK10-6	6-5.5	GSK16-7	7-6.5	GSK25-18	18-17.5
		GSK10-6.5	6.5-6	GSK16-7.5	7.5-7	GSK25-18.5	18.5-18
		GSK10-7	7-6.5	GSK16-8	8-7.5	GSK25-19	19-18.5
		GSK10-7.5	7.5-7	GSK16-8.5	8.5-8	GSK25-19.5	19.5-19
		GSK10-8	8-7.5	GSK16-9	9-8.5	GSK25-20	20-19.5
		GSK10-8.5	8.5-8	GSK16-9.5	9.5-9	GSK25-20.5	20.5-20
		GSK10-9	9-8.5	GSK16-10	10-9.5	GSK25-21	21-20.5
		GSK10-9.5	9.5-9	GSK16-10.5	10.5-10	GSK25-21.5	21.5-21
		GSK10-10	10-9.5	GSK16-11	11-10.5	GSK25-22	22-21.5
				GSK16-11.5	11.5-11	GSK25-22.5	22.5-22
				GSK16-12	12-11.5	GSK25-23	23-22.5
				GSK16-12.5	12.5-12	GSK25-23.5	23.5-23
				GSK16-13	13-12.5	GSK25-24	24-23.5
				GSK16-13.5	13.5-13	GSK25-24.5	24.5-24
				GSK16-14	14-13.5	GSK25-25	25-24.5
				GSK16-14.5	14.5-14		
				GSK16-15	15-14.5		
				GSK16-15.5	15.5-15		
				GSK16-16	16-15.5		

## S C Strong collet

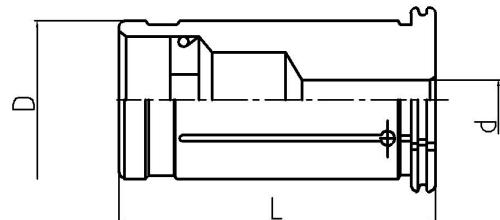


collet



PRODUCT MODEL	DIMENSIONS		
	D1	D2	H
SC12	12	3, 4, 5, 6, 7, 8, 9, 10	40
SC16	16	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	
SC20	20	6, 8, 10, 12, 14, 16	64
SC25	25	6, 8, 10, 12, 16, 20	
SC32	32	6, 8, 10, 12, 16, 20, 25	71
SC42	42	6, 8, 10, 12, 16, 20, 25, 32	

D type end face water hydraulic tool shank conversion collet



PRODUCT MODEL	DIMENSIONS			
	d	D	L	
DHC12-3	3	12	45	
DHC12-4	4	12	45	
DHC12-5	5	12	45	
DHC12-6	6	12	45	
DHC12-8	8	12	45	

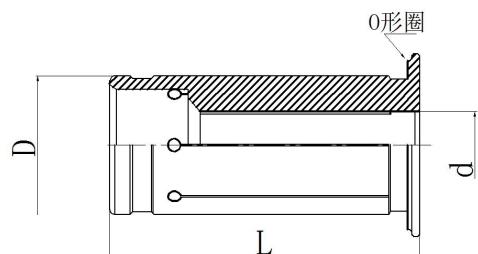
DHC20-3	3	20	50.5	
DHC20-4	4	20	50.5	
DHC20-5	5	20	50.5	
DHC20-6	6	20	50.5	
DHC20-8	8	20	50.5	
DHC20-10	10	20	50.5	
DHC20-12	12	20	50.5	
DHC20-14	14	20	50.5	
DHC20-16	16	20	50.5	

DHC32-6	6	32	60.5	
DHC32-8	8	32	60.5	
DHC32-10	10	32	60.5	
DHC32-12	12	32	60.5	
DHC32-14	14	32	60.5	
DHC32-16	16	32	60.5	
DHC32-18	18	32	60.5	
DHC32-20	20	32	60.5	
DHC32-25	25	32	60.5	

# ODHC



OD type center outlet hydraulic tool holder conversion  
collet



PRODUCT MODEL	DIMENSIONS			
	d	D	L	
ODHC12-3	3	12	45	
ODHC12-4	4	12	45	
ODHC12-5	5	12	45	
ODHC12-6	6	12	45	
ODHC12-8	8	12	45	

ODHC20-3	3	20	50.5	
ODHC20-4	4	20	50.5	
ODHC20-5	5	20	50.5	
ODHC20-6	6	20	50.5	
ODHC20-8	8	20	50.5	
ODHC20-10	10	20	50.5	
ODHC20-12	12	20	50.5	
ODHC20-14	14	20	50.5	
ODHC20-16	16	20	50.5	

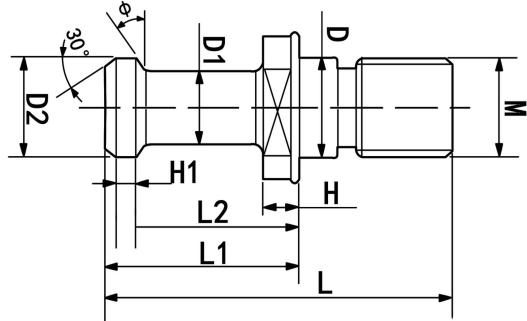
ODHC32-6	6	32	60.5	
ODHC32-8	8	32	60.5	
ODHC32-10	10	32	60.5	
ODHC32-12	12	32	60.5	
ODHC32-14	14	32	60.5	
ODHC32-16	16	32	60.5	
ODHC32-18	18	32	60.5	
ODHC32-20	20	32	60.5	
ODHC32-25	25	32	60.5	

## BT-1982 / DIN 69872 SK



Rivet

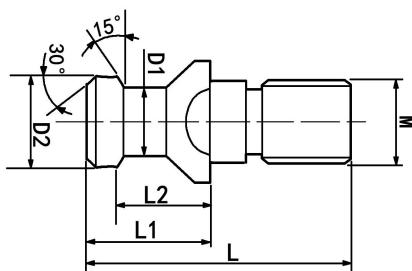
BT-1982 BT Rivet



PRODUCT MODEL	DIMENSIONS									$\Phi$
	D	D1	D2	M	L	L1	L2	H	H1	
LD-BT30	12.5	7	11	M12	43	23	18	5	2.5	45°
LD-BT40	17	10	15	M16	60	35	28	6	3	60°
LD-BT50	25	17	23	M24	85	45	35	10	5	90°

◎For intercooler Rivet with .C, example: BT50-45° .C

DIN69872 SK Rivet



PRODUCT MODEL	DIMENSIONS						
	D	D1	D2	M	L	L1	L2
SK-30A	13	9	13	M12	44	24	19
SK-40A	17	14	19	M16	54	26	20
SK-50A	25	21	28	M24	74	34	25
SK-30B	13	9	13	M12	44	24	19
SK-40B	17	14	19	M16	54	26	20
SK-50B	25	21	28	M24	74	34	25

◎For intercooler Rivet with .C, example: SK-50B.C; A MODEL WITH INNER COOL.

# ISO 7388 / ISO



Rivet

IS07388 Rivet

<b>PRODUCT MODEL</b>	<b>DIMENSIONS</b>						
	d1	d2	d3	d	g	I	t
DIN7388-40A	14	17	23	19	M16	54	7.5
DIN7388-50A	21	25	36	28	M24	74	11.5
DIN7388-40B	12.95	17	22.5	18.95	M16	44.5	7.5
DIN7388-50B	19.6	25	36	29.1	M24	65.5	11.5

◎ IF YOU NEED INNER COOL Rivet, WITH .C, EXAMPLE : DIN7388-50B.C

ISO Rivet

<b>PRODUCT MODEL</b>	<b>DIMENSIONS</b>							
	L1	L2	L3	D1	D2	D3	D4	D5
IS020	26	12	9	12	9	6	8.5	M8
IS025	28	12	9	13	11	7	8.5	M8
IS030	44	24	19	17	13	9	13.0	M12

◎For intercooler Rivet with .C, example: IS020.C

## ER / GSK Nut



Nut

ER Nut

PRODUCT MODEL	DIMENSIONS			形式
	M	D	L	
ER11-A	M14x0.75	19	13	Fig. 1
ER16-A	M22x1.52	28	17.5	Fig. 1
ER20-A	M25x1.5	34	19	Fig. 1
ER25-UM	M32x1.5	42	20	Fig. 2
ER32-UM	M40x1.5	50	22.5	Fig. 2
ER40-UM	M50x1.5	63	29	Fig. 2
ER8-M	M10x0.75	12	12	Fig. 3
ER11-M	M13x0.75	16	12	Fig. 3
ER16-M	M19x1	22	18	Fig. 3
ER20-M	M24x1	28	19	Fig. 3
ER25-M	M30x1	35	20	Fig. 3
ER25-KM	M32x1.5	42	20	Fig. 4
ER32-KM	M40x1.5	50	22.5	Fig. 4
ER40-KM	M50x1.5	63	29	Fig. 4

◎The coaxiality between the thread and the clamping cone is 0.003

GSK Nut

PRODUCT MODEL	DIMENSIONS			形式
	M	D	L	
GSK06	M15x1	20	15	Fig. 1
GSK10	M21.5x1	27	18	Fig. 1
GSK16	M32x1.5	40	25	Fig. 1
GSK25	M45x1.5	54	32	Fig. 1

The coaxiality between the thread and the clamping cone is 0.003

## ER wrench



wrench

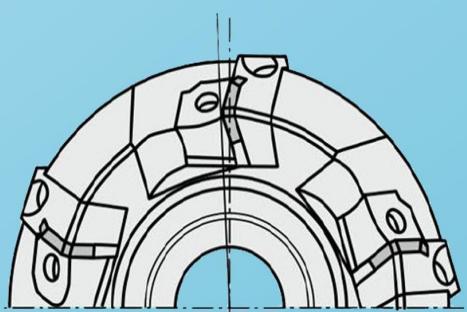
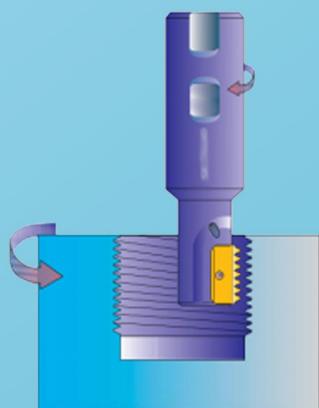
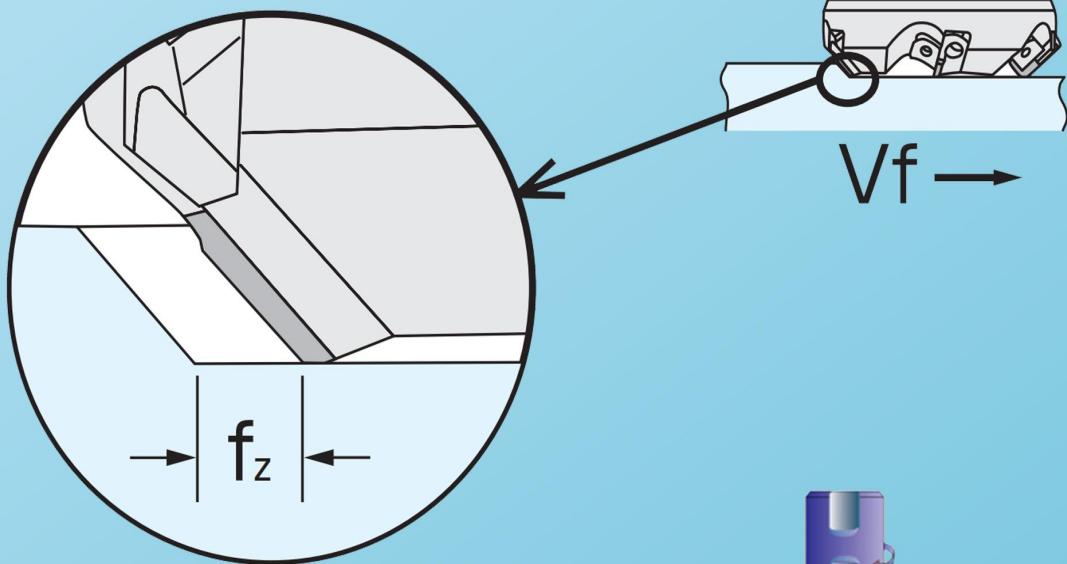
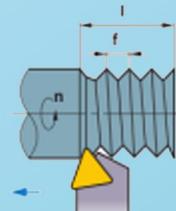
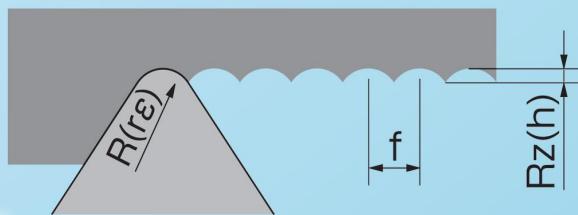
PRODUCT MODEL	K	L	SUITABLE Nut	PRODUCT MODEL	D	L	SUITABLE Nut
OW/ER11	17	100	ER11-A	UM/ER25	42	206	ER25-UM
OW/ER16	25	128	ER16-A	UM/ER32	50	253	ER32-UM
OW/ER20	30	138	ER20-A	UM/ER40	63	289	ER40-UM

PRODUCT MODEL	L	SUITABLE RANGE	Nut
A/38-42	168	38-42	SK16
A/45-52	190	45-32	SK25

PRODUCT MODEL	D	SUITABLE Nut
OB/SK06	20	GSK06
OB/SK10	27	GSK10
OB/SK16	40	GSK16
OB/SK25	54	GSK25

MLC Strong collet wrench		
PRODUCT MODEL	SUITABLE BODY	W.
SP-MLC 20	MLC20/HPC20	0.20
SP-MLC 32	MLC32/HPC32	0.30
SP-MLC 42	MLC42/HPC42	0.45

# 技术资料



# screw



## Chart

SFS Strau Reinforced Star Screws				Wyhan Reinforced Star Spoon Handle Wrench(T)
MODEL	D	L	A	
CSG2049-P	2.55	4.9	M2*0.4	CTS06W-P
CSG2252-P	3.14	5.2	M2.2*0.45	CTS07W-P
CSG2565-P	3.46	6.5	M2.5*0.45	CTS08W-P
CSG3085-P	5.3	10.8	M3*0.5	CTS10W-P
CSX3011-P	5.3	10.8	M3*0.35细牙	CTS15W-P
CSG3585-P	5.1	8.5	M3.5*0.6	CTS10W-P
CSG4011-P	5.45	11.0	M4*0.7	CTS15W-P
CSG4013-P	5.45	13.0	M4*0.7	CTS15W-P
CSG5012-P	7.0	11.45	M5*0.8	CTS20W-P
◇SCREW-P ONLY FOR CTS*W-P, OTHER WRENCH NOT SUITABLE.				
other screws				WRENCH(T)
MODEL	D	L	A	Wyhan
CSS2005	1.9	5	M2*0.4	CTS06W
CSC2250	3.0	5	M2.2*0.45	CTS07W
CSX2553	3.6	5.3	M2.5*0.35细牙	CTS08W
CSC2560	3.6	6	M2.5*0.45	CTS08W
CSD3070	3.6	7.0	M3*0.5	CTS08W
CSC3080	4.2	8	M3*0.5	CTS10W
CSC3580	5.0	8	M3.5*0.6	CTQ15
CSX4080	5.6	8	M4*0.5细牙	
CSC4090	5.4	9	M4*0.7	
CSD4010	5.7	10	M4*0.7	
CST4010	6.0	10	M4*0.7圆头	
CSC4511	6.6	11	M4.5*0.75	
CSC5012	7.2	12	M5*0.8	CTQ20
CST5010	6.27	10.6	M5*0.8圆头	
CSD5012	7.0	12	M5*0.8	
CSY5012	7.0	12	M5*0.8	
CSG5016	7.1	16	M5*0.8	
CSS6016	8.35	15.6	M6*0.75	—
◇SCREW CAN USE BOTH CTS*W WRENCH OR CTQ WRENCH.				

**SFS**



Strau Reinforced Star Screws系列

◇This series of screws has high hardness, strong impact resistance, strong locking ability and longer life

The biggest difference between this series of screws and other star-shaped screws is the widened structure design of the star angle on the head. This structure uses a specific wrench to obtain a more precise and firm fit, and its wrench torque is 25% higher

## Wyham Wrench



### Flag and key handle wrenches

◇ The handle is ergonomically shaped and provides support areas for the thumb and index finger. From now on, the transmission of large torque becomes very simple

◇ for quick screw turning

The innovative torque driver comes in a variety of sizes T6-T20 without damaging expensive set screws or handle patterns. The screwdriver lever can react elastically if the torque applied exceeds the torque

◇ Low profile shank for easy twisting of the cover screw on the screw shaft

# WRENCH



Chart



Wyham

MODEL					
CTS06W-P	6IP	35	2.0	70	40
CTS07W-P	7IP	35	2.5	70	40
CTS08W-P	8IP	40	2.5	75	40
CTS10W-P	10IP	40	3.0	75	40
CTS15W-P	15IP	45	3.5	80	40
CTS20W-P	20IP	45	4.0	80	40



Wyham

MODEL					
CTS06W	T6	35	2.0	70	40
CTS07W	T7	35	2.5	70	40
CTS08W	T8	40	2.5	75	40
CTS10W	T10	40	3.0	75	40
CTS15W	T15	45	3.5	80	40
CTS20W	T20	45	4.0	80	40



Wyham-加强星型T型手柄扳手

MODEL					
CTT15W-P	15IP	100	4.0	126	80
CTT20W-P	20IP	100	4.0	132	100



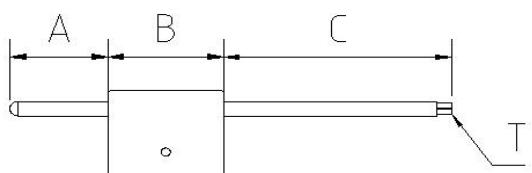
Wyham-星型T型手柄扳手

MODEL					
CTT15W	T15	100	4.0	126	80
CTT20W	T20	100	4.0	132	100

# WRENCH

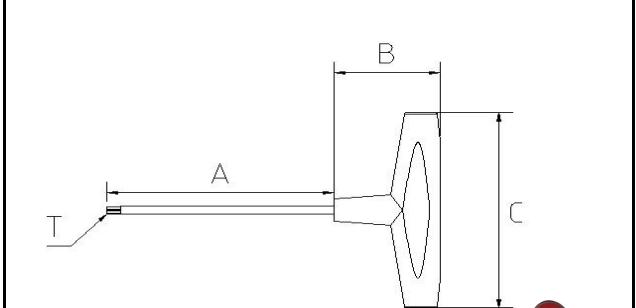


Chart



other

MODEL	A	B	C	T
CTQ06	13	15	34	T6
CTQ07	13	15	34	T7
CTQ08	13	19	39	T8
CTQ10	14	42	42	T10
CTQ15	15	45	45	T15
CTQ20	15	49	49	T20



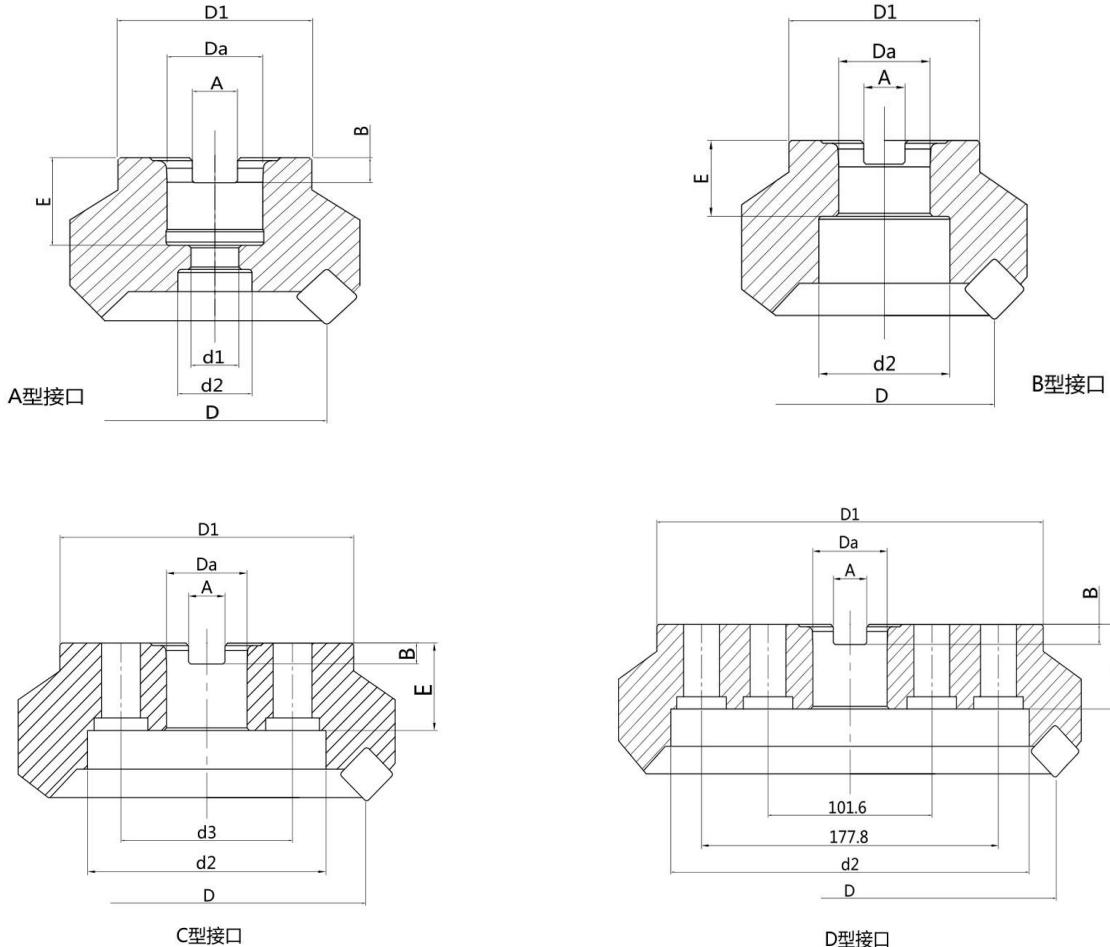
other

MODEL	A	B	C	T
CTT15	95	45	80	T15
CTT20	100	45	80	T20

# Interface Type /CONNECT



Metric CUTTER HOLDER

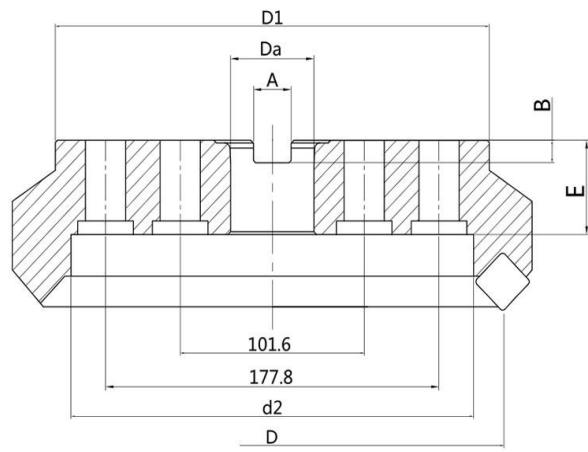
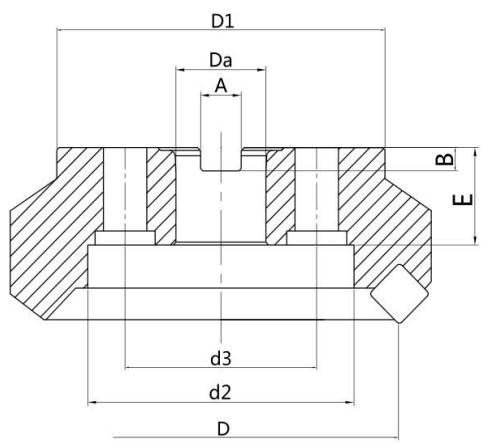
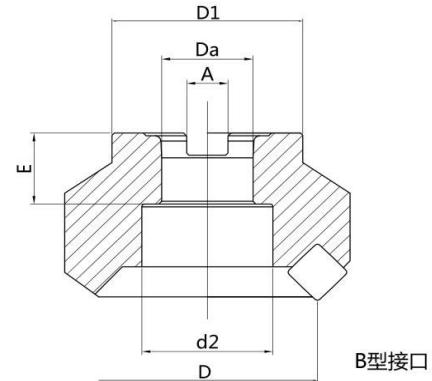
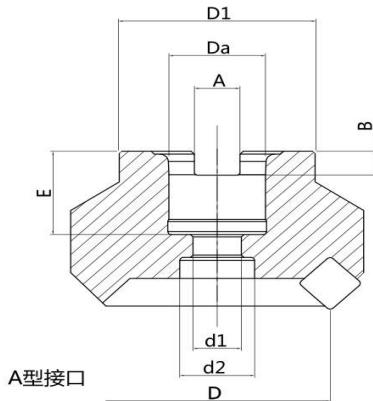


D	Da	A	B	E	D1		d1	d2	d3	CONNECTOR
					MOULD	Ordinar				
32	16	8.4	5.6	20	30	—	9	13.5	—	
40	16	8.4	5.6	20	38	—	9	13.5	—	A
40	22	10.4	6.3	22	38	—	11	17	—	A
50	22	10.4	6.3	22	40	45	11	17	—	A
63	22	10.4	6.3	22	47	—	11	17	—	A
80	27	12.4	7	28	58	70	13	22	—	A
100	32	14.4	8	26	66	85	18	26	—	A
100	32	14.4	8	26	66	85	—	46	—	B
125	40	16.4	9	32	85	—	22	32	—	A
125	40	16.4	9	32	85	—	—	56	—	B
160	40	16.4	9	32	110	—	—	90	66.7	C
200	60	25.7	14	40	130	—	—	132	101.6	C
250	60	25.7	14	40	160	—	—	150	101.6	C
315	60	25.7	14	40	220	—	—	220	—	D

# Interface Type /CONNECT



## Inch CUTTER HOLDER



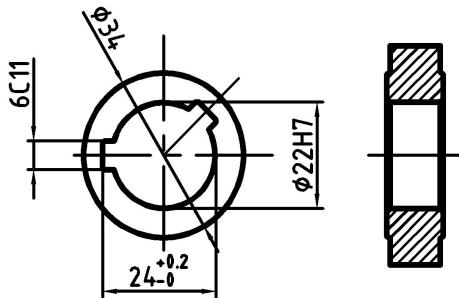
DIMENSION									CONNECTOR
D	Da	A	B	E	D1	d1	d2	d3	
32	16	8.4	5.6	20	30	9	13.5	—	
40	16	8.4	5.6	20	38	9	13.5	—	A
40	22	10.4	6.3	22	38	11	17	—	A
50	22	10.4	6.3	22	45	11	17	—	A
63	22	10.4	6.3	22	47	11	17	—	A
80	25.4	9.526	6	26	70	13	22	—	A
100	31.75	12.7	8	32	80	18	26	—	A
100	31.75	12.7	8	32	80	—	46	—	B
125	38.1	15.876	10	38	80	—	56	—	B
160	50.8	19.05	11	38	100	—	72	—	B
200	47.625	25.4	14	38	130	—	132	101.6	C
250	47.625	25.4	14	38	160	—	150	101.6	C
315	47.625	25.4	14	38	220	—	224	—	D

# HUB Monolithic interface standards

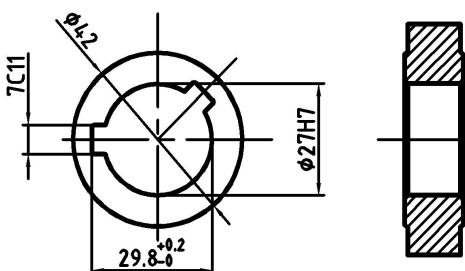


CHART

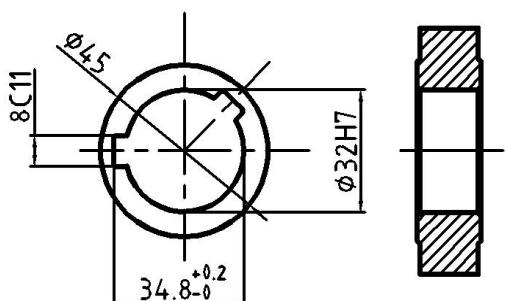
Interface diameter D22



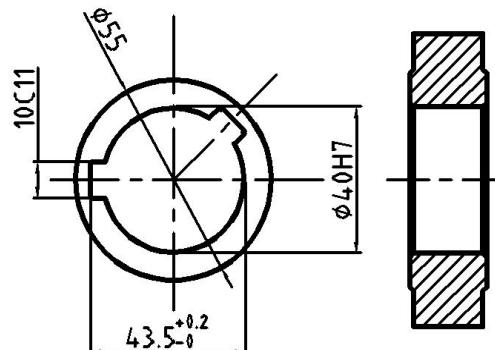
Interface diameter D27



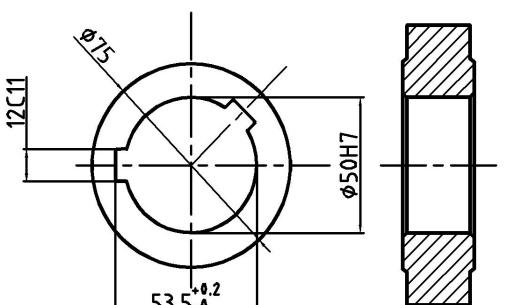
Interface diameter D32



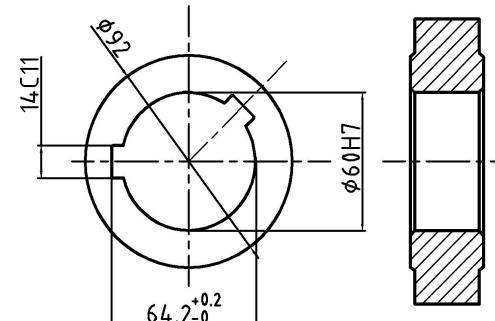
Interface diameter D40



Interface diameter D50



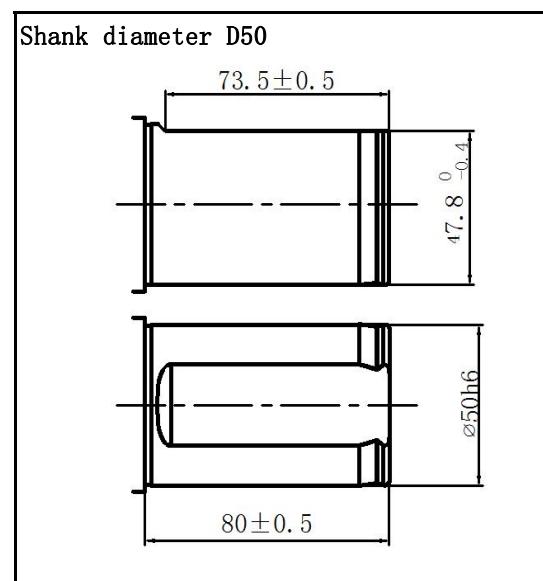
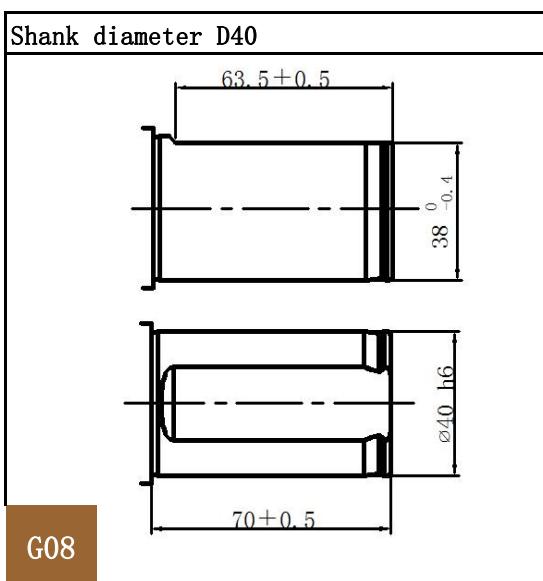
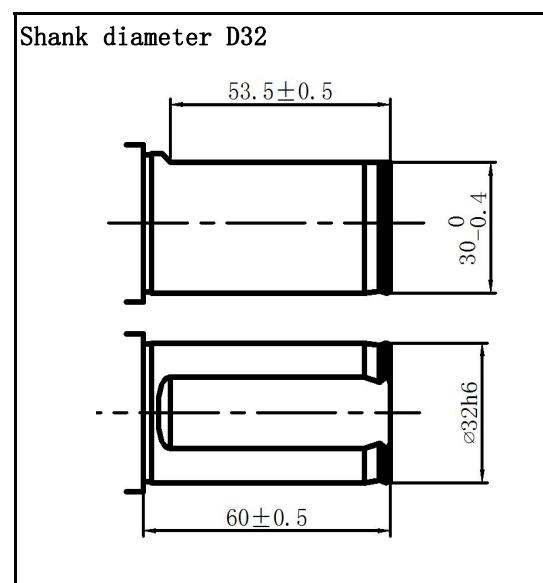
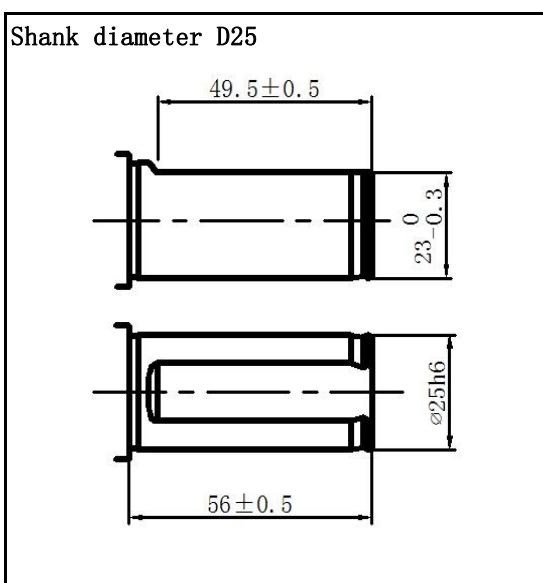
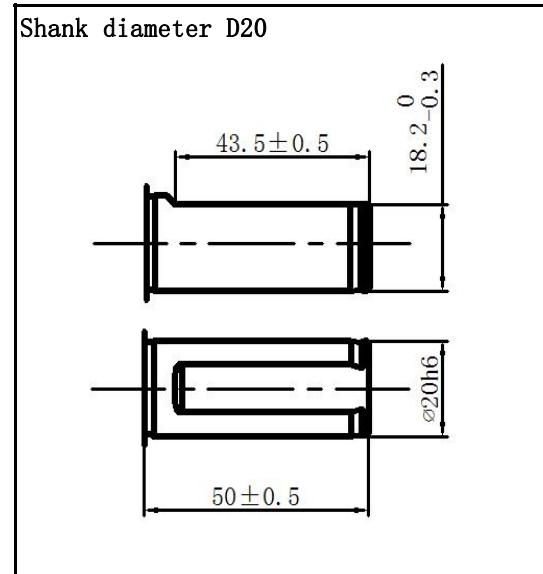
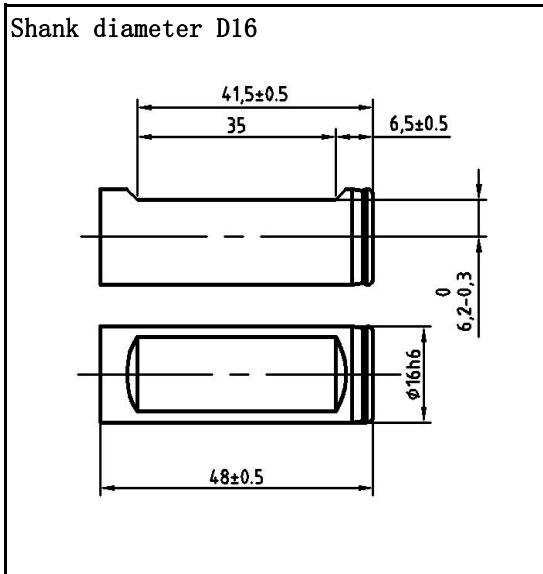
Interface diameter D60



# ISO 9766Side shank flattening standard



CHART

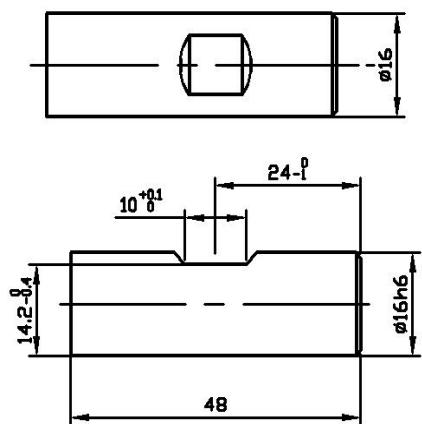


# ISO 3338 Side shank flattening standard

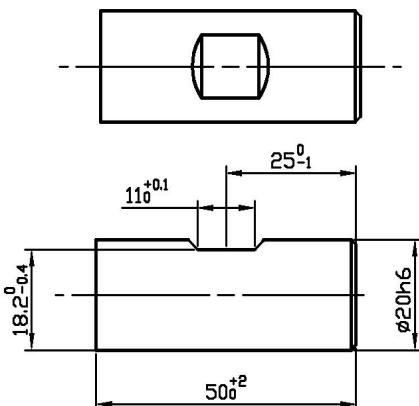


## CHART

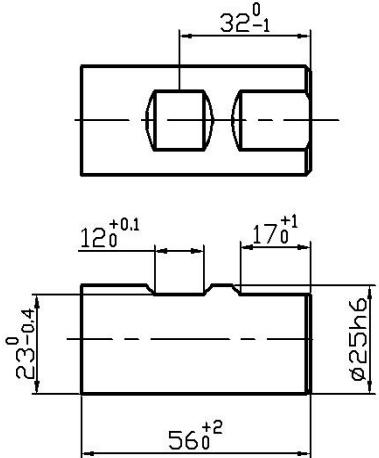
Shank diameter D16



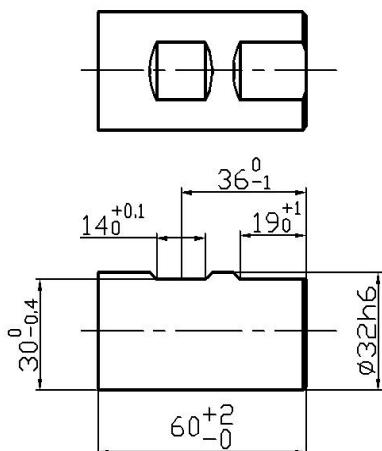
Shank diameter D20



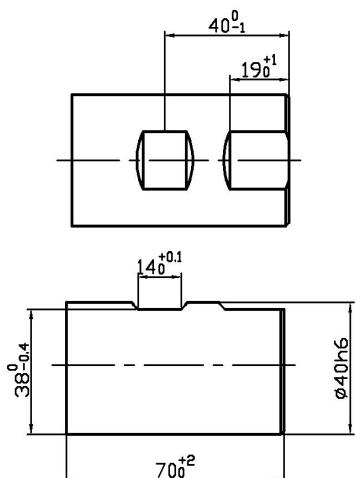
Shank diameter D25



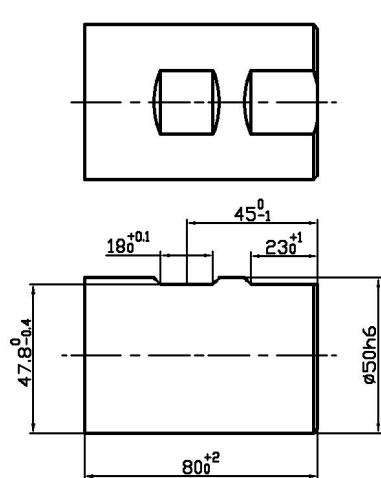
Shank diameter D32



Shank diameter D40



Shank diameter D50



## Internal hole turning tool shank flattening standard



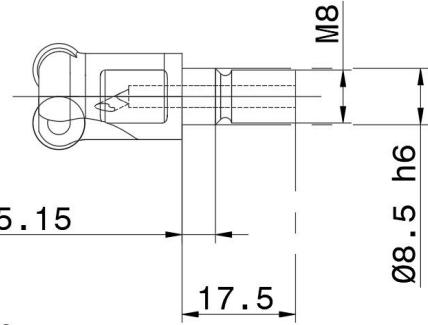
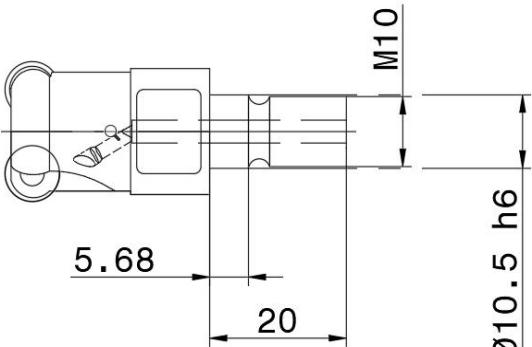
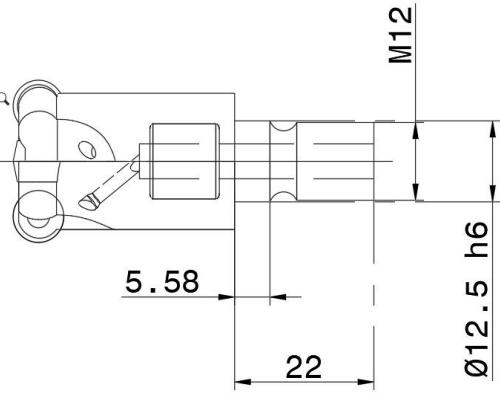
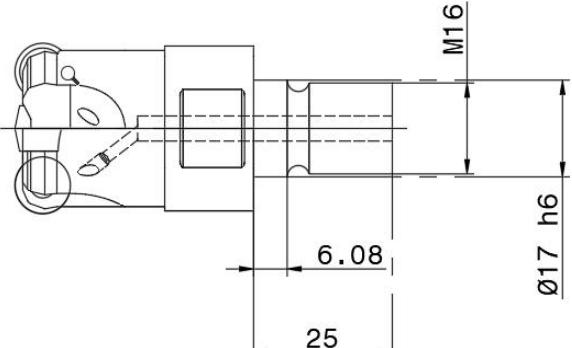
CHART

Shank diameter D12	A technical drawing showing two views of a shank. The front view shows a total length of 11 mm and a shoulder diameter of φ12 g7. The cross-sectional view shows a shoulder height of 6 mm and a total height of 11.5 mm from the base.
Shank diameter D16	A technical drawing showing two views of a shank. The front view shows a total length of 15 mm and a shoulder diameter of φ16 g7. The cross-sectional view shows a shoulder height of 8 mm and a total height of 15.5 mm from the base.
Shank diameter D20	A technical drawing showing two views of a shank. The front view shows a total length of 18 mm and a shoulder diameter of φ20 g7. The cross-sectional view shows a shoulder height of 10 mm and a total height of 19 mm from the base.
Shank diameter D25	A technical drawing showing two views of a shank. The front view shows a total length of 23 mm and a shoulder diameter of φ25 g7. The cross-sectional view shows a shoulder height of 12.5 mm and a total height of 24 mm from the base.
Shank diameter D32	A technical drawing showing two views of a shank. The front view shows a total length of 30 mm and a shoulder diameter of φ32 g7. The cross-sectional view shows a shoulder height of 16 mm and a total height of 31 mm from the base.
Shank diameter D40	A technical drawing showing two views of a shank. The front view shows a total length of 38 mm and a shoulder diameter of φ40 g7. The cross-sectional view shows a shoulder height of 20 mm and a total height of 39 mm from the base.

## Common thread head specifications



CHART

M8	 <p>Technical drawing showing the cross-section of an M8 threaded rod head. Key dimensions: total height is M8, shoulder diameter is Ø8.5 h6, and the distance from the bottom of the head to the center of the thread is 5.15. The overall length of the threaded section is 17.5.</p>
M10	 <p>Technical drawing showing the cross-section of an M10 threaded rod head. Key dimensions: total height is M10, shoulder diameter is Ø10.5 h6, and the distance from the bottom of the head to the center of the thread is 5.68. The overall length of the threaded section is 20.</p>
M12	 <p>Technical drawing showing the cross-section of an M12 threaded rod head. Key dimensions: total height is M12, shoulder diameter is Ø12.5 h6, and the distance from the bottom of the head to the center of the thread is 5.58. The overall length of the threaded section is 22.</p>
M16	 <p>Technical drawing showing the cross-section of an M16 threaded rod head. Key dimensions: total height is M16, shoulder diameter is Ø17 h6, and the distance from the bottom of the head to the center of the thread is 6.08. The overall length of the threaded section is 25.</p>

## Standard Shank Details



Commonly used BT40-SLN standard handle

图1

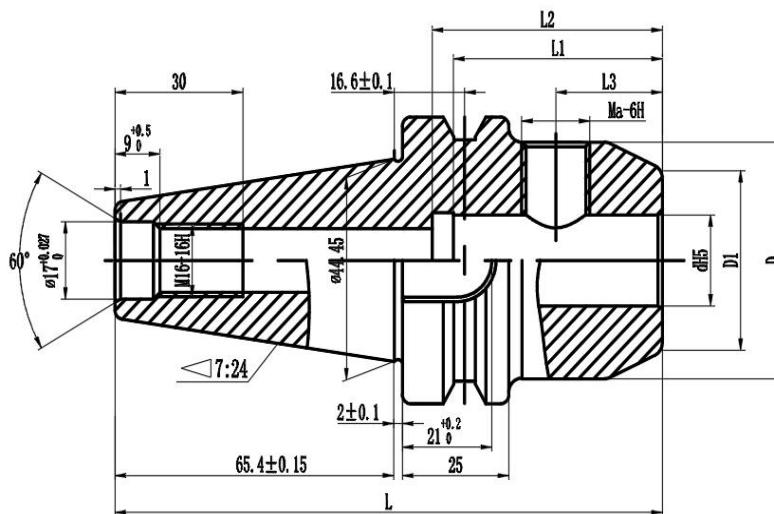
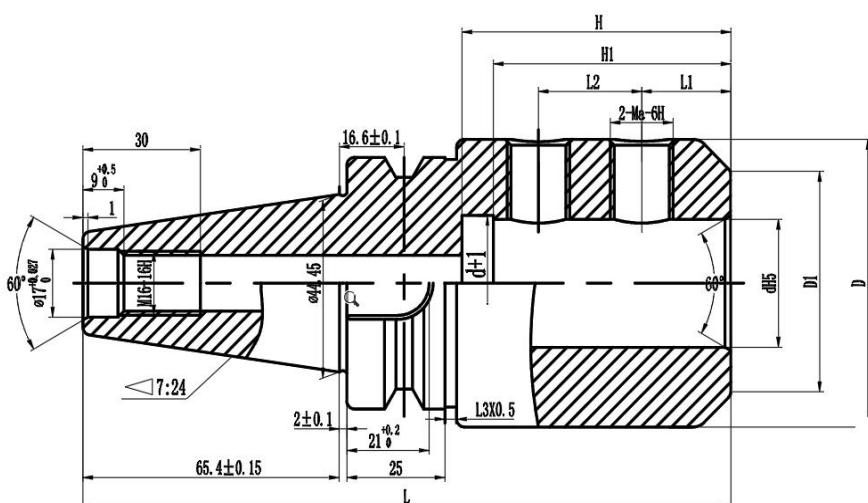


图2

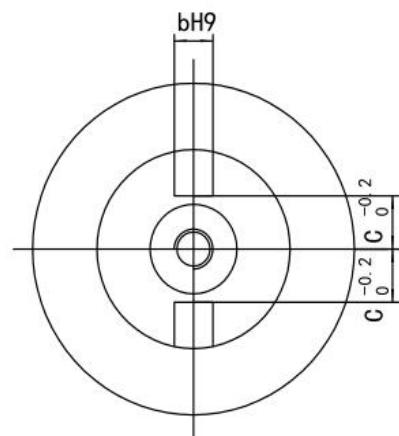
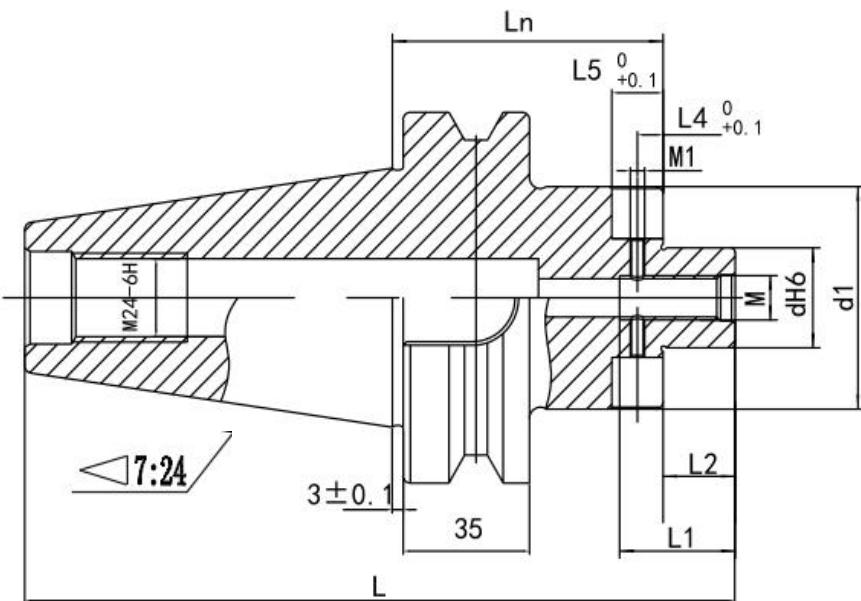


MODEL	DIMENSION									
	dH5	D	Ma	D1	L1	L2	L3	H1	H	图示
BT40-SLN16	16 ( $0/+0.008$ )	48	M14	36	47	52	24	—	—	1
BT40-SLN20	20 ( $0/+0.009$ )	52	M16	40	49	54	25	—	—	1
BT40-SLN25	25 ( $0/+0.009$ )	65	M18	45	24	25	—	54	62	2
BT40-SLN32	32 ( $0/+0.011$ )	72	M20	56	24	28	—	58	66	2
BT40-SLN40	40 ( $0/+0.011$ )	80	M20	60	30	32	—	68	76	2

## Standard TOOL HOLDER Details



Commonly used BT50-FMB standard handle

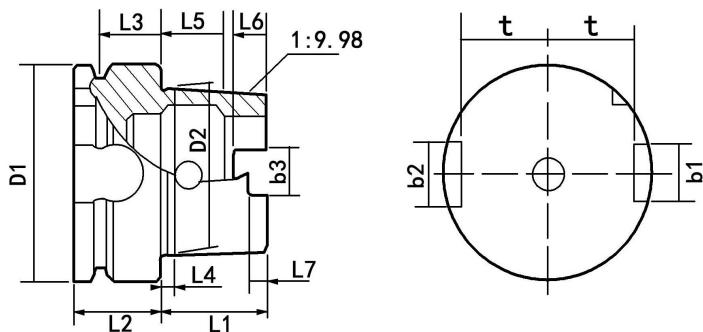


MODEL	DIMENSION										
	dH6	D	Ma	D1	L2	L3XD	bH9	L4	L5	L1	M1
BT50-FMB22	22	48	M10	48细/60粗	16.5	2.5X11	16.5	6.2	12.4	28	M4
BT50-FMB27	27	52	M12	60	18.5	4X12.5	18.5	7.1	14.2	32	M4
BT50-FMB32	32	65	M16	63	20.0	4X16.5	20.0	9	18	42	M5
BT50-FMB40	40	72	M16	80	23.0	4X16.5	23.0	10	20	45	M6

## Standard TOOL HOLDER Details

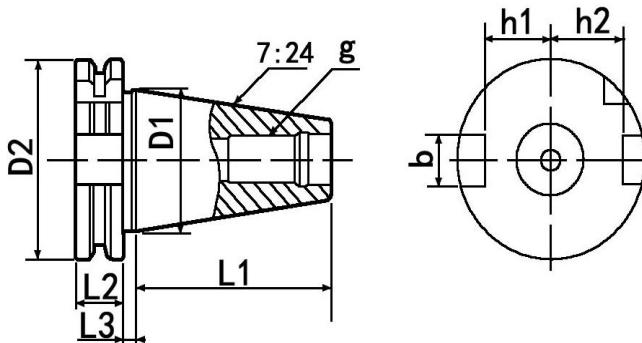


HSK handle detail DIN69893



MODEL	DIMENSION												
	D1	D2	L1	L2	L3	L4	L5	L6	L7	b1	b2	b3	t
HSK40A	40	30.007	20	20	16	4	11.42	6	3.5	11	9	8.05	17
HSK50A	50	38.009	25	26	18	5	14.13	7.5	4.5	14	12	10.54	21
HSK63A	63	48.010	32	26	18	6.3	18.13	10	6	18	16	12.5	26.5
HSK100A	100	75.013	50	29	20	10	28.56	15	10	22	20	20	44

SK handle detail DIN69871



MODEL	DIMENSION								
	D1	D2	L1	L2	L3	b	h1	h2	g
SK30	31.75	50	47.8	15.9	3.2	16.1	16.4	19	M12
SK40	44.45	63.55	68.4	15.9	3.2	16.4	22.8	25	M16
SK50	69.85	97.50	101.75	15.9	3.2	25.7	35.5	32.7	M24

— Chai Tools —

# 非标产品展示

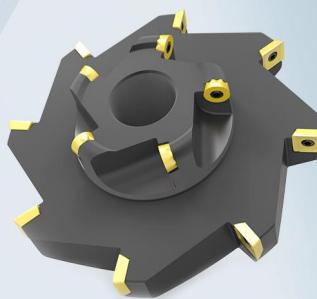
NON STANDARD



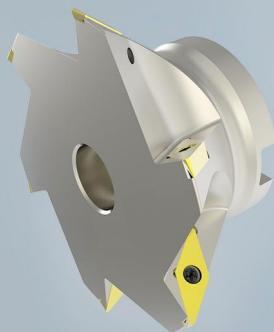
齿轮铣刀盘



精铣面铣刀



左手铣刀盘



燕尾槽铣刀



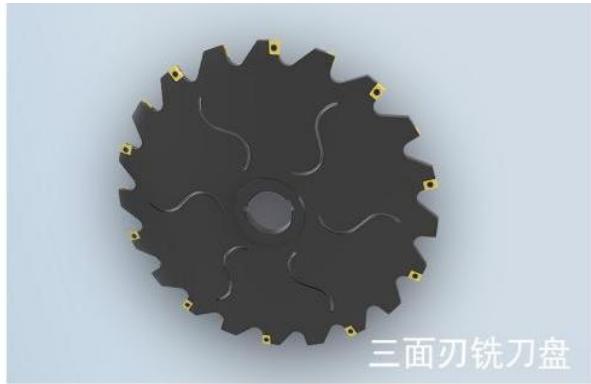
刹车钳铣刀

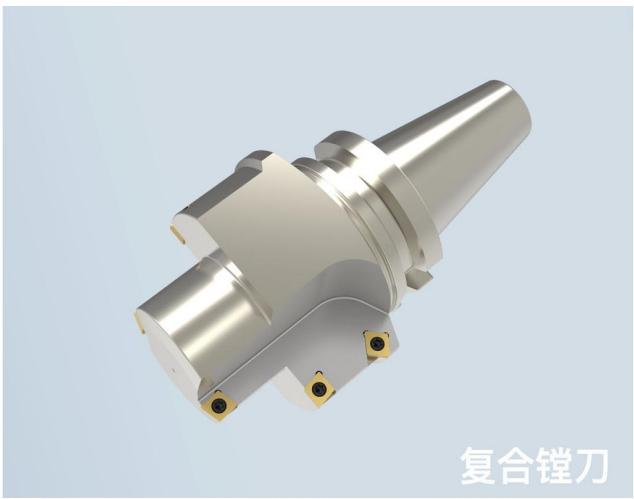


面铣刀盘

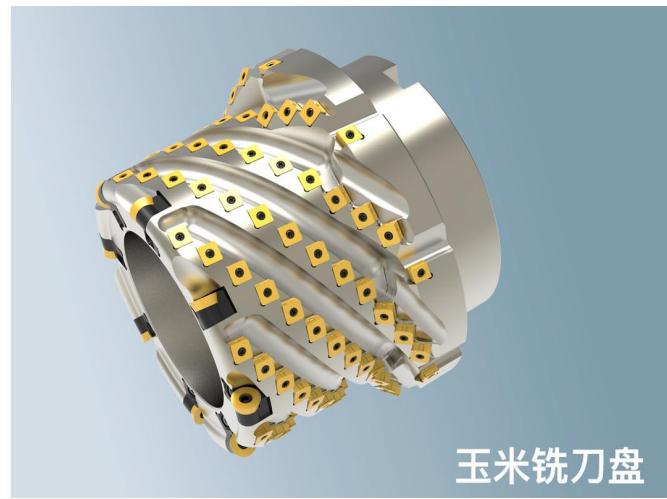


转子铣刀





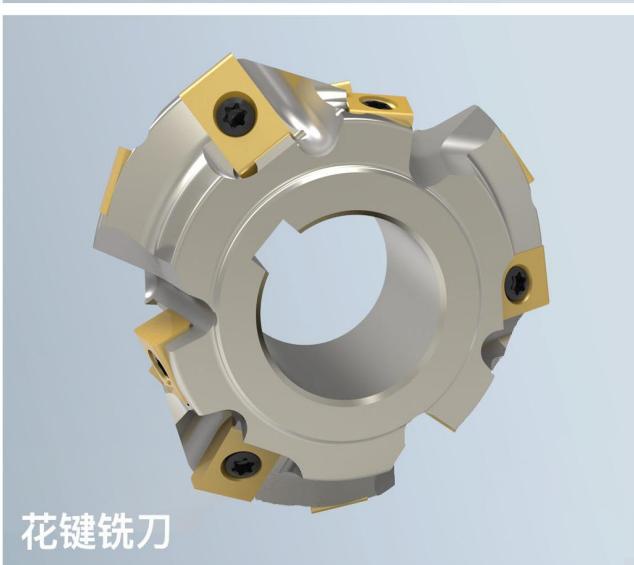
复合镗刀



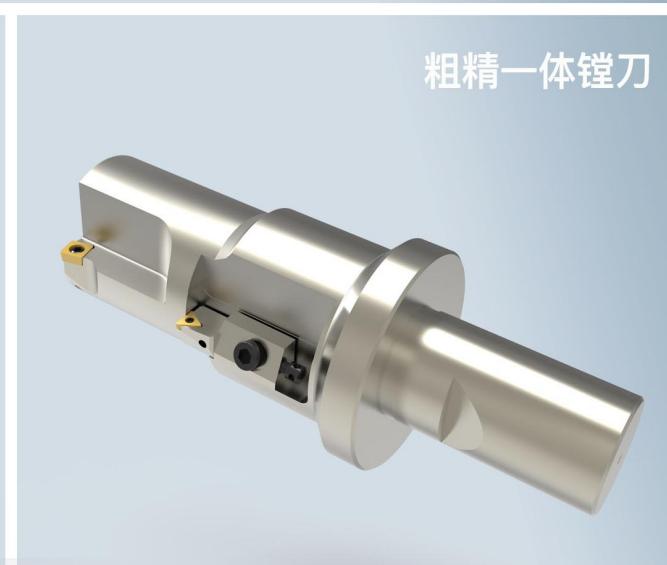
玉米铣刀盘



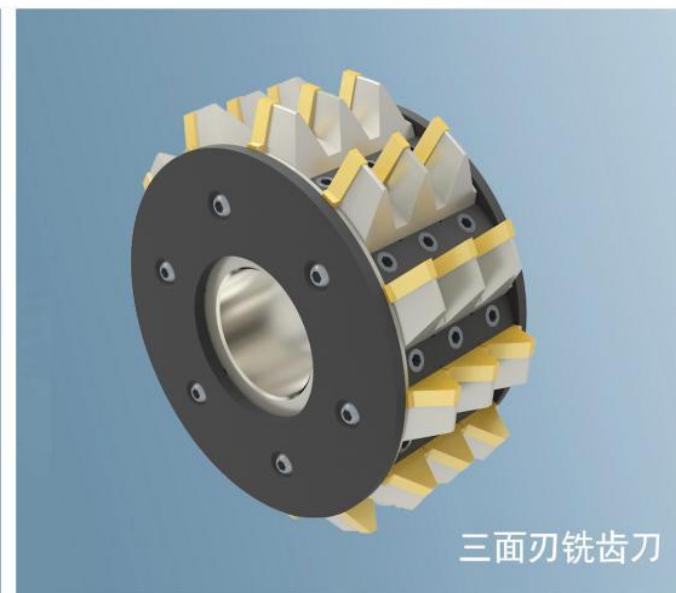
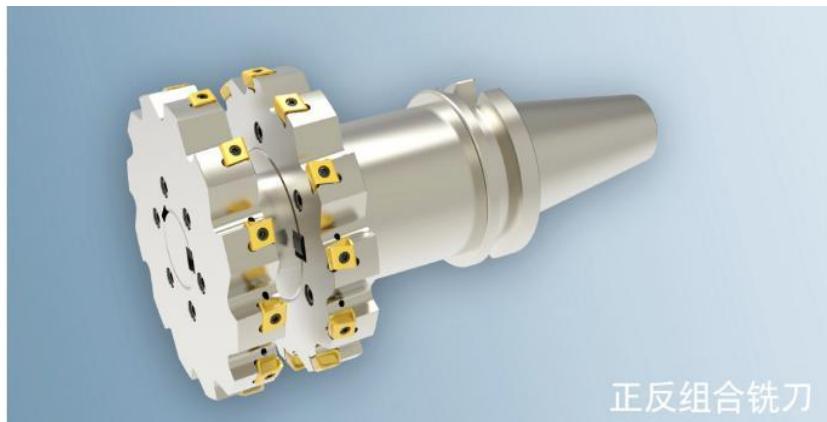
铝合金铣刀盘



花键铣刀

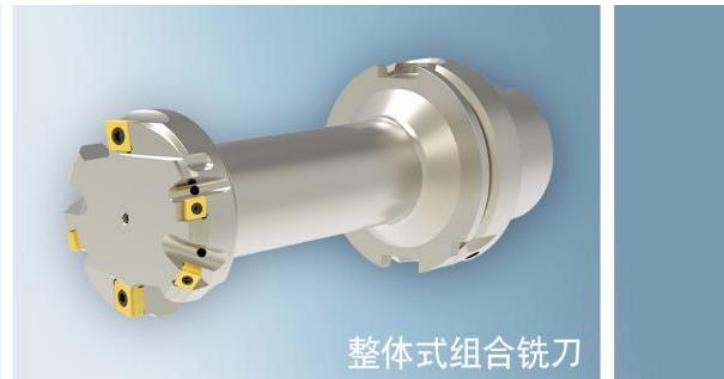


粗精一体镗刀





盘铣刀



整体式组合铣刀



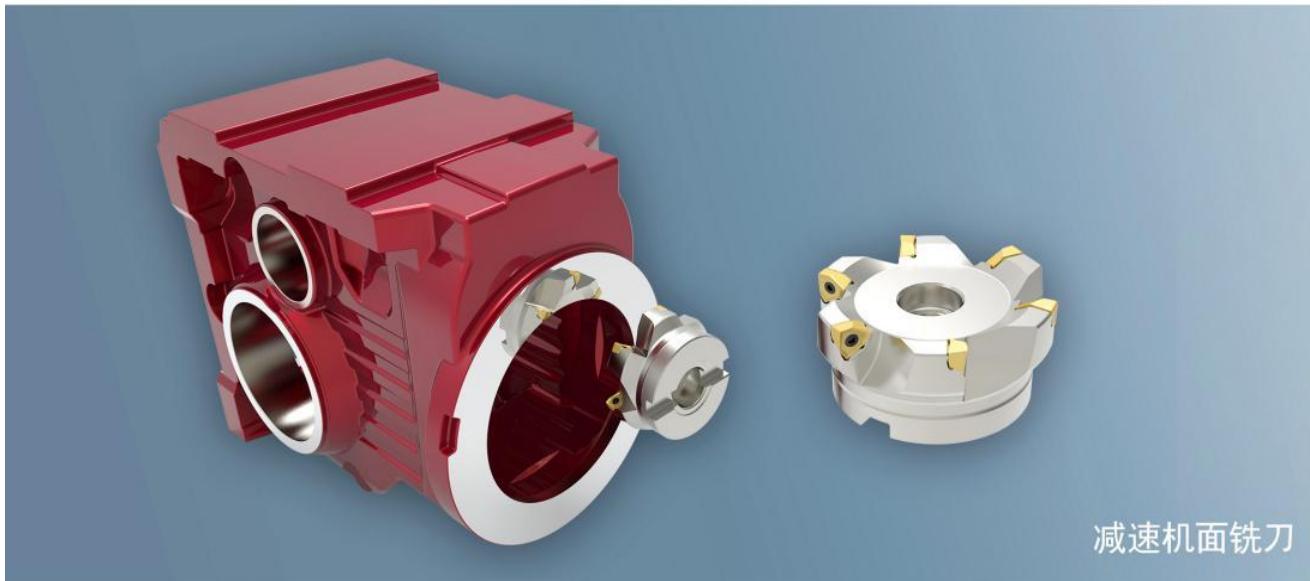
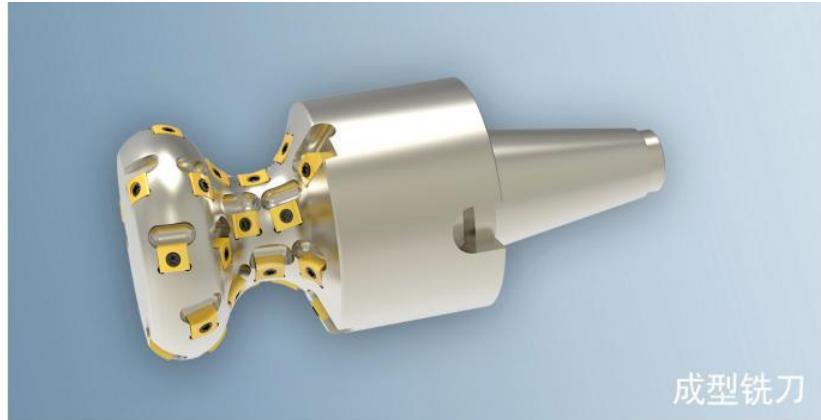
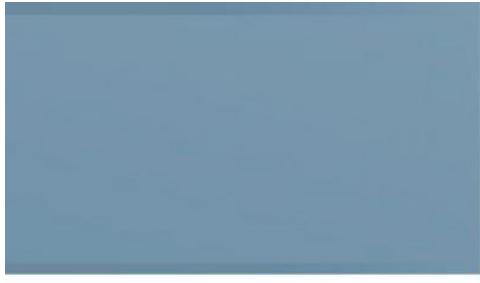
整体式组合铣刀



整体玉米铣刀



卡钳-套槽刀





面铣刀



成型铣刀



卡钳-复合镗刀



卡钳-孔口锪面刀



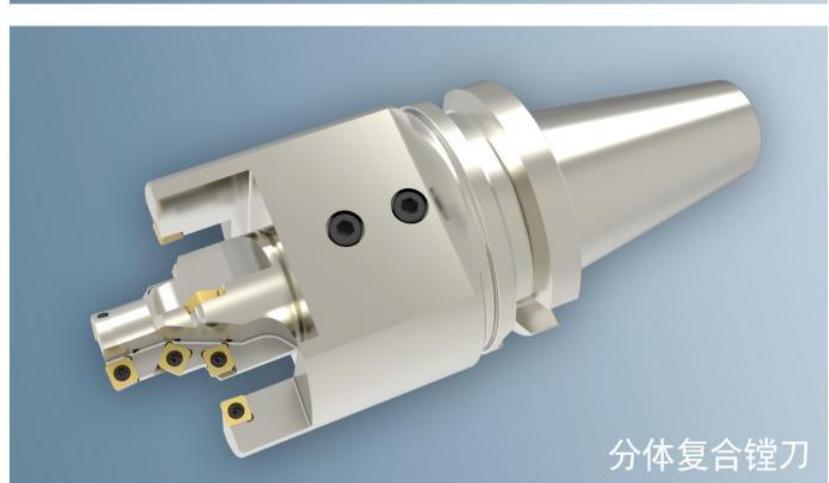
卡钳-正反铣



方柄内端面槽刀杆



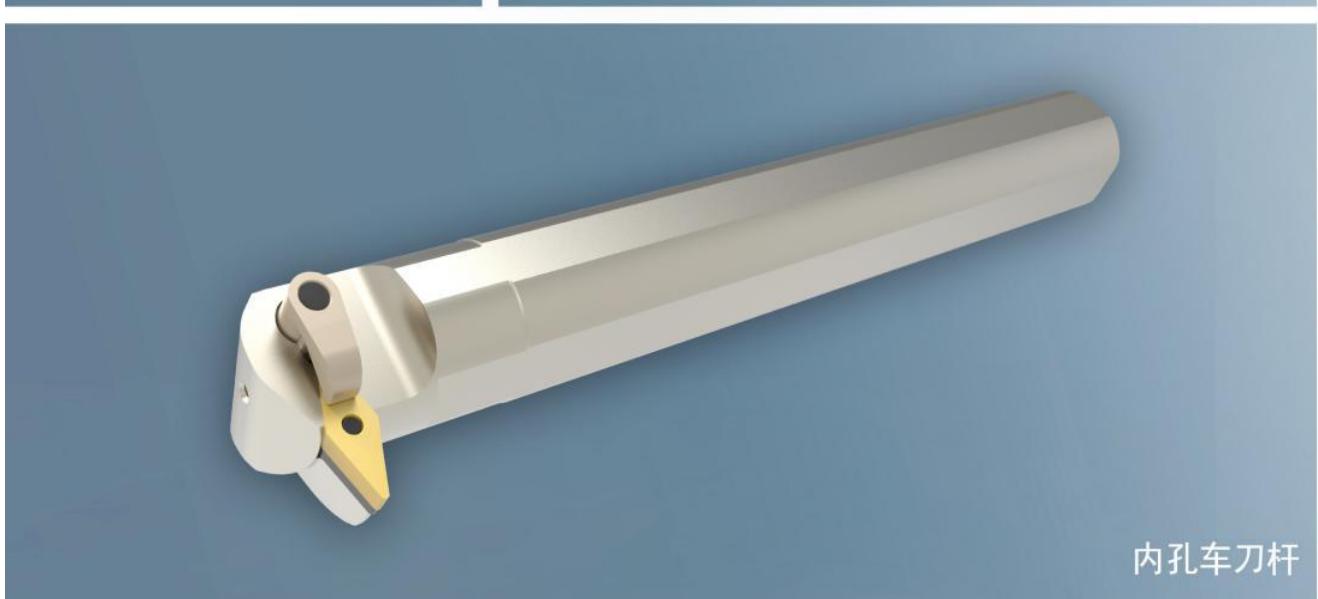
齿轮锥度玉米铣



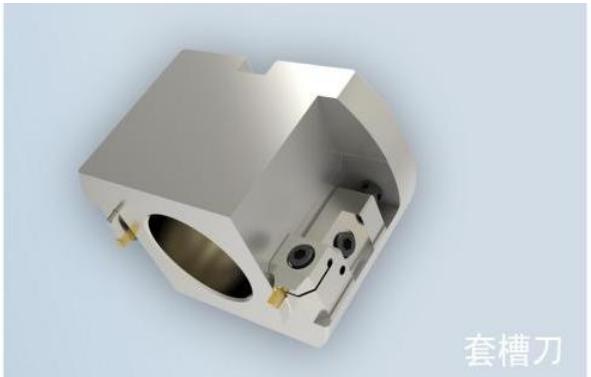
分体复合镗刀



切槽刀杆



内孔车刀杆



套槽刀



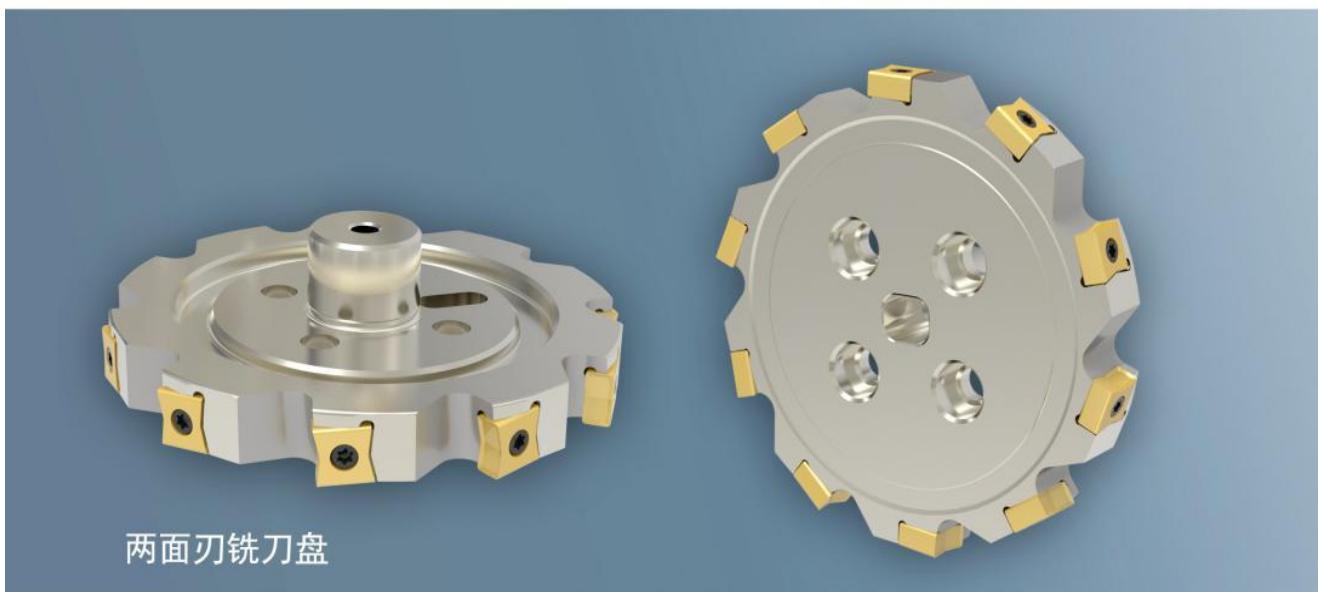
面铣刀盘

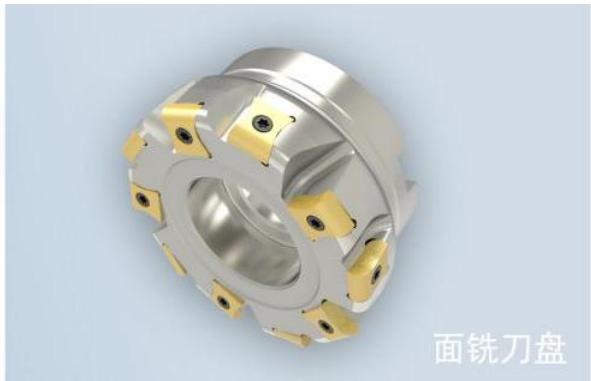


可换头玉米铣



EN组合





面铣刀盘



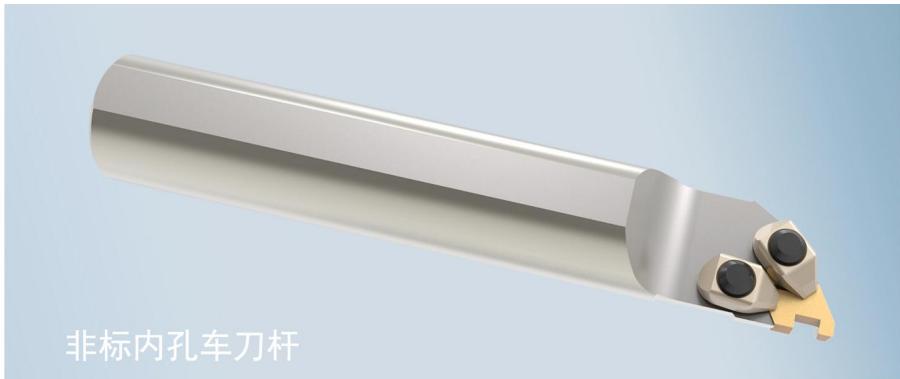
可调镗刀



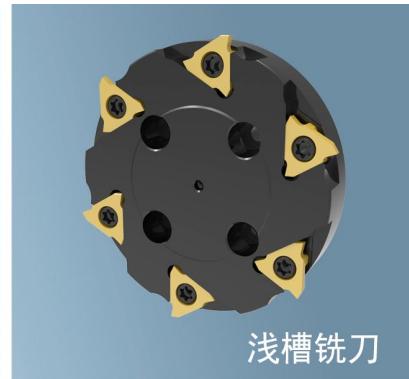
制动钳铣刀



快换式桥镗



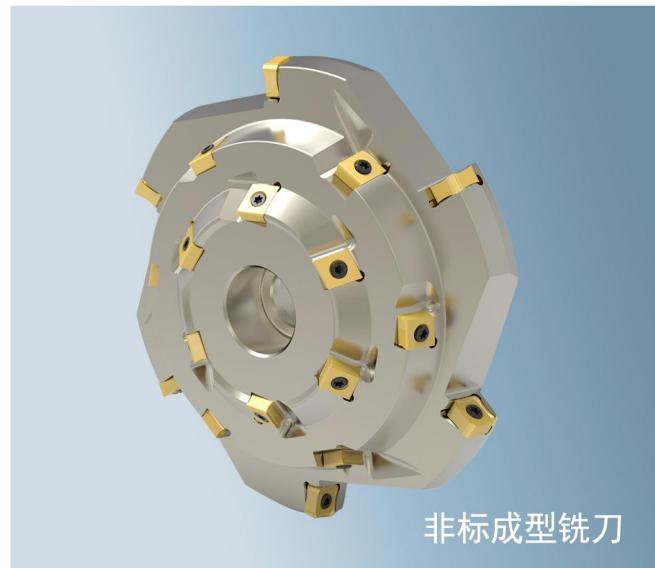
非标内孔车刀杆



浅槽铣刀



偏心反镗刀



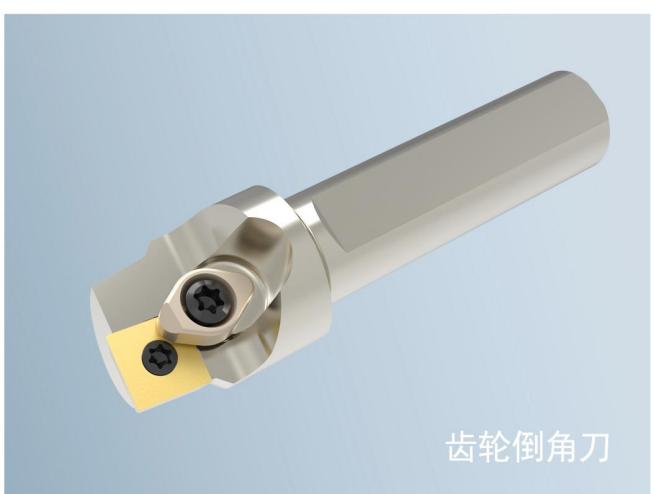
非标成型铣刀



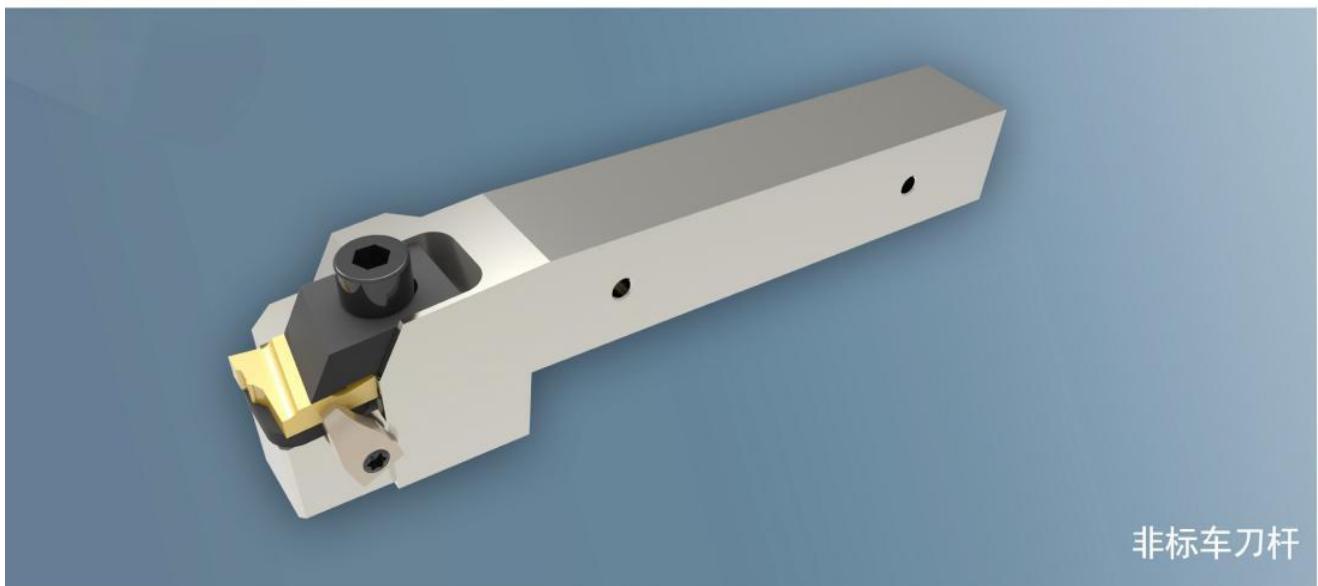
钻镗复合刀

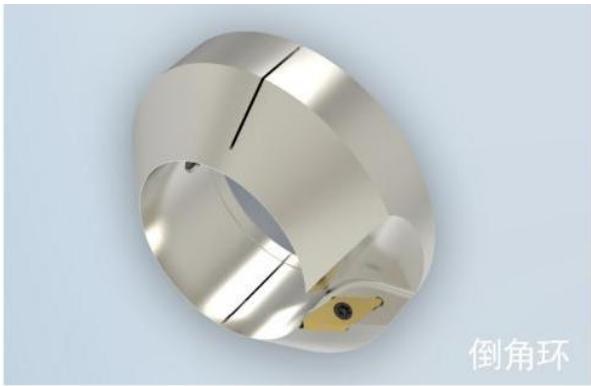


插槽刀

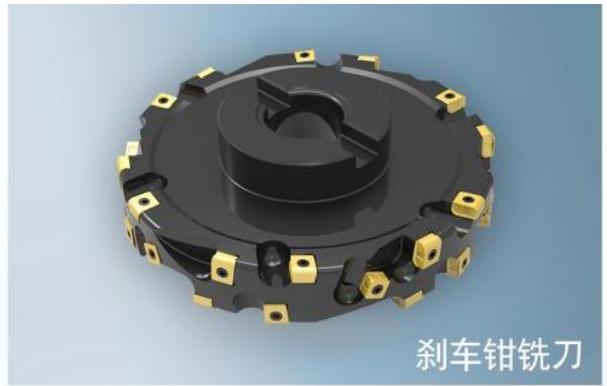


齿轮倒角刀

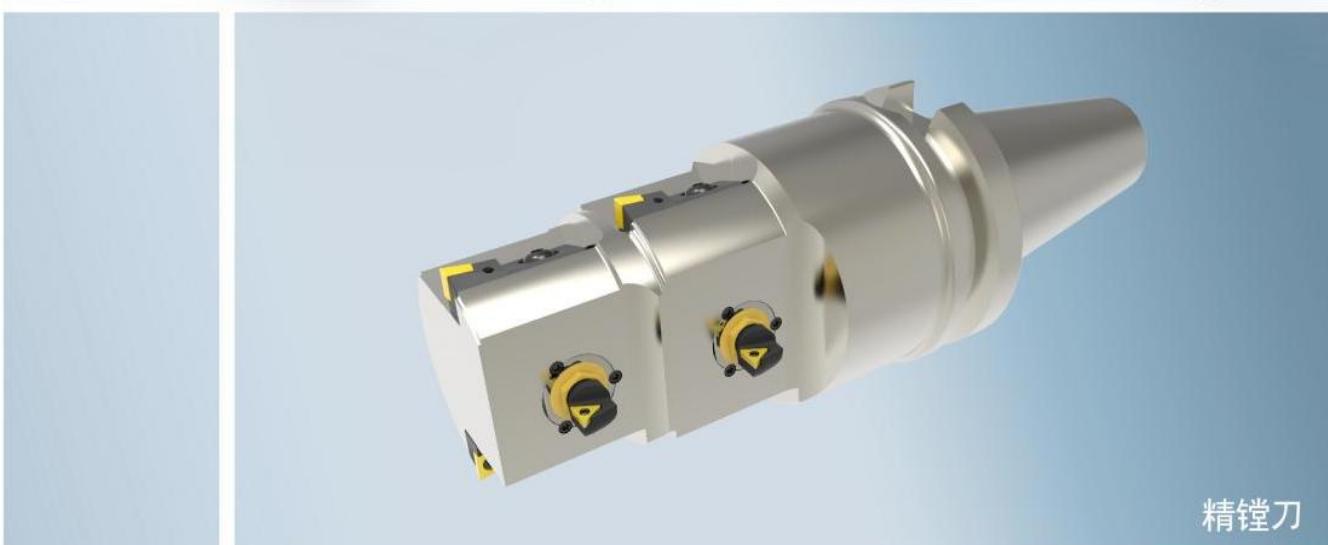




倒角环



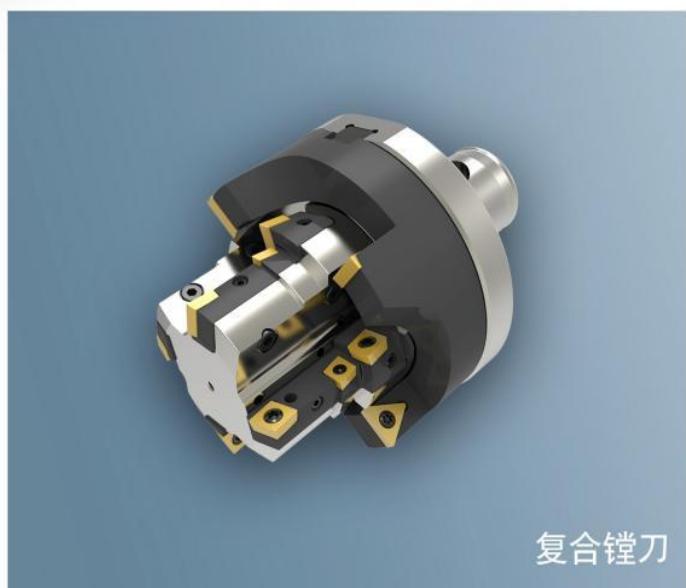
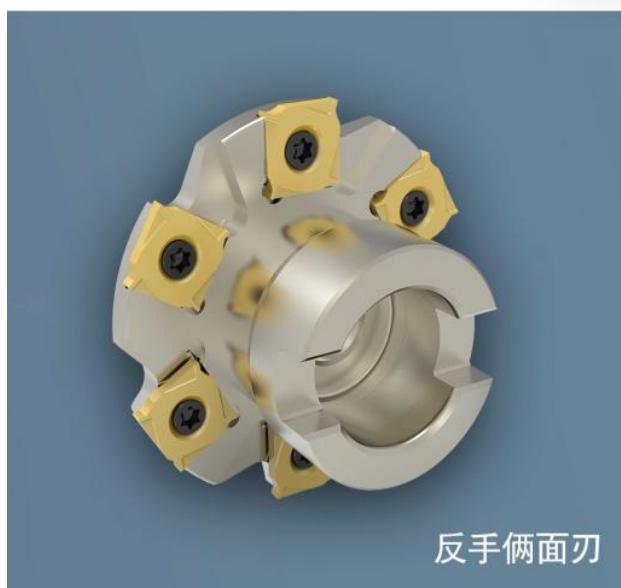
刹车钳铣刀



精镗刀



微调楔块机构

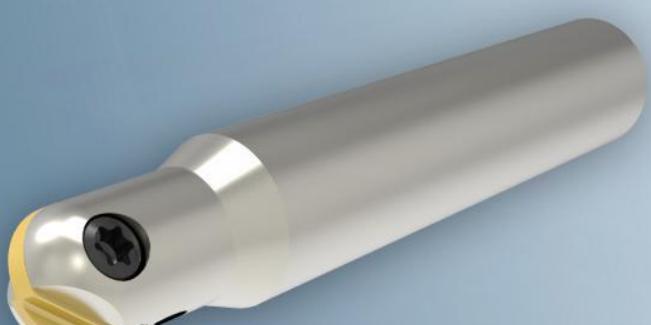




复合阶梯镗刀



柳叶立铣刀



球头铣刀



内孔车刀头



复合钻



接纳器



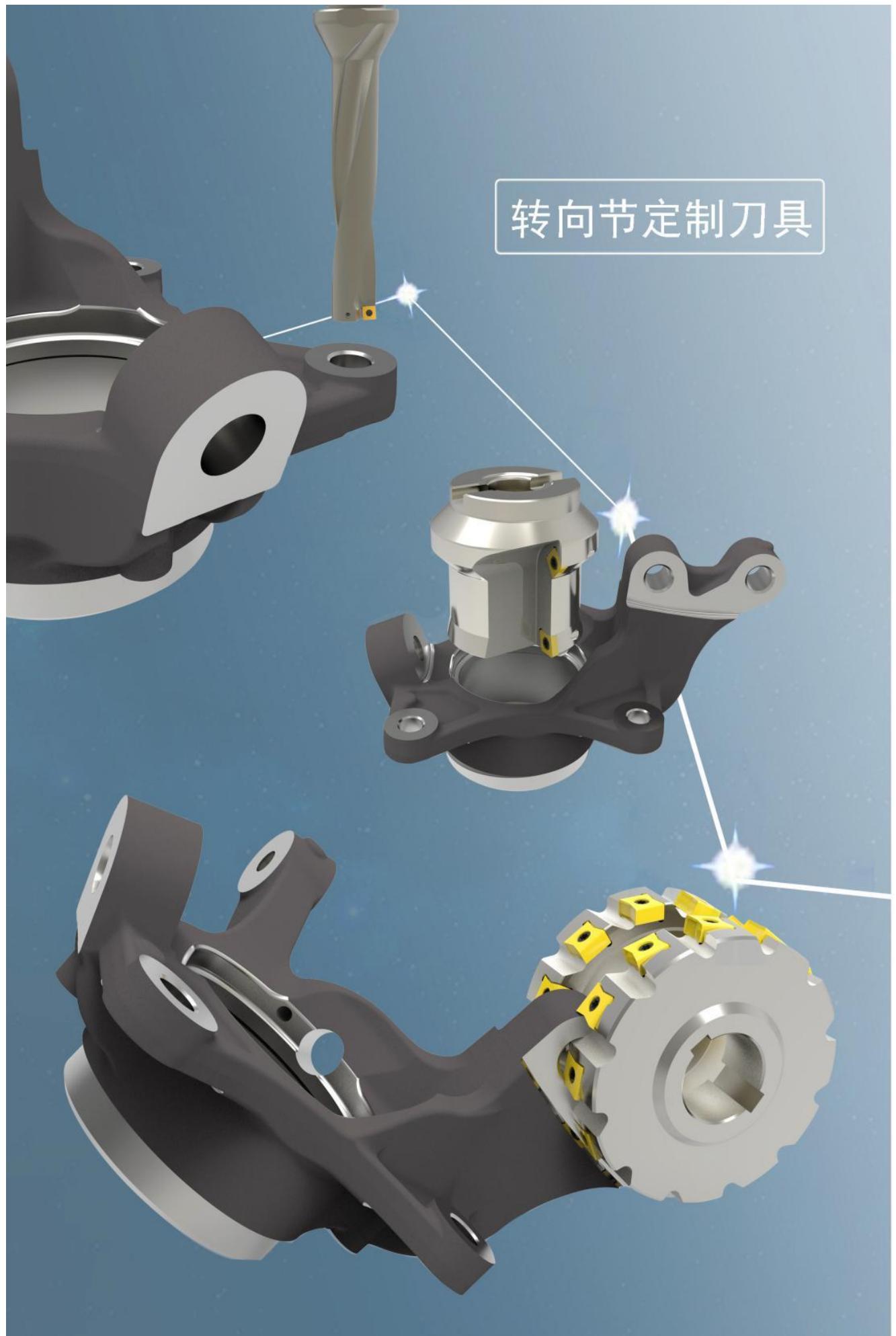
左手切槽刀

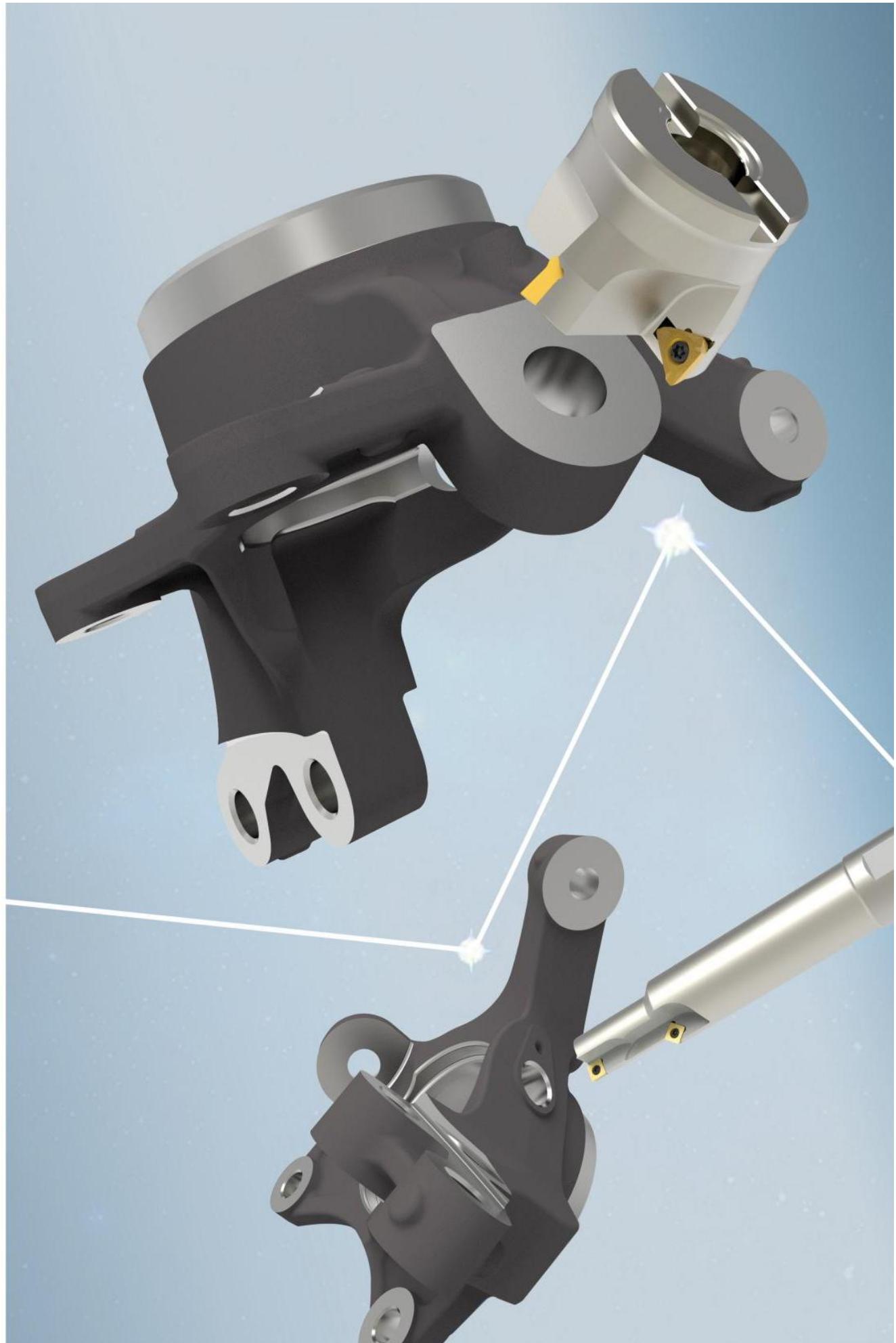


复合镗刀



球头铣刀







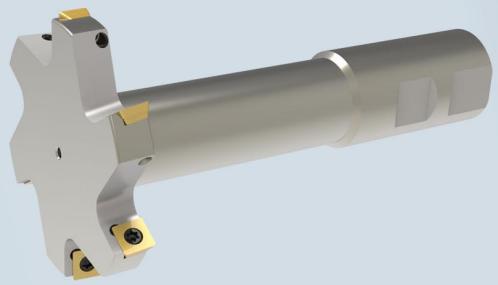
齿条刀盘



锥度玉米铣

插铣刀





反 铣 刀



成 型 铣 刀

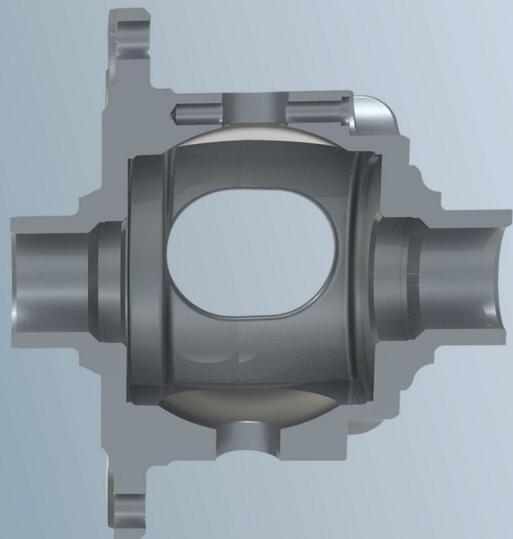


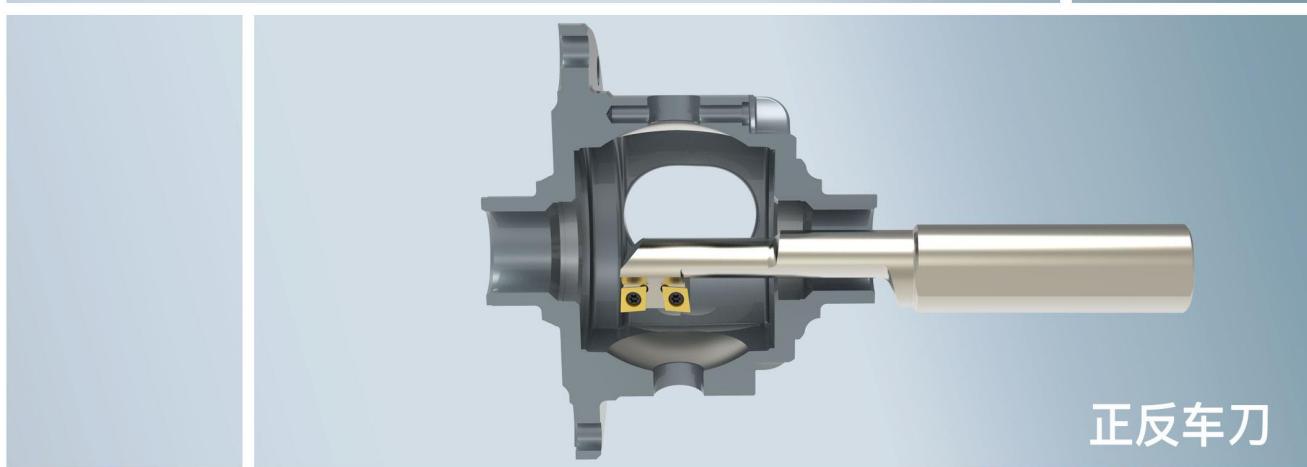
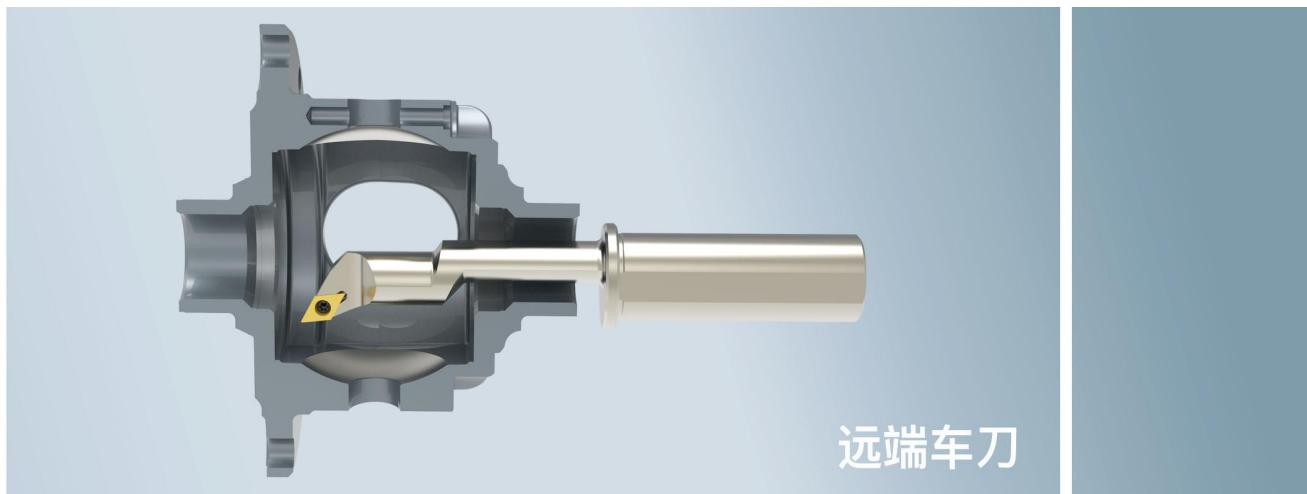
套 料 钻

三 面 刀

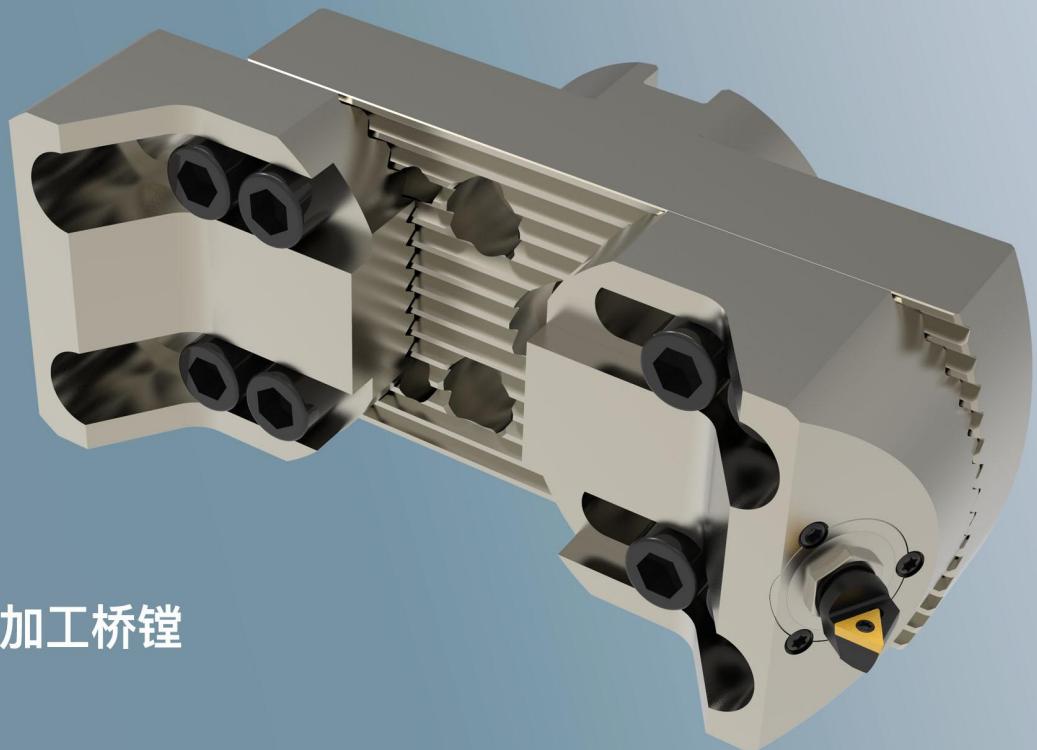


# 差速器刀具

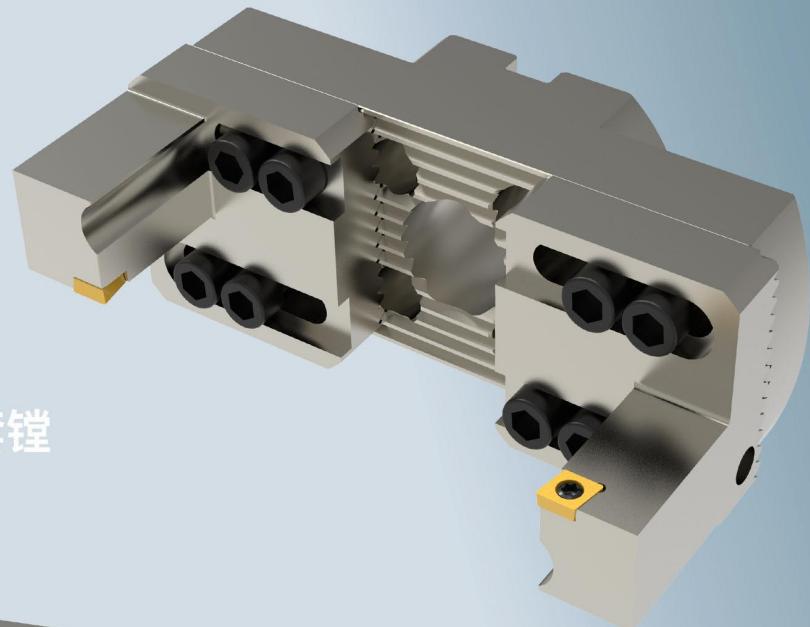




# 桥镗刀具



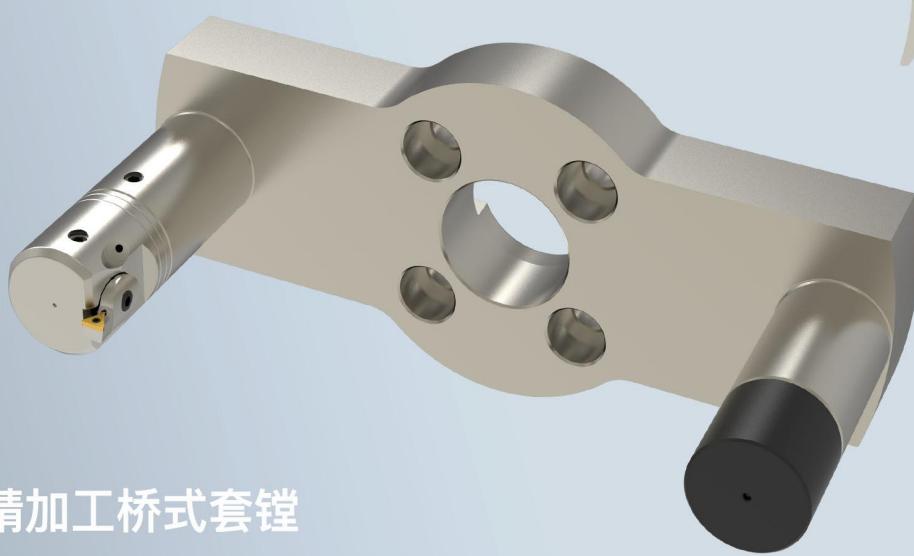
精加工桥镗



粗加工桥式套镗



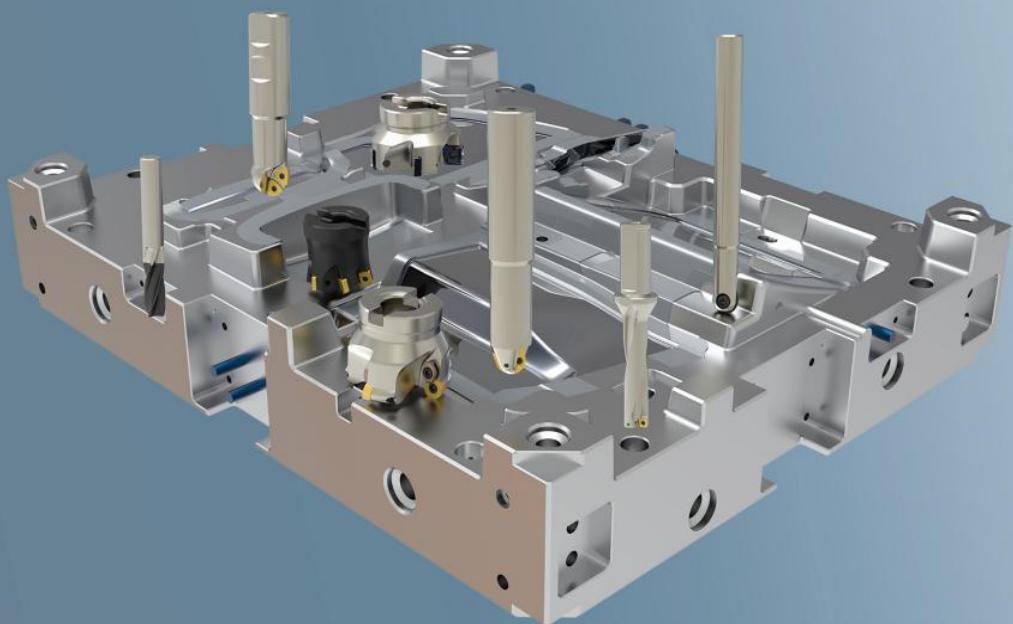
槽刀式桥镗



精加工桥式套镗

# 转向节定制刀具

模具加工





# 智能工具柜

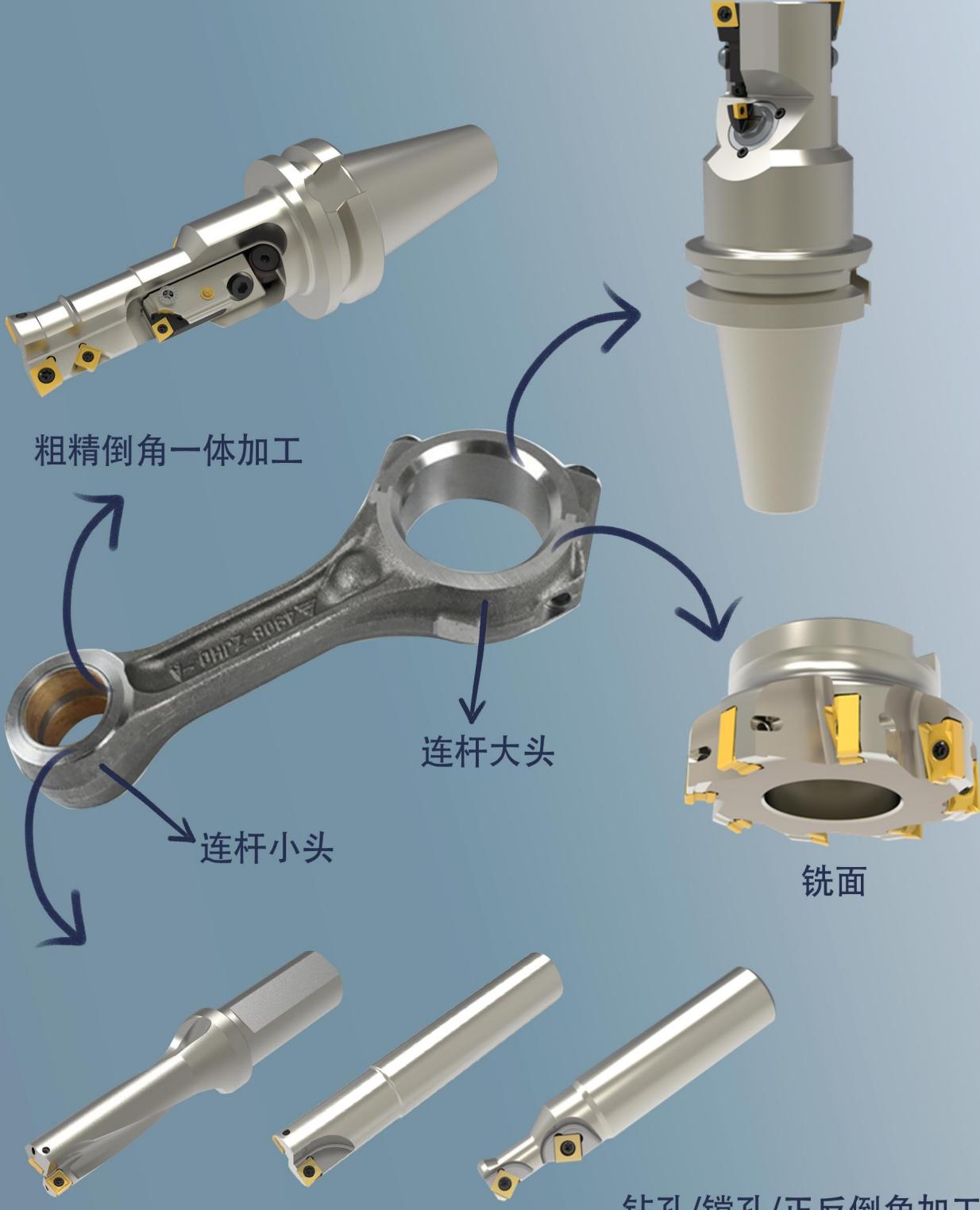
超凡脱俗 卓尔不群

- ① 弹簧柜（主柜）；型号：CA-SJ-80Z
  - ② 弹簧柜（副柜）；型号：CA-SJ-80F
  - ③ 抽屉柜；型号：CA-CT-138F
  - ④ 回收柜；型号：CA-HS
  - ⑤ 抽屉柜；型号：CA-CT-100F
- （备注：①号主柜为必选柜）

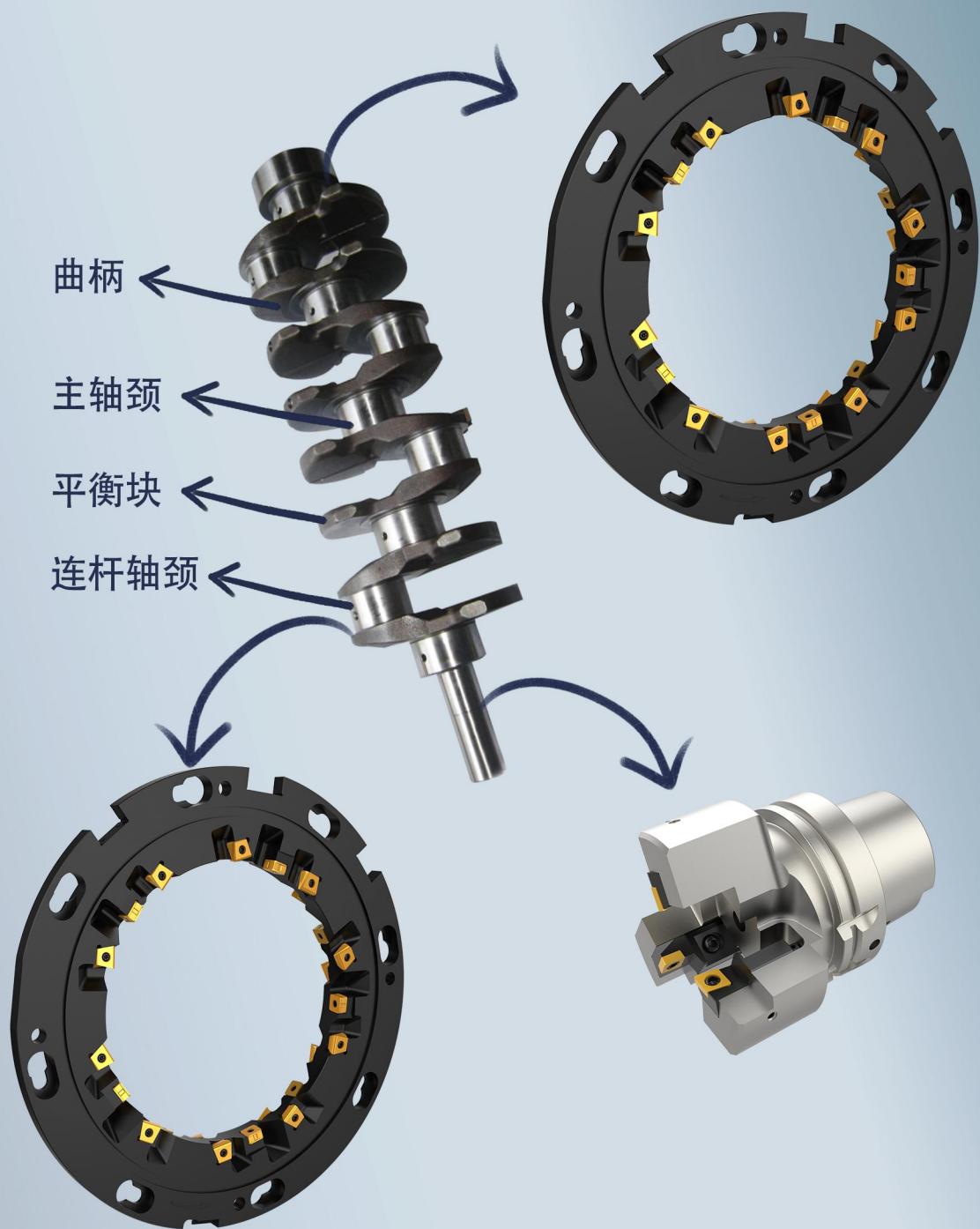


# 工件加工：连杆

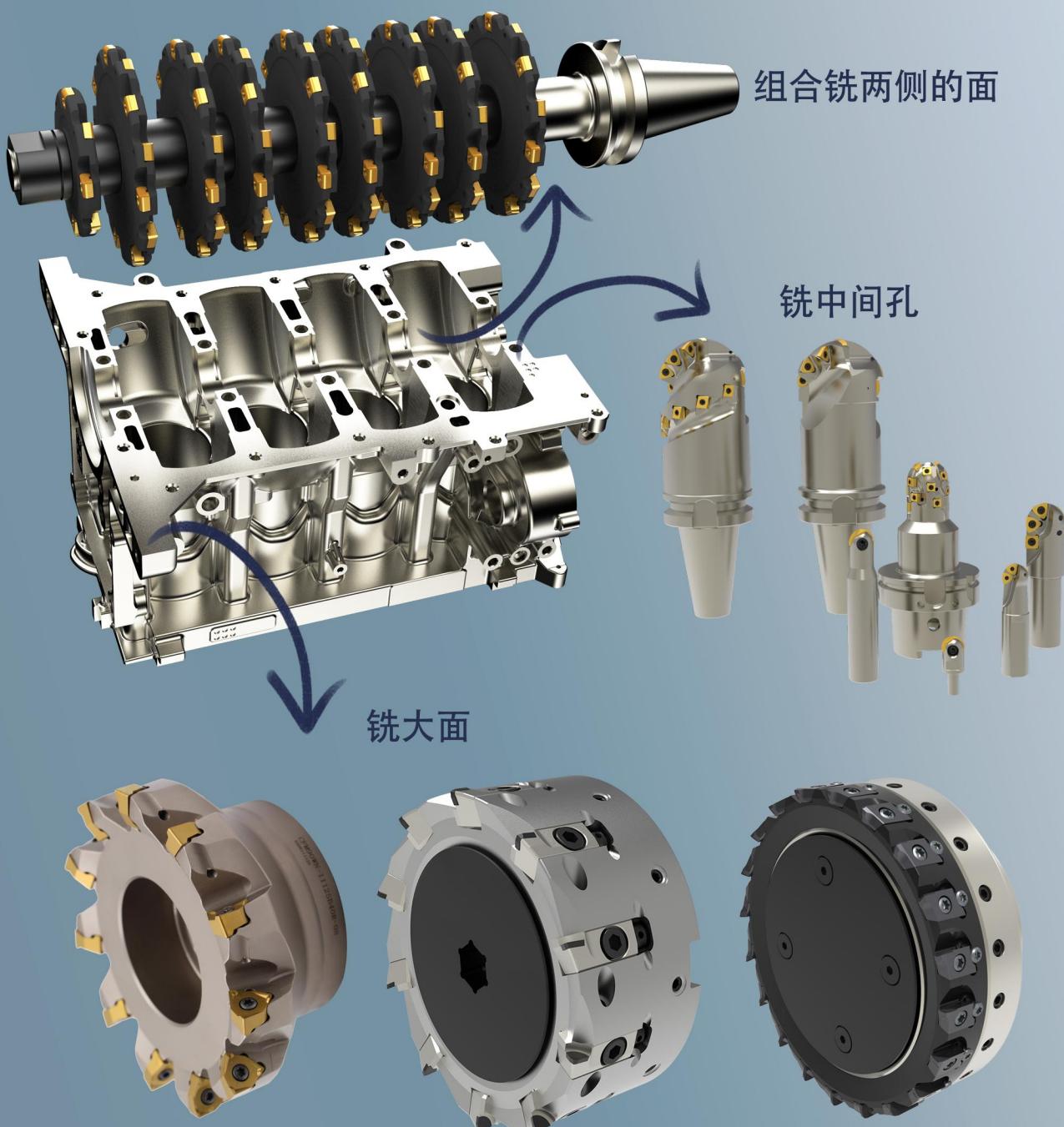
粗精倒角一体加工



## 工件加工：曲轴



## 工件加工：缸体





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TOOLS

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Wechat: M18867120330