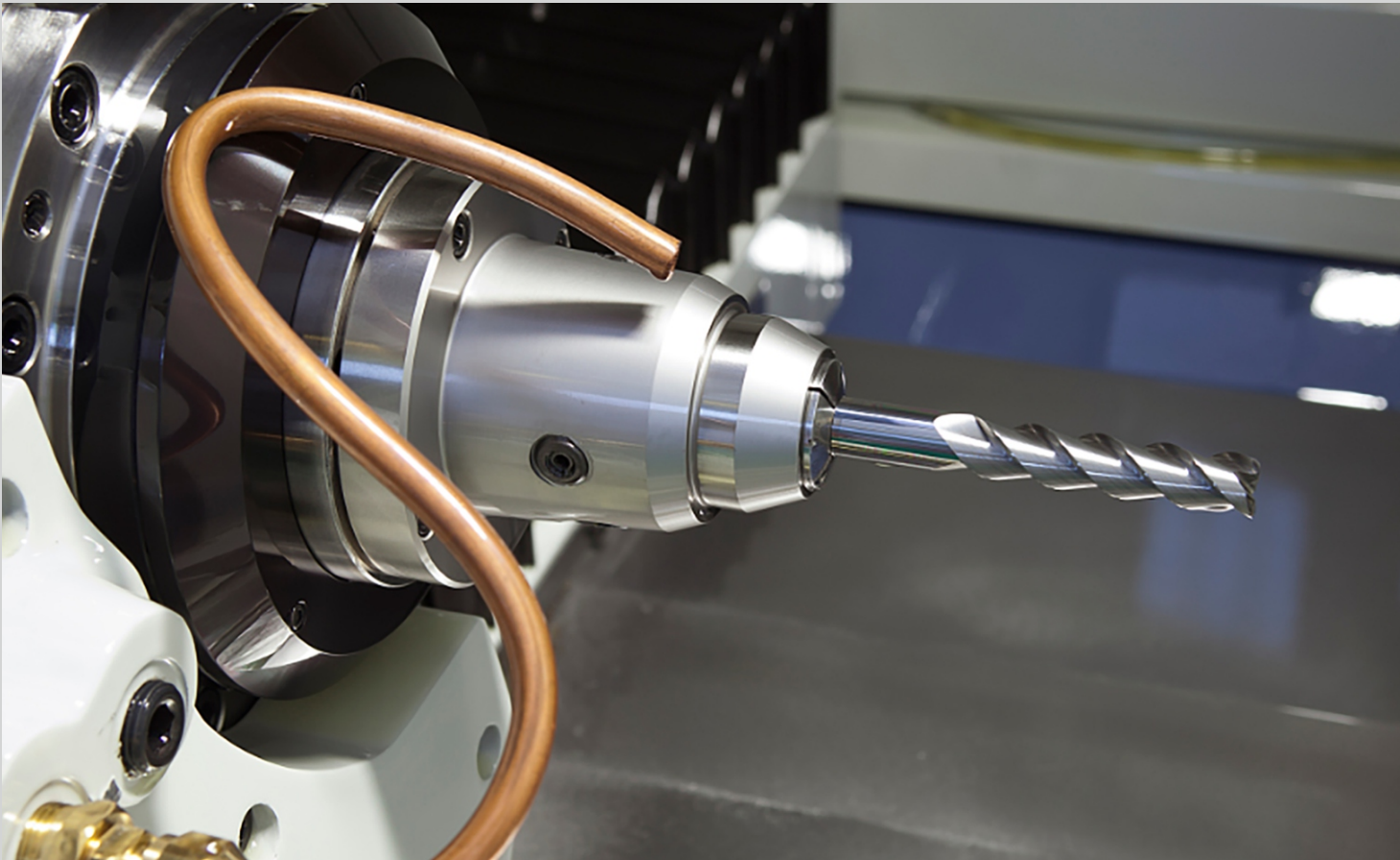


旋转刀具

Rotating tools



铣削/钻削/铰孔/工具系统
*MILLING/DRILLING/REAMING/
TOOLING SYSTEM*

KOVES®
科维丝工具

2025 ROTATING TOOLS

KOVES®
科维丝工具

东莞市科维丝精密工具有限公司
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科维丝公司是一家专注于切削工具生产与销售的企业。
公司成立于2009年，从成立之初就注重技术服务为基础，公司建有“高性能数控刀具与工具系统技术联合实验室”，同时我们根据客户的产品和工艺需求：制定和优化加工工艺方案；选择合理切削参数；计算加工节拍；选择工具、刀具、刀片及附件；量身定做非标刀具；提供与机械加工相关的全套技术服务。

koves is a global service-oriented enterprise,specialized in developing and selling industrial products.
since established in 2009,from the very beginning,koves pay attention to technical service as basement,we are has"high performance cnc cutting tools and systems technology laboratory",also our according to the customer's product and process requirements formulation and optimization of manufacturing process;reasonable selection of cutting parameters;calculating cycle times;selest tools,cutters,blades and accessories;customized non-standard tool;provide a full range of technical services related to mechanical processing.



一 铣削

Milling

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Milling

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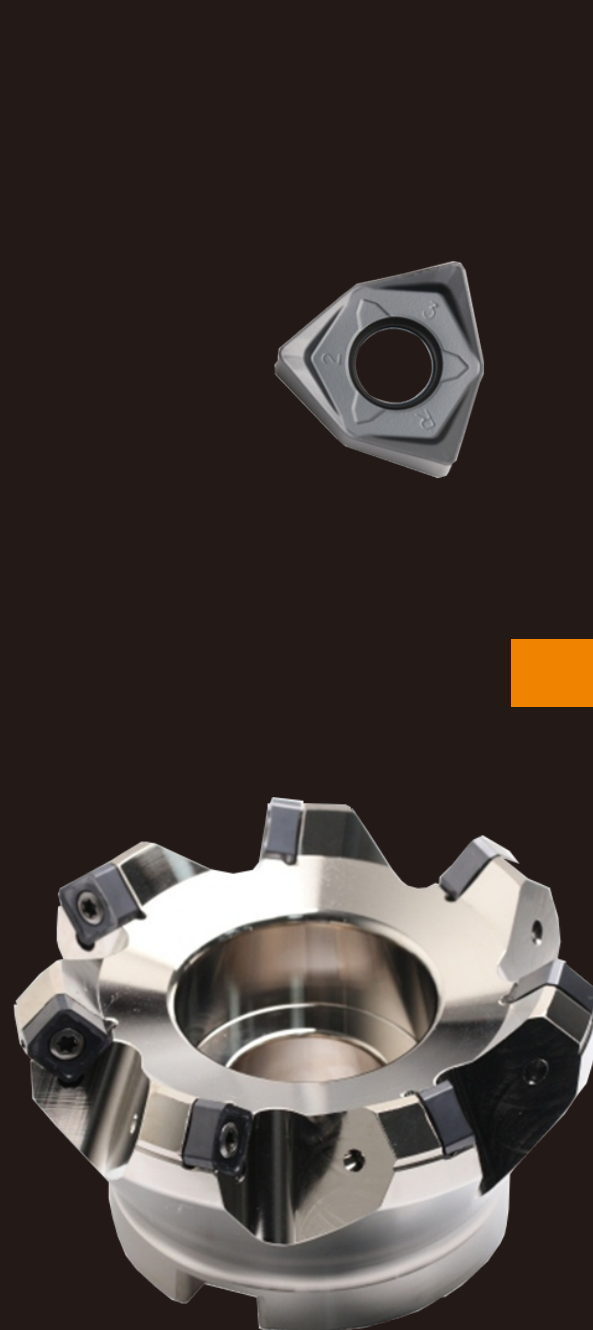
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Slot milling, Thread milling cutter, Tungsten carbide bar



铣削刀片材质简介
Milling Insert Grades

KP1230

高耐磨性晶粒基体与纳米结构的TiAlN涂层完美结合，具有良好的耐磨性和抗崩刃性。

Nano-structure TiAlN coating on micro-grain carbide, superior wear resistance and fracture resistance



KP1110

高韧性高硬度的硬质合金基体结合耐磨的TiAlN涂层，具有良好的韧性和耐磨性，适合中高硬度钢件和铸铁的加工

The highly hard and thin grained substrate combines with wearing resistance AlTiN coating, it is optimized for impact resistance, suited for mid-high hardness steel and cost iron in milling

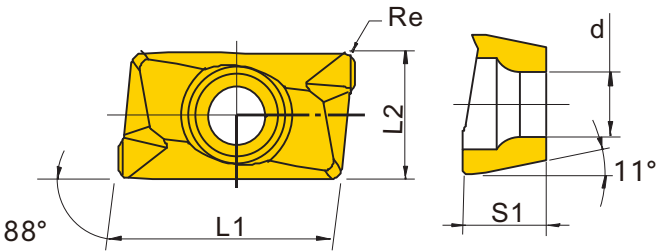


刀片材质一览表
Summary of Insert Grades

铣削加工
Milling

材质符号 Workpiece Material	P 钢 Steel					M 不锈钢 Stainless steel					K 铸铁 Cast Iron				N 有色金属 Nonferrous			S 耐热合金 NRSA				H 高硬材料 Hardness		
ISO	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	K01	K10	K20	K30	N10	N20	N30	S01	S10	S20	S30	H01	H10	H20
PVD 涂层硬质合金 PVD Coated Carbide	KP1230					KP1230 KP2220					KP1230							KP6210				KP1210		
硬质合金 Uncoated Carbide															KW20									
金属陶瓷 Cermet	KT20					KT20					KT20													

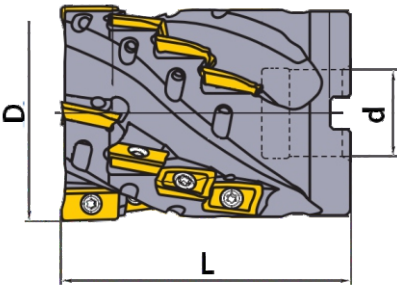
铣削刀片
Milling inserts
APMT APKT



刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			L1	L2	S1	F1	Re	KP1110	KP1230	KP2220	KT20	KW20
	APMT1135PDER	○	11	6.35	3.5	1.2	0.4		●			
	APMT1135PDER-M2	○	11	6.35	3.5	1.2	0.8		●			
	APKT113504-G2	○	11.3	6.35	3.5	1.2	0.4					●
	APKT113508-G2	○	11.3	6.35	3.5	1.2	0.8					●
	APMT1604PDER	○	16.5	9.525	4.76	1.7	0.4		●			
	APMT1604PDER-M2	○	16.5	9.525	4.76	1.7	0.8		●			
	APKT160404-G2	○	17.02	9.525	4.76	1.4	0.4					●
	APKT160408-G2	○	17.02	9.525	4.76	1.4	0.8					●
	APKT160408-PM	○	17.878	9.33	5.76	4.4	0.8		●			
	APKT1604PDER MA	○	17.878	9.33	5.76	4.4	0.8					●
钢 Steel									★			
不锈钢 Stainless Steel									★			
铸铁 Cast Iron									★			
有色金属 Nonferrous Metal												★
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

BAP玉米面铣刀
BAP Corn Face Milling Cutter



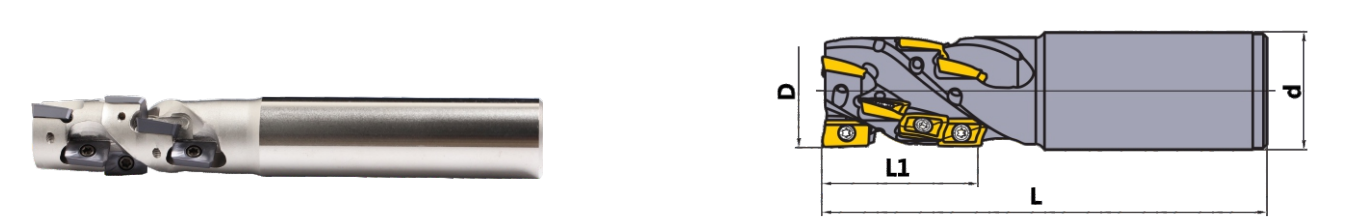
型号 Model	库存 Stock		外形尺寸 Size (mm)			刀片数量 Number of blades	适用刀片 Apply to the blade
	R	L	d	D	L1		
BAP400R-D50-22d-42M-3T-9P	○		50	22	42	9	APMT1604
BAP400R-D50-22d-42M-4T-12P	○		50	22	42	12	
BAP400R-D50-22d-60M-4T-16P	○		50	22	60	16	
BAP400R-D63-27d-42M-4T-12P	○		63	27	42	12	
BAP400R-D63-27d-60M-4T-12P	○		63	27	60	12	
BAP400R-D63-27d-68M-4T-20P	○		63	27	68	20	
BAP400R-D63-27d-95M-4T-20P	○		63	27	95	20	
BAP400R-D80-32d-72M-5T-25P	○		80	32	72	25	
BAP400R-D100-40d-72M-6T-30P	○		100	40	72	30	

* 刀片需单独订购。Blades to be ordered separately. ● 标准库存Standard inventory ○ 订单生产The order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	140-250	0.04-0.15	
		180-280	KP1230	130-250	0.04-0.15	
		280-350	KP1230	110-240	0.04-0.15	
M	不锈钢 Stainless Steel	<270	KP1230	80-190	0.04-0.15	
K	铸铁 Cast iron	180-250	KP1230	80-210	0.04-0.15	
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60	KP1110	70-120		

BAP玉米立铣刀
BAP Corn End Milling Cutter



型号 Model	库存 Stock	外形尺寸 Size (mm)				刀片数量 Number of blades	适用刀片 Apply to the blade
		d	D	L1	L		
BAP300R-C20-20-28M-120L-2T-6P	○	20	20	28	120	6	AP1135
BAP300R-C20-20-48M-130L-2T-10P	○	20	20	48	130	10	
BAP300R-C20-20-68M-200L-2T-16P	○	20	20	68	200	16	
BAP300R-C25-25-38M-130L-2T-8P	○	25	25	38	130	8	
BAP300R-C25-25-48M-130L-2T-10P	○	25	25	48	130	10	
BAP300R-C25-25-68M-200L-2T-16P	○	25	25	68	200	16	
BAP300R-C32-32-48M-150L-3T-15P	○	32	32	48	150	15	
BAP400R-C32-32- 42M-150L-2T-6P	○	32	32	42	150	6	
BAP400R-C32-32-55M-150L-2T-8P	○	32	32	55	150	8	
BAP400R-C32-32- 70M-150L-2T-10P	○	32	32	70	150	10	
BAP400R-C32-32- 70M-220L-2T-10P	○	32	32	70	220	10	AP1604
BAP400R-C32-32- 100M-220L-2T-14P	○	32	32	100	220	14	
BAP400R-C32-33- 55M-150L-2T-8P	○	32	33	55	150	8	
BAP400R-C32-33-70M-150L-2T-10P	○	32	33	70	150	10	
BAP400R-C32-33-100M-200L-2T-14P	○	32	33	100	200	14	
BAP400R-C32-35-55M-150L-2T-8P	○	32	35	55	150	8	
BAP400R-C32-35-70M-150L-2T-10P	○	32	35	70	150	10	
BAP400R-C32-35-100M-200L 2T-14P	○	32	35	100	200	14	
BAP400R-C32-40-70M-150-2T-10P	○	32	40	70	150	10	
BAP400R-C32-40-70M-150-3T-15P	○	32	40	70	150	15	
BAP400R-C32- 40-100M-200-3T-21P	○	32	40	100	200	21	
BAP400R-C32- 50-70M-150-3T-15P	○	32	50	70	150	15	
BAP400R-C40-50-70M-150-3T-15P	○	40	50	70	150	15	
BAP400R-C32- 50- 100M-175-3T-21P	○	32	50	100	175	21	
BAP400R-C40-50-100M-175-3T-21P	○	40	50	100	175	21	
BAP400R-C32- 50-150M-220-3T-33P	○	32	50	150	220	33	

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

BAP 锁牙式立铣刀头
BAP Locking Modular Endmill Head Cutter

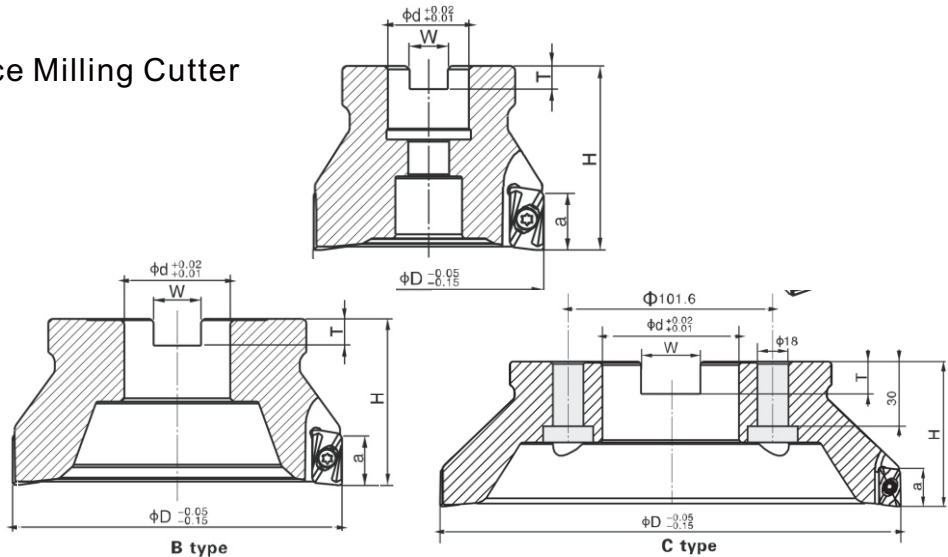
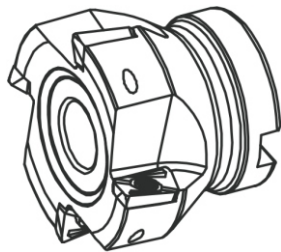


型号 Model	库存 Stock	尺寸 (mm) Dimensions					齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		D	L	L1	B	M				
BAP300R-16-M8-2T	○	16	46	28	8.5	M8	2	APMT1135PDER	M2.5	T8
BAP300R-17-M8-2T	○	17	46	28	8.5	M8	2			
BAP300R-20-M10-2T	○	20	49	30	10.5	M10	2			
BAP300R-21-M10-2T	○	21	49	30	10.5	M10	2			
BAP300R-25-M12-3T	○	25	57	35	12.5	M12	3			
BAP300R-26-M12-3T	○	26	57	35	12.5	M12	3	APMT1604PDER	M4.0	T15
BAP400R-25-M12-2T	○	25	57	35	12.5	M12	2			
BAP400R-26-M12-2T	○	26	57	35	12.5	M12	2			
BAP400R-30-M12-2T	○	30	57	35	12.5	M12	2			
BAP400R-32-M16-3T	○	32	63	40	17	M16	3			
BAP400R-35-M16-3T	○	35	63	40	17	M16	3			
BAP400R-40-M16-3T	○	40	63	40	17	M16	3			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

BAP方肩面铣刀
BAP Square Shoulder Face Milling Cutter

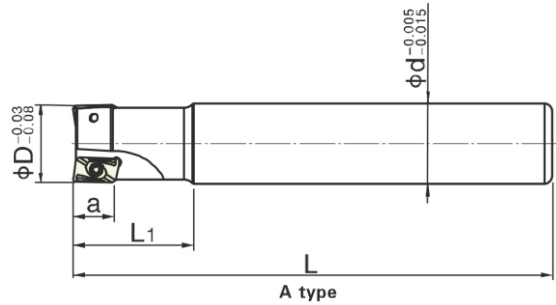
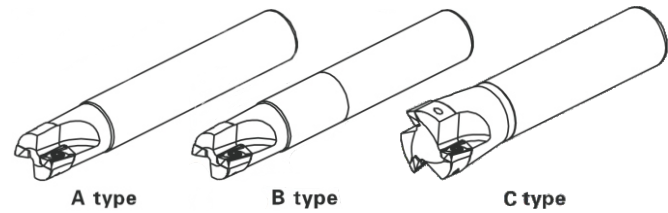


型号 Model	库存 Stock	类型 Manner	尺寸 (mm) Dimensions						刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	d	H	W	T	a			
BAP400R-50-22-4T	○	A	50	22	50	10.4	6.3	14	APMT1604PDER	A40100J M4*10	T15F T15
BAP400R-63-22-4T	○	A	63	22	50	10.4	6.3	14			
BAP400R-63-22-5T	○	A	63	22	50	10.4	6.3	14			
BAP400R-80-27-6T	○	A	80	27	50	12.4	7	14			
BAP400R-100-32-6T	○	B	100	32	50	14.4	8	14			
BAP400R-125-40-6T	○	B	125	40	63	14.4	8	14			
BAP400R-160-40-9T	○	B	160	40	63	14.4	8	14			
BAP400R-200-60-9T	○	C	200	60	63	25.7	14	14			
BAP400R-200-60-12T	○	C	200	60	63	25.7	14	14			
BAP400R-50-25.4-4T	○	A	50	25.4	50	10	6	14			
BAP400R-63-25.4-4T	○	A	63	25.4	50	10	6	14			
BAP400R-63-25.4-5T	○	A	63	25.4	50	10	6	14			
BAP400R-80-25.4-6T	○	A	80	25.4	50	10	6	14			
BAP400R-100-31.75-6T	○	B	100	31.75	50	13	8	14			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

BAP 方肩立铣刀
BAP Square Shoulder End Milling Cutter

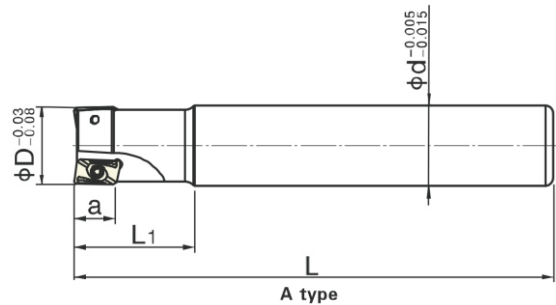
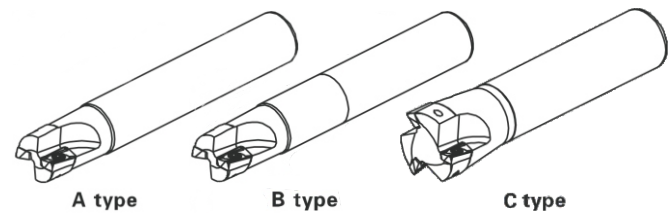


型号 Model	库存 Stock	类型 Manner	刀片数量 NO. of flutes	尺寸 (mm) Dimensions						刀片 Insert	螺钉 Screw	扳手 Torx wrench
				D	d	L	L1	L2	a			
BAP300R-10x120	○	A	1	10	10	120	30	-	9	APMT1135PDER	A40100J M4*10	T8F T8
BAP300R-12x100	○	A	1	12	12	100	30	-	9			
BAP300R-12x120	○	A	1	12	12	120	30	-	9			
BAP300R-12x130	○	A	1	12	12	130	36	-	9			
BAP300R-12x150	○	A	1	12	12	150	36	-	9			
BAP300R-13x120-C12	○	A	1	13	12	120	30	-	9			
BAP300R-13x150-C12	○	A	1	13	12	150	36	-	9			
BAP300R-16x120	○	A	2	16	16	120	40	-	9			
BAP300R-16x160	○	A	2	16	16	160	40	-	9			
BAP300R-16x160-C15.6	○	A	2	16	15.6	160	40	-	9			
BAP300R-16x180	○	B	2	16	16	180	40	90	9	APMT1135PDER	A25065G M2.5*6.5	T8F T8
BAP300R-16x180-C15	○	A	2	16	15	180	40	-	9			
BAP300R-16x200	○	B	2	16	16	200	40	100	9			
BAP300R-16x160-C15	○	A	2	16	15	160	40	-	9			
BAP300R-17x160-C16	○	A	2	17	16	160	40	-	9			
BAP300R-17x200-C16	○	A	2	17	16	200	40	-	9			
BAP300R-20x120	○	A	2/3	20	20	120	40	-	9			
BAP300R-20x160	○	A	2/3	20	20	160	50	-	9			
BAP300R-20x160-C19	○	A	2/3	20	19	160	50	-	9			
BAP300R-20x180	○	B	2/3	20	20	180	50	90	9			
BAP300R-20x180-C19	○	A	2/3	20	20	180	45	-	9			
BAP300R-20x200	○	B	2/3	20	20	200	50	100	9			
BAP300R-20x200-C19	○	A	2/3	20	19	200	50	-	9			
BAP300R-21x160-C20	○	A	2/3	21	20	160	40	-	9			
BAP300R-21x180-C20	○	A	2/3	21	20	180	50	-	9			
BAP300R-21x200-C20	○	A	2/3	21	20	200	50	-	9			
BAP300R-25x160	○	A	3	25	25	160	50	-	9			
BAP300R-25x160-C24	○	A	3	25	24	160	50	-	9			
BAP300R-25x200	○	A	3	25	25	200	75	-	9			
BAP300R-25x200-C24	○	A	3	25	24	200	50	-	9			
BAP300R-26x160-C25	○	A	3	26	25	160	40	-	9			
BAP300R-26x200-C25	○	A	3	26	25	200	50	-	9			
BAP300R-30x160-C25	○	C	3	30	25	160	50	-	9			
BAP300R-30x200-C25	○	C	3	30	25	200	50	-	9			
BAP300R-30x250-C25	○	C	3	30	25	250	50	-	9			
BAP300R-30x300-C25	○	C	3	30	25	300	50	-	9			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

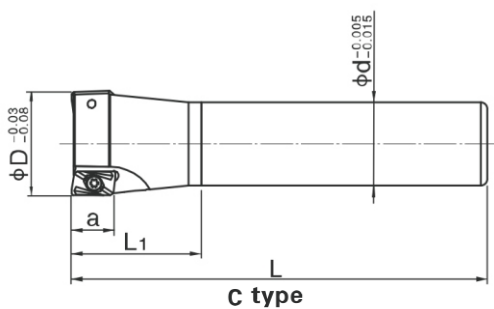
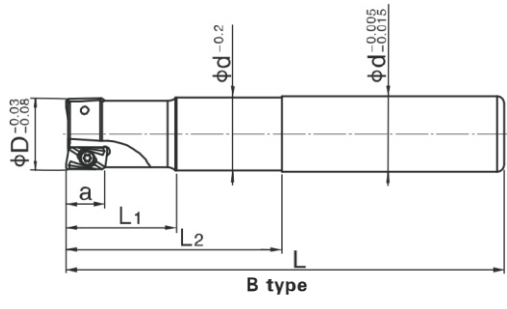
BAP 方肩立铣刀
BAPSquare Shoulder End Milling Cutter



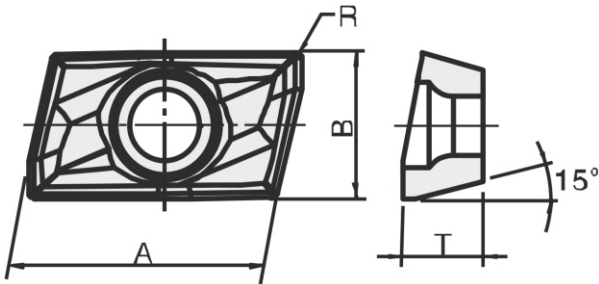
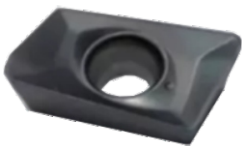
型号 Model	库存 Stock	类型 Manner	刀片数量 NO.of flutes	尺寸 (mm) Dimensions					刀片 Insert	螺钉 Screw	扳手 Torx wrench
				D	d	L	L1	L2			
BAP400R-25x160	○	A	2	25	25	160	50	-	APMT1604PDER	A40090G M4*9	T8F T8
BAP400R-25x160-C24	○	A	2	25	25	160	50	-			
BAP400R-25x200	○	A	2	25	25	200	75	-			
BAP400R-25x200-C24	○	A	2	25	24	200	50	-			
BAP400R-25x250	○	B	2	25	25	250	50	115			
BAP400R-25x250-C24	○	A	2	25	24	250	50	-			
BAP400R-25x300	○	B	2	25	25	300	60	165			
BAP400R-26x160-C25	○	A	2	26	25	160	50	-			
BAP400R-26x200-C25	○	A	2	26	25	200	50	-			
BAP400R-26x250	○	A	2	26	25	250	50	-			
BAP400R-32x160-C25	○	C	2/3	32	25	160	50	-			
BAP400R-32x200-C25	○	C	2/3	32	25	200	50	-			
BAP400R-32x200	○	A	2/3	32	32	200	80	-			
BAP400R-32x250-C25	○	C	2/3	32	25	250	60	-			
BAP400R-32x250	○	B	2/3	32	32	250	60	115			
BAP400R-32x300	○	B	2/3	32	32	300	60	165			
BAP400R-32x350	○	B	2/3	32	32	350	60	165			
BAP400R-35x160-C32	○	C	3	35	32	160	50	-			
BAP400R-35x200-C32	○	C	3	35	32	200	50	-			
BAP400R-35x250-C32	○	C	3	35	32	250	60	-			
BAP400R-35x300-032	○	C	3	35	32	300	60	-			
BAP400R-35x350-C32	○	C	3	35	32	350	60	-			
BAP400R-40x160-C32	○	C	3	40	32	160	50	-			
BAP400R-40x200-C32	○	C	3	40	32	200	50	-			
BAP400R-40x250-C32	○	C	3	40	32	250	60	-			
BAP400R-40x300-C32	○	C	3	40	32	300	60	-			
BAP400R-40x350-C32	○	C	3	40	32	350	60	-			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production



铣削刀片
Milling inserts
JDMT

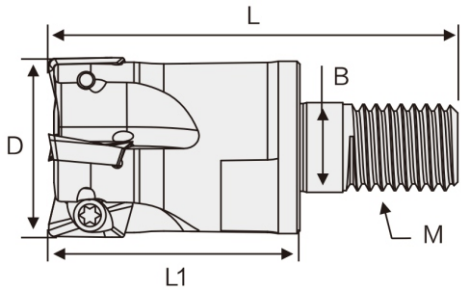


刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			A	B	T	R		KP1110	KP1230	KP2220	KT20	KW20
	JDMT100308R-FW	○	11	6.1	3.5	0.8			●			
	JDMT100304R	○	11	6.1	3.5	1.4			●			
	JDMT100308R	○	11	6.1	3.5	1.8			●			
	JDMT100320R	○	11	6.1	3.5	2.0			●			
	JDMT150504R	○	16	9.12	5	0.4			●			
	JDMT150508R	○	16	9.12	5	0.8			●			
	JDMT150520R	○	16	9.12	5	2.0			●			
	JDMT150530R	○	16	9.12	5	3.0			●			
钢 Steel									★			
不锈钢 Stainless Steel									★			
铸铁 Cast Iron									★			
有色金属 Nonferrous Metal												
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

AHU 锁牙式立铣刀头
AHU Locking Modular Endmill Head Cutter

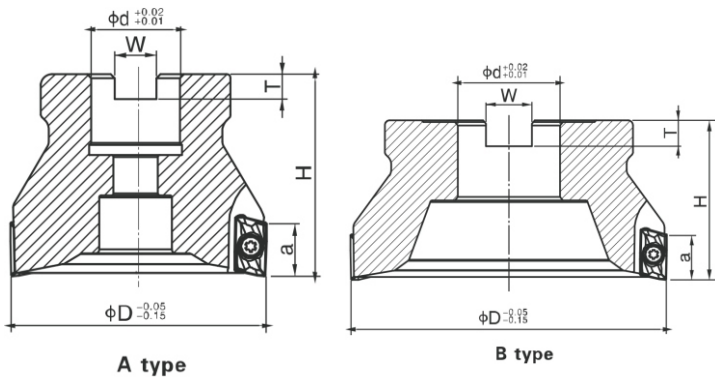
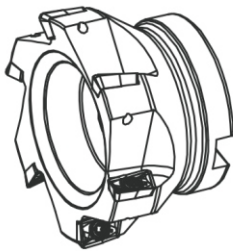
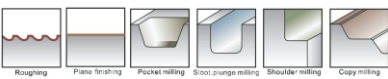


型号 Model	库存 Stock	尺寸 (mm) Dimensions								
		D	L	L1	B	M	齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
AHU10-16-M8-2T	○	16	46	28	8.5	M8	2	JDMT1003**R	M2.5*6	T8
AHU10-17-M8-2T	○	17	46	28	8.5	M8	2			
AHU10-20-M10-3T	○	20	49	30	10.5	M10	3			
AHU10-21-M10-3T	○	21	49	30	10.5	M10	3			
AHU10-25-M12-4T	○	25	57	35	12.5	M12	4			
AHU10-26-M12-4T	○	26	57	35	12.5	M12	4	JDMT1505**R	M4*9	T15
AHU16-32-M16-5T	○	32	63	40	17	M16	5			
AHU16-35-M16-5T	○	35	63	40	17	M16	5			
AHU16-40-M16-6T	○	40	63	40	17	M16	6			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

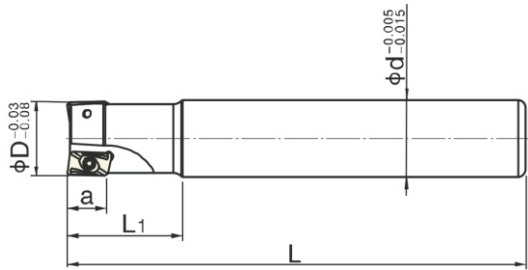
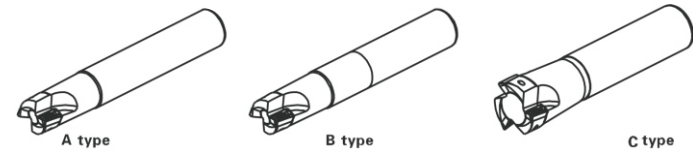
AHUB方肩面铣刀
AHUB Square Shoulder Face Milling Cutter



型号 Model	库存 Stock	类型 Manner	尺寸 (mm) Dimensions							 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
			D	d	H	W	T	a				
AHUB15-50-22-4T	○	A	50	22	50	10.4	6.3	14	JDMT1505**R	A40100J M4*10	T15F T15	
AHUB15-63-22-4T	○	A	63	22	50	10.4	6.3	14				
AHUB15-63-22-5T	○	A	63	22	50	10.4	6.3	14				
AHUB15-80-27-6T	○	A	80	27	50	12.4	7	14				
AHUB15-100-32-6T	○	B	100	32	50	14.4	8	14				
AHUB15-50-25.4-4T	○	A	50	25.4	50	10	6	14				
AHUB15-63-25.4-4T	○	A	63	25.4	50	10	6	14				
AHUB15-63-25.4-5T	○	A	63	25.4	50	10	6	14				
AHUB15-80-25.4-6T	○	A	80	25.4	50	10	6	14				
AHUB15-100-31.75-6T	○	B	100	31.75	50	13	8	14				

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

AHU 方肩立铣刀
AHU Square Shoulder End Milling Cutter

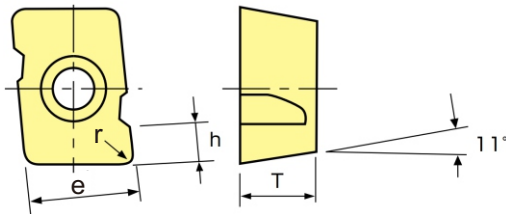


型号 Model	库存 Stock	类型 Manner	刀片数量 NO.of flutes	尺寸 Size (mm)						 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
				D	d	L	L1	L2	a			
AHU-1012x120	○	A	1	12	12	120	30	-	9	JDMT1003**R	A25050G M2.5*5	T8F T8
AHU-1012x150	○	A	1	12	12	150	30	-	9			
AHU-1013x120-C12	○	A	1	13	12	120	30	-	9			
AHU-1013x150-C12	○	A	1	13	12	150	36	-	9			
AHU-1016x120	○	A	2	16	16	120	40	-	9	JDMT1003**R	A25050G M2.5*6	T8F T8
AHU-1016x120-C15	○	A	2	16	15	120	40	-	9			
AHU-1016x160	○	A	2	16	16	120	40	-	9			
AHU-1016x160-C15	○	A	2	16	15	160	40	-	9			
AHU-1016x160-C15.6	○	A	2	16	15.6	160	40	-	9			
AHU-1016x180	○	B	2	16	16	180	40	90	9			
AHU-1016x180-C15	○	A	2	16	15	180	40	-	9			
AHU-1016x200	○	B	2	16	16	200	40	100	9			
AHU-1017x120-C16	○	A	2	17	16	120	40	-	9			
AHU-1017x160-C16	○	A	2	17	16	160	40	-	9			
AHU-1017x200-C16	○	A	2	17	16	200	40	-	9			
AHU-1020x120	○	A	2/3	20	20	120	40	-	9			
AHU-1020x160	○	A	2/3	20	20	160	50	-	9			
AHU-1020x160-C19	○	A	2/3	20	19	160	50	-	9			
AHU-1020x200	○	B	2/3	20	20	200	50	100	9			
AHU-1020x200-C19	○	A	2/3	21	19	200	50	-	9			
AHU-1021x160-C20	○	A	2/3	21	20	160	40	-	9			
AHU-1021x200-C20	○	A	2/3	21	20	200	50	-	9			
AHU-1025x160	○	A	3	25	25	160	50	-	9			
AHU-1025x200	○	A	3	25	25	200	75	-	9			
AHU-1025x160-C24	○	A	3	25	24	160	50	-	9			
AHU-1026x160-C25	○	A	3	26	25	160	50	-	9			
AHU-1030x160-C25	○	C	3	30	25	160	50	-	9			
AHU-1030x200-C25	○	C	3	30	25	200	50	-	9			
AHU-1030x250-C25	○	C	3	30	25	250	50	-	9			
AHU-1525x160	○	A	2	25	24	160	50	-	14			
AHU-1525x160-C24	○	A	2	25	25	160	50	-	14			
AHU-1525x200	○	A	2	25	24	200	75	-	14			
AHU-1525x200-C24	○	A	2	25	25	200	50	-	14			
AHU-1526x160-C25	○	A	2	26	25	160	50	-	14			
AHU-1526x200-C25	○	A	2	26	25	200	50	-	14			
AHU-1532x160-C25	○	C	2/3	32	25	160	50	-	14			
AHU-1532x200-C25	○	C	2/3	32	25	200	50	-	14			
AHU-1532x160	○	A	2/3	32	32	160	50	-	14			
AHU-1532x200	○	A	2/3	32	32	200	80	-	14			
AHU-1532x250-C25	○	C	2/3	32	25	250	50	-	14			
AHU-1532x250	○	B	2/3	32	32	250	60	115	14			
AHU-1532x300	○	B	2/3	32	32	300	60	165	14			
AHU-1535x200-C32	○	C	3	35	32	200	50	-	14			
AHU-1535x250-C32	○	C	3	35	32	250	60	-	14			
AHU-1535x300-C32	○	C	3	35	32	300	60	-	14			
AHU-1535x350-C32	○	C	3	35	32	350	60	-	14			
AHU-1540x200-C32	○	C	3/4	40	32	200	50	-	14			
AHU-1540x250-C32	○	C	3/4	40	32	250	60	-	14			
AHU-1540x300-C32	○	C	3/4	40	32	300	60	-	14			
AHU-1540x350-C32	○	C	3/4	40	32	350	60	-	14			
										JDMT1505**R	A40090J M4*10	T15F T15

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
MPHW

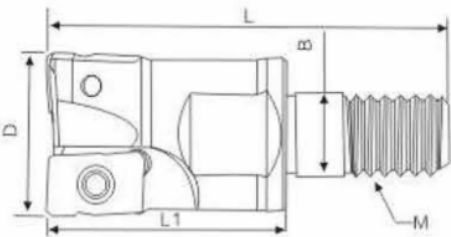
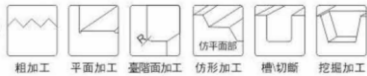


刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			e	T	h	r3		KP1210	KP1230	KP2220	KT20	KW20
	MPHW060302ZEL	○	6.35	3.18	3	0.2		●		●		
	MPHW060308ZEL	○	6.35	3.18	3	0.8		●	●			
	MPHW060308ZEL	○	6.35	3.18	3	0.8		●				
	MPHW060320ZEL	○	6.35	3.18	3	2.0		●				
钢 Steel									★			
不锈钢 Stainless Steel								★	★	★		
铸铁 Cast iron									★			
有色金属 Nonferrous Metal												
耐热合金 Heat Resistant Alloy										☆		
淬硬钢 Hardened Steel												

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

ASPV 锁牙式立铣刀头
ASPV Locking Modular Endmill Head Cutter

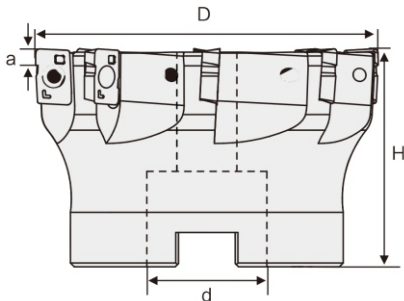


型号 Model	库存 Stock	尺寸 (mm) Dimensions								
		D	L	L1	B	M	齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
ASPV16-M8-2T	○	16	46	28	8.5	M8	2	MPHW0603TN	M2.5	T8
ASPV17-M8-2T	○	17	46	28	8.5	M8	2			
ASPV20-M10-2T	○	20	49	30	10.5	M10	2			
ASPV21-M10-2T	○	21	49	30	10.5	M10	2			
ASPV25-M12-3T	○	25	57	35	12.5	M12	3			
ASPV26-M12-3T	○	26	57	35	12.5	M12	3			
ASPV32-M16-3T	○	32	63	40	17	M16	3			
ASPV35-M16-4T	○	35	63	40	17	M16	4			
ASPV40-M16-4T	○	40	63	40	17	M16	4			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

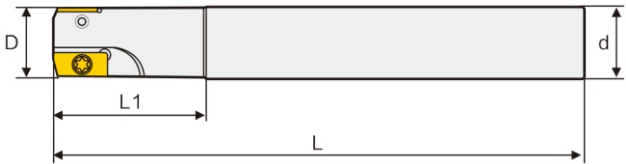
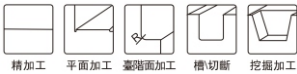
ASPV方肩面铣刀
ASPV Square Shoulder Face Milling Cutter



型号 Model	库存 Stock	刃数 Teeth	尺寸 (mm) Dimensions				刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	d	H	a			
ASPV50-22-7T	○	7	50	22	20	3	MPHW0603TN	M2.5	T8
ASPV63-22-8T	○	8	63	22	20	3			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

ASPV 方肩立铣刀
ASPV Square Shoulder End Milling Cutter

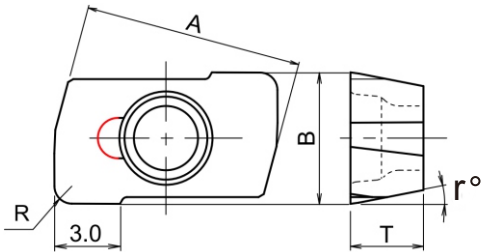
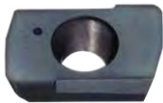


型号 Model	库存 Stock	刃数 Teeth	尺寸 Size (mm)					刀片 Peripheral Insert	螺钉 Screw	扳手 Torx wrench
			D	d	L	L1	a			
ASPV16-C15-160	○	2	16	16	160	40	3	MPHW0603TN	M2.5*6	T8
ASPV16-C15-200	○	2	16	16	200	50	3			
ASPV16-C16-160	○	2	16	16	160	40	3			
ASPV16-C16-200	○	2	16	16	200	50	3			
ASPV17-C16-160	○	2	17	16	160	27	3			
ASPV17-C16-200	○	2	17	16	200	27	3			
ASPV20-C19-160	○	2	20	20	160	78	3			
ASPV20-C19-200	○	2	20	20	200	50	3			
ASPV20-C19-250	○	2	20	20	250	50	3			
ASPV20-C20-160	○	2	20	20	160	78	3			
ASPV20-C20-200	○	2	20	20	200	50	3			
ASPV20-C20-250	○	2	20	20	250	50	3			
ASPV21-C20-160	○	2	21	20	160	27	3			
ASPV21-C20-200	○	2	21	20	200	27	3			
ASPV21-C20-250	○	2	21	20	250	27	3			
ASPV25-C25-160	○	3	25	25	160	60	3			
ASPV25-C25-200	○	3	25	25	200	70	3			
ASPV25-C25-250	○	3	25	25	250	70	3			
ASPV25-C25-300	○	3	25	25	300	70	3			
ASPV26-C25-200	○	3	26	25	200	50	3			
ASPV26-C25-250	○	3	26	25	250	50	3			
ASPV26-C25-300	○	3	26	25	300	50	3			
ASPV32-C32-160	○	4	32	32	160	70	3			
ASPV32-C32-200	○	4	32	32	200	70	3			
ASPV33-C32-160	○	4	33	32	160	60	3			
ASPV33-C32-200	○	4	33	70	200	32	3			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
YPHW

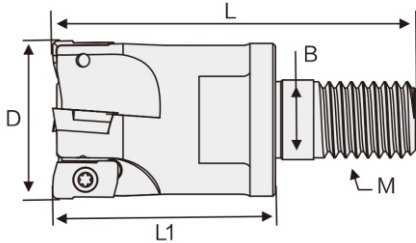
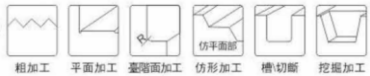


刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades											
			A	T	B	R	r°	KP1210	KP1230	KP2220	KT20	KW20		
	YPHW100304ZER-15	○	10	3.35	6	0.3	11	●						
	YPHW100308ZER-15	○	10	3.35	6	0.3	11	●						
	YPHW100320ZER-24	○	10	3.35	6	0.3	11	●						
钢 Steel									★					
不锈钢 Stainless Steel														
铸铁 Cast Iron														
有色金属 Nonferrous Metal														
耐热合金 Heat Resistant Alloy														
淬硬钢 Hardened Steel									★					

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

MQX 锁牙式立铣刀头
MQX Locking Modular Endmill Head Cutter



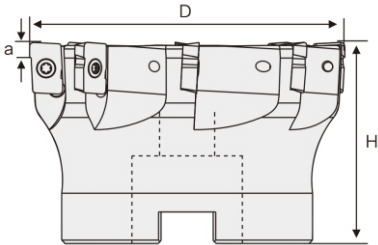
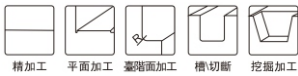
型号 Model	库存 Stock	尺寸 (mm) Dimensions								
		D	L	L1	B	M	齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
MQX16-M8-2T	○	16	46	28	8.5	M8	2	YPHW100304ZER-15 YPHW100308ZER-15 YPHW100320ZER-24	M2.5	T8
MQX17-M8-2T	○	17	46	28	8.5	M8	2			
MQX20-M10-3T	○	20	49	30	10.5	M10	3			
MQX21-M10-3T	○	21	49	30	10.5	M10	3			
MQX25-M12-4T	○	25	57	35	12.5	M12	4			
MQX26-M12-4T	○	26	57	35	12.5	M12	4			
MQX32-M16-5T	○	32	63	40	17	M16	5			
MQX35-M16-5T	○	35	63	40	17	M16	5			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

QXP方肩面铣刀
QXP Square Shoulder Face Milling Cutter

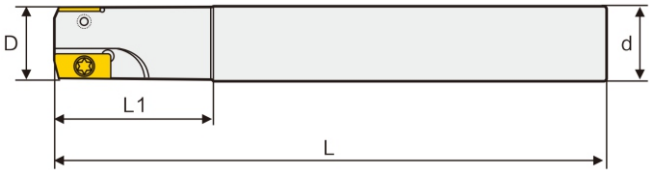


型号 Model	库存 Stock	刃数 Teeth	尺寸 (mm) Dimensions				刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	d	H	a			
QXP50-22-8T	○	8	50	22	50	10	YPHW100304ZER-15 YPHW100308ZER-15 YPHW100320ZER-24	M2.5	T8
QXP63-22-8T	○	8	63	22	50	10			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

MQX 方肩立铣刀
MQX Square Shoulder End Milling Cutter

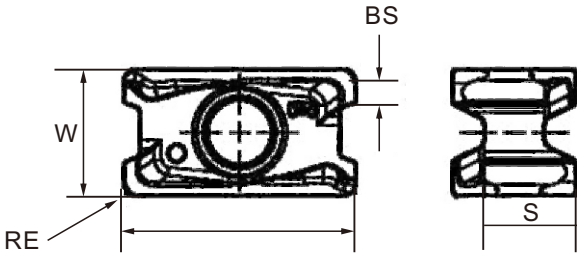
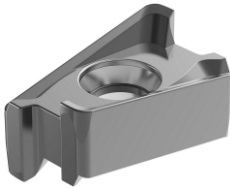


型号 Model	库存 Stock	刃数 Teeth	尺寸 Size (mm)					刀片 Peripheral Insert	螺钉 Screw	扳手 Torx wrench
			D	d	L	L1	a			
MQX16-C16-120L	○	2	16	16	120	50	10	YPHW100304ZER-15 YPHW100308ZER-15 YPHW100320ZER-24	M2.5	T8
MQX16-C16-160L	○	2	16	16	160	50	10			
MQX16-C16-200L	○	2	16	16	200	80	10			
MQX17-C16-120L	○	2	17	16	120	30	10			
MQX17-C16-160L	○	2	17	16	160	30	10			
MQX17-C16-200L	○	2	17	20	200	30	10			
MQX20-C20-160L	○	3	20	20	160	50	10			
MQX20-C20-180L	○	3	20	20	180	50	10			
MQX20-C20-200L	○	3	20	20	200	80	10			
MQX21-C20-160L	○	3	21	20	160	30	10			
MQX21-C20-180L	○	3	21	20	180	30	10			
MQX21-C20-200L	○	3	21	20	200	30	10			
MQX25-C25-160L	○	4	25	25	160	60	10			
MQX25-C25-200L	○	4	25	25	200	100	10			
MQX26-C25-160L	○	4	26	25	160	35	10			
MQX26-C25-200L	○	4	26	25	200	35	10			
MQX32-C32-160L	○	5	32	32	160	70	10			
MQX32-C32-200L	○	5	32	32	200	120	10			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
LNPU



刀片外形 Insert shape	型 号 Model	库存 Stock	尺寸与材质 Size and Grades									
			L1	S	W	BS	RE	KP1110	KP1230	KP2220	KT20	KW20
	LNPU110408ERGEKP1230	○	12.1	4.83	6.6	0.9	0.8	●				
钢 Steel									★			
不锈钢 Stainless Steel									★			
铸铁 Cast Iron									★			
有色金属 Nonferrous Metal												
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

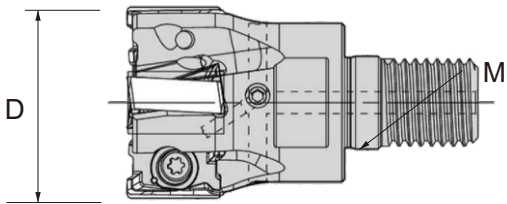
★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast Iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

HM4锁牙立铣刀头
HM4 Locking Modular Endmill Head Cutter



型号 Model	库存 Stock R L	外形尺寸 Size (mm)		刃数 Teeth	刀片 Insert
		D	M		
HM4-D16-M8-2T	○	16	8	2	LNPU1104
HM4-D17-M8-2T	○	17	8	2	
HM4-D20-M10-3T	○	20	10	3	
HM4-D21-M10-3T	○	21	10	3	
HM4-D25-M12-4T	○	25	12	4	
HM4-D26-M12-4T	○	26	12	4	
HM4-D32-M16-5T	○	32	16	5	
HM4-D35-M16-5T	○	35	16	5	

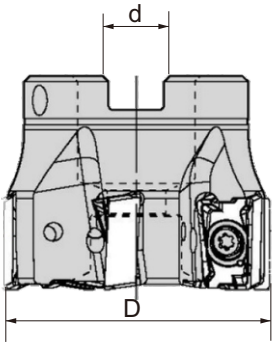
* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
HM4...	CSPB-2.5	M-1000	IP-8D

TM4方肩面铣刀
TM4 Square Shoulder Face Milling Cutter



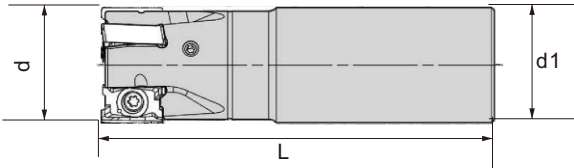
型号 Model	库存 Stock R L	外形尺寸 Size (mm)		刃数 Teeth	刀片 Insert
		D	d		
TM4-D50-22-5T	○	50	22	5	LNPU1104
TM4-D63-22-6T	○	63	22	6	
TM4-D80-27-8T	○	80	27	8	

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
TM4...	CSPB-2.5	M-1000	IP-8D

EM4方肩立铣刀
EM4 Square Shoulder End Milling Cutter



型号 Model	库存 Stock		外形尺寸 Size (mm)			刃数 Teeth	刀片 Insert
	R	L	d1	d	L		
EM4-C16-16-120-2T-C	○		16	16	120	2	LNPU1104
EM4-C16-16-120-2T	○		16	16	120	2	
EM4-C16-17-120-2T	○		16	17	120	2	
EM4-C16-16-160-2T-C	○		16	16	160	2	
EM4-C20-20-160-2T	○		20	20	160	2	
EM4-C20-21-150-3T	○		20	21	150	3	
EM4-C25-26-150-4T	○		25	26	150	4	
EM4-C25-26-200-4T	○		25	26	200	4	
EM4-C25-26-250-4T	○		25	26	250	4	
EM4-C25-30-150-4T	○		25	30	150	4	
EM4-C25-30-200-4T	○		25	30	200	4	
EM4-C32-35-150-5T	○		32	35	150	5	
EM4-C32-35-200-5T	○		32	35	200	5	
EM4-C32-35-250-5T	○		32	35	250	5	

* 刀片需单独订购。Blades to be ordered separately.

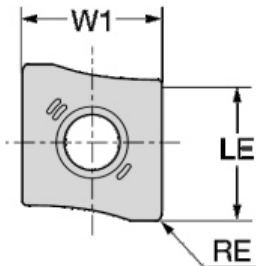
●标准库存Standard inventory ○订单生产The order production

注：-C表示带内冷
Note: -C indicates in-band cold

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
EM4...	CSPB-2.5	M-1000	IP-8D

铣削刀片
Milling inserts
R590



刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades					
		W1	LE	RE	KP1110	KP1230	KP2220 KT20 KW20
	R590-110508H	11.5	11	0.8			●
钢 Steel							
不锈钢 Stainless Steel							
铸铁 Cast Iron							
有色金属 Nonferrous Metal							★
耐热合金 Heat Resistant Alloy							
淬硬钢 Hardened Steel							

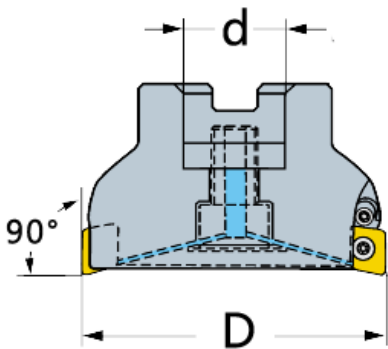
★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

R590铝用方肩面铣刀
R590 Aluminum Square Shoulder Face Milling Cutter



型号 Model	库存 Stock		外形尺寸 Size (mm)		刀片数量 Number of blades	切削刀刃 KAPR	刀片 Insert
	R	L	D	d			
R590-50-22-4T	○		50	22	4	90°	R590-110508H KW20
R590-63-22-5T	○		63	22	5		
R590-80-27-6T	○		80	27	6		
R590-100-32-6T	○		100	32	6		
R590-125-40-8T	○		125	40	8		
R590-160-40-10T	○		160	40	10		

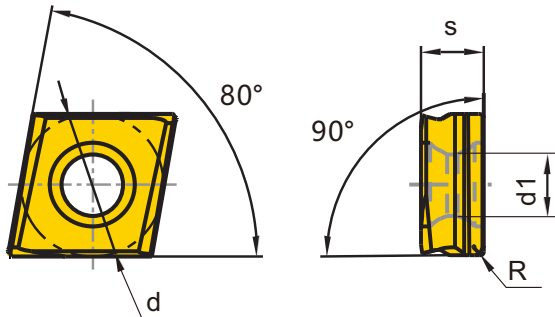
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

备件The spare parts

型号 model	 锁紧螺钉 Lock screw	 润滑剂 lubricant	 扳手 wrench
HM4...	CSPB-2.5	M-1000	IP-8D

铣削刀片
Milling inserts
CNCQ



刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades						KP1110	KP1230	KP2220	KP3220	KT20	KW20
		R	d	s	d1								
	CNCQ090508NF	0.8	9.525	5.56	4.4			●			●		
	CNCQ120508NF	0.8	12.7	5.56	5.5			●			●		
钢 Steel								★					
不锈钢 Stainless Steel								★					
铸铁 Cast iron								★			★		
有色金属 Nonferrous Metal													
耐热合金 Heat Resistant Alloy													
淬硬钢 Hardened Steel													

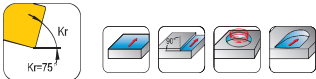
★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

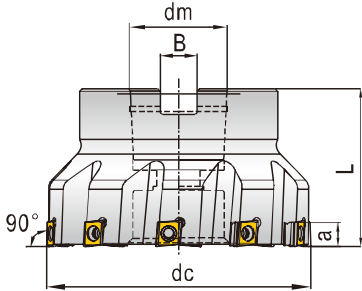
推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	80-180	0.1-0.25	2.0-4.0
		180-280	KP1230	80-180	0.1-0.25	2.0-4.0
		280-350	KP1230	80-180	0.1-0.25	2.0-4.0
M	不锈钢 Stainless Steel	<270	KP1230	80-180	0.1-0.25	2.0-4.0
K	铸铁 Cast iron	180-250	KP3220	80-180	0.1-0.25	2.0-4.0
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

FM90-CN方肩面铣刀
FM90-CN Square shoulder Face milling cutter



- 采用螺钉式压紧结构，容屑空间大，排屑流畅。
- Screw type compression structure, large space for chip, smooth chip removal.
- 大前角刀片，切削轻快。
- Large rake blade for easy cutting.
- 适用于轻、中型铣削加工。
- Suitable for light and medium milling.

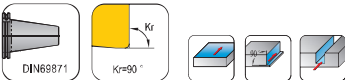


型号 Model	库存 Stock	尺寸 (mm) Dimensions									
		dc	dm	a	B	L	齿数 No.of teeth	刀片 Insert	压紧螺钉 Forcing Screw	螺钉 Screw	扳手 Torx wrench
FM90-50CN09.XDZ24	○	50	24	9	10	50	5	CNCQ090508NF	MS10035	CO40A11S	WT15
FM90-63CN09.XDZ24	○	63	24	9	10	50	6	CNCQ090508NF	MS10035	CO40A11S	WT15
FM90-80CN09.XDZ30	○	80	30	9	12	55	8	CNCQ090508NF	MS12045	CO40A11S	WT15
FM90-100CN09.XDZ38	○	100	38	9	14	63	10	CNCQ090508NF	SXDZ38	CO40A11S	WT15
FM90-125CN09.XDZ48	○	125	48	9	16	63	12	CNCQ090508NF	SXDZ48	CO40A11S	WT15
FM90-80CN12.XDZ30	○	80	30	12	12	55	7	CNCQ120508NF	MS12045	C050A12S	WT20
FM90-100CN12.XDZ38	○	100	38	12	14	63	9	CNCQ120508NF	SXDZ38	C050A12S	WT20
FM90-125CN12.XDZ48	○	125	48	12	16	63	11	CNCQ120508NF	SXDZ48	C050A12S	WT20
FM90-160CN12.XDZ48	○	160	48	12	16	63	14	CNCQ120508NF	SXDZ48	C050A12S	WT20

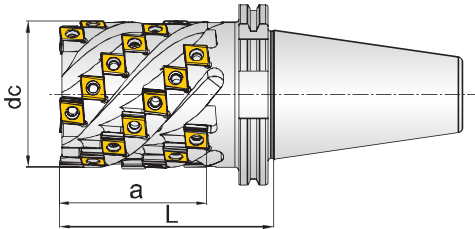
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

HEM90-JT可转位螺旋刀铣刀(锥柄一体式)
HEM90-JT Helical End milling cutter(Integral Arbor)



- 适用于粗，半精加工。
- Suitable for rough and semi-finish machining.
- 全功效加工，高效率加工利器。
- Full effect processing, high efficiency processing sharp tools.

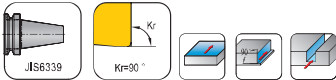


型号 Model	库存 Stock	尺寸 (mm) Dimensions			齿数 No.of teeth	刃数 No.of blade	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	a	L					
HEM90-50CN09L.51/95.3-JT40	○	50	51	95	40	18	CNCQ090508F	CO40A11S	WT15
HEM90-63CN09L.58/110.4-JT40	○	63	58	110	40	28	CNCQ090508F	CO40A11S	WT15
HEM90-50CN09L.51/110.3-JT50	○	50	51	110	50	18	CNCQ090508F	CO40A11S	WT15
HEM90-63CN09L.58/125.4-JT50	○	50	58	125	50	28	CNCQ090508F	CO40A11S	WT15
HEM90-80CN09L.80/135.5-JT50	○	80	80	135	50	35	CNCQ120508F	C050A12S	WT20

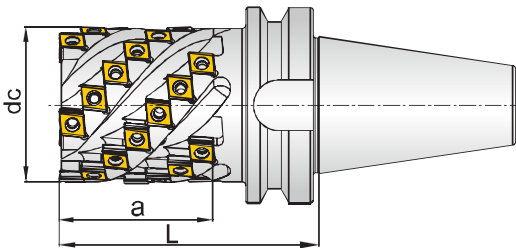
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

HEM90-BT可转位螺旋刀铣刀(锥柄一体式)
HEM90-BT Helical End milling cutter(Integral Arbor)



- 适用于粗，半精加工。
- Suitable for rough and semi-finish machining.
- 全功效加工，高效率加工利器。
- Full effect processing, high efficiency processing sharp tools.

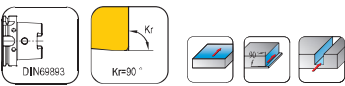


型号 Model	库存 Stock	尺寸 (mm) Dimensions			齿数 No.of teeth	刃数 No.of blade	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	a	L					
HEM90-50CN09L.51/100.3-BT40	○	50	51	100	40	18	CNCQ090508F	CO40A11S	WT15
HEM90-63CN09L.58/115.4-BT40	○	63	58	100	40	28	CNCQ090508F	CO40A11S	WT15
HEM90-50CN09L.51/125.3-BT50	○	50	51	125	50	18	CNCQ090508F	CO40A11S	WT15
HEM90-63CN09L.58/140.4-BT50	○	50	58	140	50	28	CNCQ090508F	CO40A11S	WT15
HEM90-80CN09L.80/150.5-BT50	○	80	80	150	50	35	CNCQ120508F	C050A12S	WT20

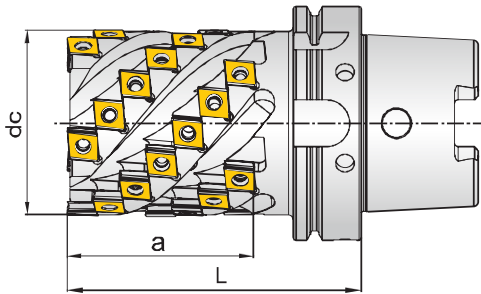
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

HEM90-HSK 螺旋刃铣刀(锥柄一体式)
HEM90-HSK Helical End milling cutter(Integral Arbor)



- 适用于粗，半精加工。
- Suitable for rough and semi-finish machining.
- 全功效加工，高效率加工利器。
- Full effect processing, high efficiency processing sharp tools.

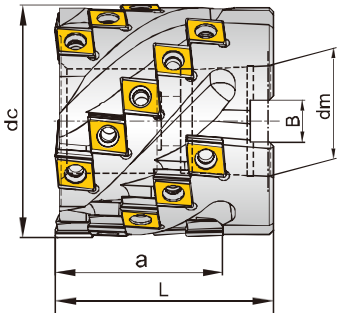


型号 Model	库存 Stock	尺寸 (mm) Dimensions				 齿数 No.of teeth	 刃数 No.of blade	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
		dc	a	L						
HEM90-50CN09L.51/95.3-HSK63A	○	50	51	95	40	18	3	CNCQ090508F	C040A11S	WT15
HEM90-63CN09L.58/110.4-HSK63A	○	63	58	110	40	28	4	CNCQ090508F	C040A11S	WT15
HEM90-50CN09L.51/110.3-HSK100A	○	50	51	110	50	18	3	CNCQ090508F	C040A11S	WT15
HEM90-63CN09L.58/125.4-HSK100A	○	50	58	125	50	28	4	CNCQ090508F	C040A11S	WT15
HEM90-80CNO9L.80/135.5-HSK100A	○	80	80	135	50	35	5	CNCQ120508F	C050A12S	WT20

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

HEM90螺旋面铣刀
HEM90 Helical Face milling cutter

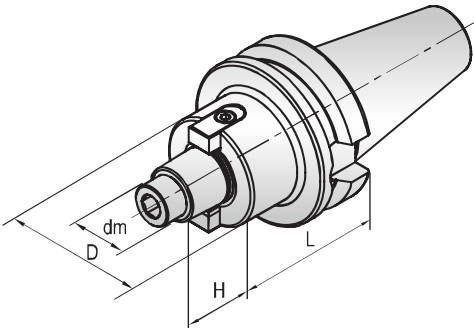


型号 Model	库存 Stock	尺寸 (mm) Dimensions					 齿数 No.of teeth	 刃数 No.of blade	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
		dc	dm	a	B	L					
HEM90-50CN09L.42/60.3XDZ24	○	50	24	42	10	60	15	3	CNCQ090508F	C040A11S	WT15
HEM90-63CN09L.51/70.4XDZ30	○	63	30	51	12	70	24	4	CNCQ090508F	C040A11S	WT15
HEM90-80CN12L.57/75.5XDZ38	○	80	38	57	14	75	25	5	CNCQ120508F	C050A12S	WT20
HEM90-100CN12L.69/90.6XDZ48	○	100	48	69	16	90	36	6	CNCQ120508F	C050A12S	WT20

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

BT 铣刀柄-HEM90 面铣刀专用
BT Milling Chuck for HEM90 Face milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions					 键 Key	 螺钉 Screw
		dc	D	L	H			
BT40-XDZ24-60	○	24	48	60	17	40	JC10021-h9	MS04010
BT40-XDZ30-60	○	30	61	60	22	40	JC12023-h9	MS05016
BT50-XDZ24-60	○	24	48	60	17	50	JC10021-h9	MS04010
BT50-XDZ30-60	○	30	61	60	22	50	JC12023-h9	MS05016
BT50-XDZ38-60	○	38	78	60	26	50	JC14018-h9	MS06020
BT50-XDZ48-60	○	48	98	60	25	50	KXM40-h9	MS08020

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

JT 铣刀柄-HEM90 面铣刀专用
JT Milling Chuck for HEM90 Face milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions					 键 Key	 螺钉 Screw
		dc	D	L	H			
JT40-XDZ24-60	○	24	48	60	17	40	JC10021-h9	MS04010
JT40-XDZ30-75	○	30	61	75	22	40	JC12023-h9	MS05016
JT50-XDZ24-60	○	24	48	60	17	50	JC10021-h9	MS04010
JT50-XDZ30-60	○	30	61	60	22	50	JC12023-h9	MS05016
JT50-XDZ38-60	○	38	78	60	26	50	JC14018-h9	MS06020
JT50-XDZ48-75	○	48	98	75	25	50	KXM40-h9	MS08020

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

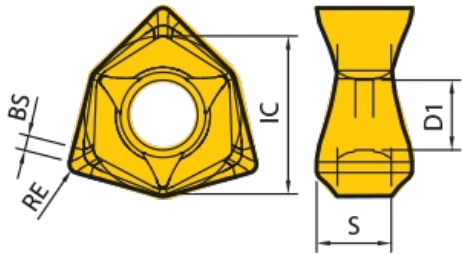
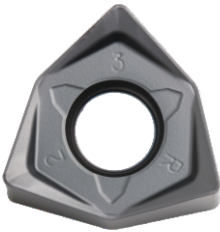
HSK 铣刀柄-HEM90 面铣刀专用
HSK Milling Chuck for HEM90 Face milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions					 键 Key	 螺钉 Screw
		dm	D1	L	H			
HSK63A-XDZ24-50	○	63	24	50	17	HSK-A63	JC10021-h9	MS04010
HSK63A-XDZ30-60	○	63	30	60	22	HSK-A63	JC12023-h9	MS05016
HSK100A-XDZ24-50	○	100	24	50	17	HSK-A100	JC10021-h9	MS04010
HSK100A-XDZ30-50	○	100	30	50	22	HSK-A100	JC12023-h9	MS05016
HSK100A-XDZ38-50	○	100	38	50	26	HSK-A100	JC14018-h9	MS06020
HSK100A-XDZ48-70	○	100	48	70	25	HSK-A100	KXM40-h9	MS08020

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
WNMU



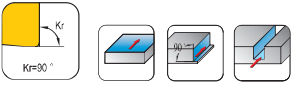
刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades									
		RE	IC	S	D1	BS	KP1110	KP1230	KP2220	KT20	KW20
	WNMU080608EN-GM	0.8	14.02	6.65	6.2	1.3		●			●
钢 Steel								★			
不锈钢 Stainless Steel								★			
铸铁 Cast Iron								★			
有色金属 Nonferrous Metal											
耐热合金 Heat Resistant Alloy											
淬硬钢 Hardened Steel											

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

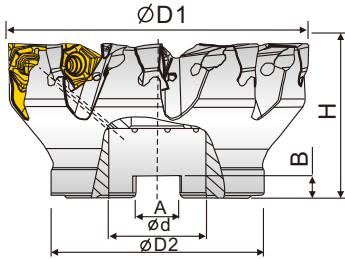
推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

MFWN 重切削双面6刃面铣刀
MFWN Heavy Cutting Double sided 6 edge Face milling cutter



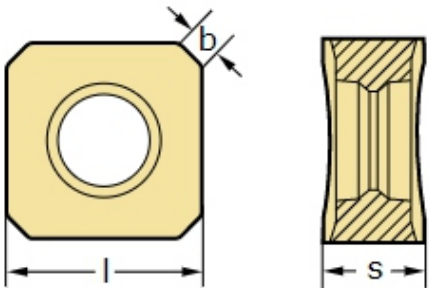
低切削力，切刃锋利
抗震能力强
Sharp cutting due to lower cutting forces
Resistant to chattering and applicable to long overhang



型号 Model	库存 Stock	尺寸 (mm) Dimensions						齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		D	D2	d	A	B	H				
MFWN0806-050R-4T-M	●	50	42	22	10.4	6.3	40	4	WNMU 080608N	M5	T20
MFWN0806-063R-4T-M	●	63	47	22	10.4	6.3	40	4			
MFWN0806-063R-5T-M	●	63	47	22	10.4	6.3	40	5			
MFWN0806-080R-5T-M	●	80	60	27	12.4	7	50	5			
MFWN0806-080R-6T-M	●	80	60	27	12.4	7	50	6			
MFWN0806-100R-7T-M	●	100	70	32	14.4	8	50	7			
MFWN0806-125R-8T-M	●	125	85	40	16.4	9	63	8			
MFWN0806-160R-10T-M	●	160	105	40	16.4	9	63	10			
MFWN0806-200R-12T-M	●	200	140	60	25.7	14	63	12			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

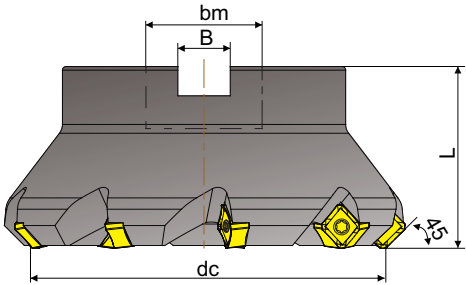
铣削刀片
Milling inserts
SNMX



刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades				
		b	L	S	KP1110	KP1230
	SNMX1205AZER-EMF	1.5	12.7	5.59		●
钢 Steel		★				
不锈钢 Stainless Steel		★				
铸铁 Cast Iron		★				
有色金属 Nonferrous Metal						
耐热合金 Heat Resistant Alloy						
淬硬钢 Hardened Steel						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

FM45重切削面铣刀
FM45 Heavy Cutting Face Milling Cutter



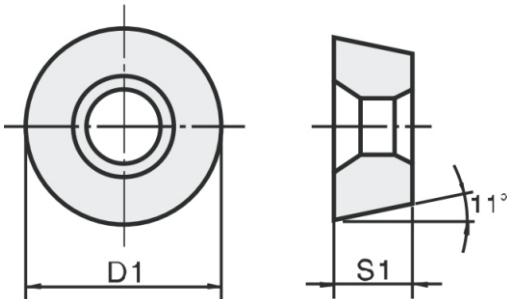
型号 Model	库存 Stock	尺寸 (mm) Dimensions				齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	dm	B	L				
FM45-50-22-4T-SN12	○	50	22	10.4	50	4	SNMX1205 ANEN-CM	5*12	T20
FM45-63-22-5T-SN12	○	63	22	10.4	50	5			
FM45-80-27-6T-SN12	○	80	27	12.4	50	6			
FM45-100-32-7T-SN12	○	100	32	14.4	50	8			
FM45-125-40-8T-SN12	○	125	40	16.4	63	9			
FM45-160-40-10T-SN12	○	160	40	16.4	63	10			
FM45-200-60-12T-SN12	○	200	60	25.7	63	12			
FM45-250-60-14T-SN12	○	250	60	25.7	63	14			

* 刀片需单独订购。Blades to be ordered separately. ● 标准库存Standard inventory ○ 订单生产The order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

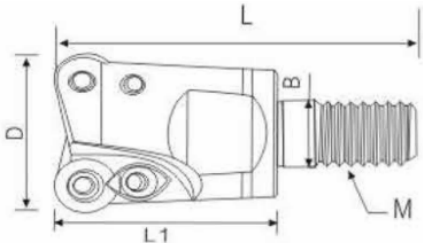
铣削刀片
Milling inserts
RPMW RPMT



刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades											
			D1	S1					KP1110	KP1230	KP2220	KT20	KW20	
	RPMW0802MO	○	8	2.38						●				
	RPMW08T2MO	○	8	2.78						●				
	RPMT08T2MOE	○	8	2.78						●				
	RPMW1003MO	○	10	3.18						●				
	RPMT10T3MOE	○	10	3.97						●				
	RPMT1204MOE	○	12	4.76						●				
钢 Steel										★				
不锈钢 Stainless Steel										★				
铸铁 Cast Iron										★				
有色金属 Nonferrous Metal														
耐热合金 Heat Resistant Alloy														
淬硬钢 Hardened Steel														

★ 首选 Preferred ☆ 可选 optional ● 标准库存 standard stock ○ 订单生产 order production

EMR 锁牙式立铣刀头
EMR Locking Modular Endmill Head Cutter

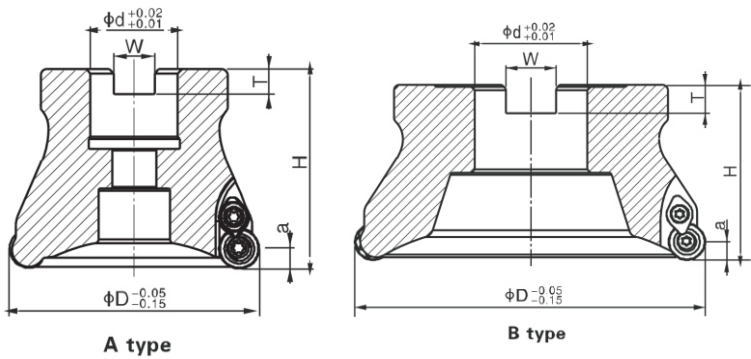
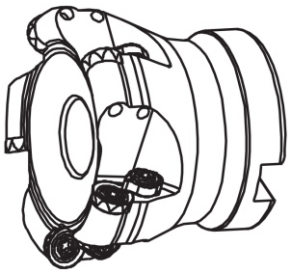
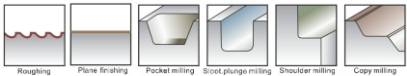


型号 Model	库存 Stock	尺寸 (mm) Dimensions					 齿数 No. of teeth	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
		D	L	L1	B	M				
EMR-5R-20-M10-2T	○	20	49	30	10.5	M10	2	RPMW1003	M4.0	T15
EMR-5R-21-M10-2T	○	21	49	30	10.5	M10	2			
EMR-5R-25-M12-2T	○	25	57	35	12.5	M12	2			
EMR-5R-26-M12-2T	○	26	57	35	12.5	M12	2			
EMR-5R-30-M12-2T	○	30	57	35	12.5	M12	2			
EMR-5R-32-M16-3T	○	32	57	35	12.5	M16	3			
EMR-5R-35-M16-3T	○	35	63	40	17	M16	3	RPMT1204	M4.0	T15
EMR-5R-40-M16-3T	○	40	63	40	17	M16	3			
EMR-6R-30-M16-3T	○	30	57	35	12.5	M16	3			
EMR-6R-32-M16-3T	○	32	57	35	12.5	M16	3			
EMR-6R-35-M16-3T	○	35	63	40	17	M16	3			
EMR-6R-40-M16-4T	○	40	63	40	17	M16	3/4			

* 刀片需单独订购。Blades to be ordered separately. ● 标准库存 Standard inventory ○ 订单生产 The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

EMR圆鼻面铣刀
EMR Round Dowel Face milling cutter

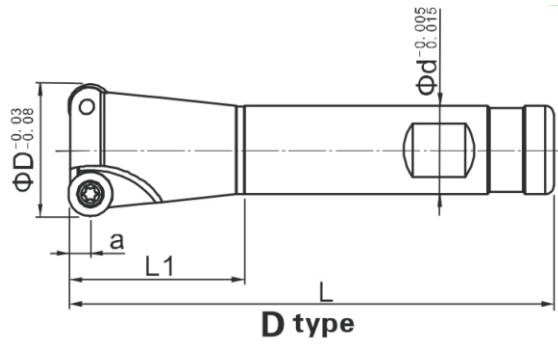
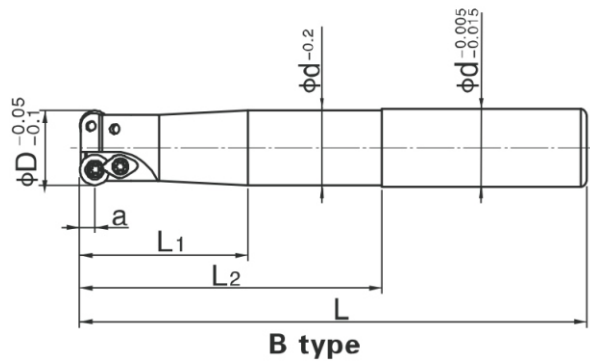
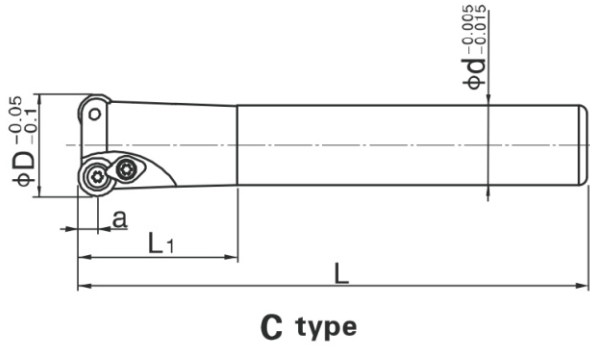
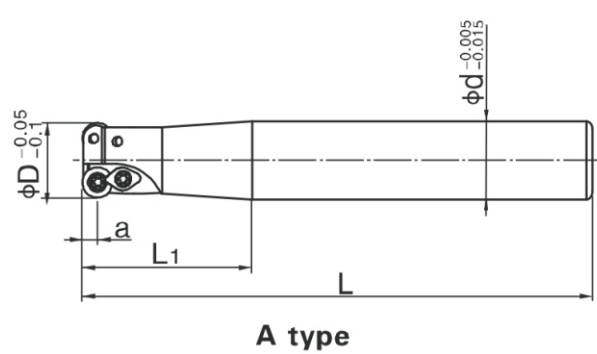
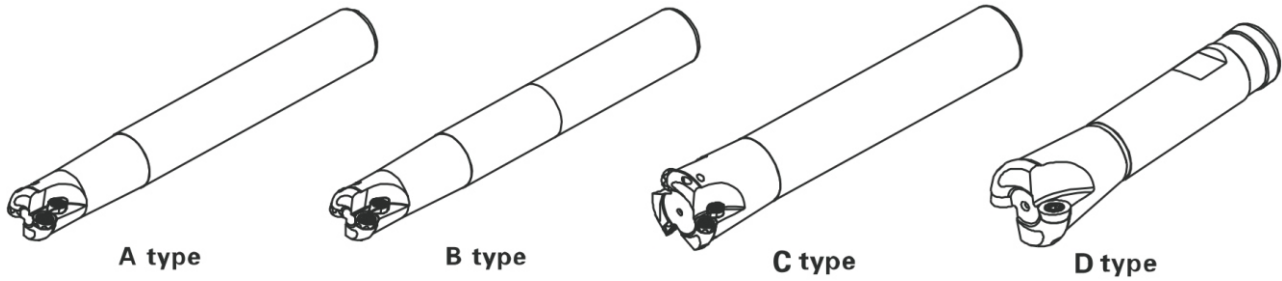


型号 Model	库存 Stock	类型 Manner	尺寸 (mm) Dimensions						夹片 Clamp piece	刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	d	H	W	T	a				
EMR-5R-50-22-4T	○	A	50	22	50	10.4	6.3	5	A-5R	RPMW 1003 RPMT 10T3	A40100J M4*10 A35100F M3.5*10	T20F T20
EMR-5R-63-22-4T	○	A	63	22	50	10.4	6.3	5				
EMR-5R-63-22-5T	○	A	63	22	50	10.4	6.3	5				
EMR-5R-80-27-6T	○	A	80	27	50	12.4	7	5				
EMR-5R-100-32-6T	○	B	100	32	50	14.4	8	5				
EMR-5R-50-25.4-4T	○	A	50	25.4	50	10	6	5				
EMR-5R-63-25.4-4T	○	A	63	25.4	50	10	6	5				
EMR-5R-63-25.4-5T	○	A	63	25.4	50	10	6	5				
EMR-5R-80-25.4-6T	○	A	80	25.4	50	10	6	5				
EMR-5R-100-31.75-6T	○	B	100	31.75	50	13	8	5				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

EMR 圆鼻立铣刀
EMR Round Dowel End milling cutter



EMR 圆鼻立铣刀
EMR Round Dowel End milling cutter



型号 Model	库存 Stock	类型 Manner	刀片数量 NO. of flutes	尺寸 Size (mm)						夹片 Clamp piece	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
				D	d	L	L1	L2	a				
EMR-4Rx12x120	○	A	1	12	12	120	40	-	4	A-4R	RPMW 0802	A30070G M3*7	T10F T10
EMR-4Rx13x120-C12	○	A	1	13	12	120	40	-	4				
EMR-4Rx16x120-C15	○	A	2	16	15	120	40	-	4				
EMR-4Rx16x120	○	A	2	16	16	120	40	-	4				
EMR-4Rx16x160	○	A	2	16	16	160	40	-	4				
EMR-4Rx16x160-C15	○	A	2	16	15	160	40	-	4				
EMR-4Rx16x150-C15.6	○	A	2	16	15.6	150	40	-	4				
EMR-4Rx16x160-C15.6	○	A	2	16	15.6	160	40	-	4				
EMR-4Rx16x180	○	B	2	16	16	180	40	90	4				
EMR-4Rx16x180-C15.6	○	A	2	16	15.6	180	40	-	4				
EMR-4Rx16x200	○	B	2	16	16	200	40	100	4				
EMR-4Rx16x200-C15	○	A	2	16	15	200	50	-	4				
EMR-4Rx17x120-C16	○	A	2	17	16	120	40	-	4				
EMR-4Rx17x160-C16	○	A	2	17	16	160	40	-	4				
EMR-4Rx17x200-C16	○	A	2	17	16	200	40	-	4				
EMR-4Rx20x160	○	A	2	20	20	160	50	-	4				
EMR-4Rx20x160-C19	○	C	2	20	19	160	50	-	4				
EMR-4Rx20x180	○	B	2	20	20	180	50	90	4				
EMR-4Rx20x180-C19	○	C	2	20	19	180	50	-	4				
EMR-4Rx20x200	○	B	2	20	20	200	50	100	4				
EMR-4Rx20x200-C19	○	A	2	20	19	200	50	-	4				
EMR-4Rx21x160-C20	○	A	2	21	20	160	50	-	5				
EMR-4Rx21x200-C20	○	A	2	21	20	200	50	-	5				
EMR-5Rx20x160	○	A	2	20	20	160	50	-	5				
EMR-5Rx20x160-C19	○	A	2	20	19	160	50	-	5				
EMR-5Rx20x180	○	B	2	20	20	180	50	90	5				
EMR-5Rx20x200	○	B	2	20	20	200	50	100	5				
EMR-5Rx21x160-C20	○	A	2	21	20	160	50	-	5				
EMR-5Rx21x200-C20	○	A	2	21	20	200	50	-	5				
EMR-5Rx25x160	○	A	2	25	25	160	50	-	5				
EMR-5Rx25x160-C20	○	C	2	25	20	160	50	-	5				
EMR-5Rx25x160-C24	○	A	2	25	24	160	50	-	5				
EMR-5Rx25x180	○	A	2	25	25	180	50	-	5				
EMR-5Rx25x200	○	A	2	25	25	200	75	-	5				
EMR-5Rx25x250	○	B	2	25	25	250	60	115	5				
EMR-5Rx25x300	○	B	2	25	25	300	60	165	5				
EMR-5Rx25x200-C20	○	C	2	25	20	200	50	-	5				
EMR-5Rx25x200-C24	○	A	2	25	24	200	50	-	5				
EMR-5Rx25x250-C24	○	A	2	25	24	250	60	-	5				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

EMR 圆鼻立铣刀
EMR Round Dowel End milling cutter

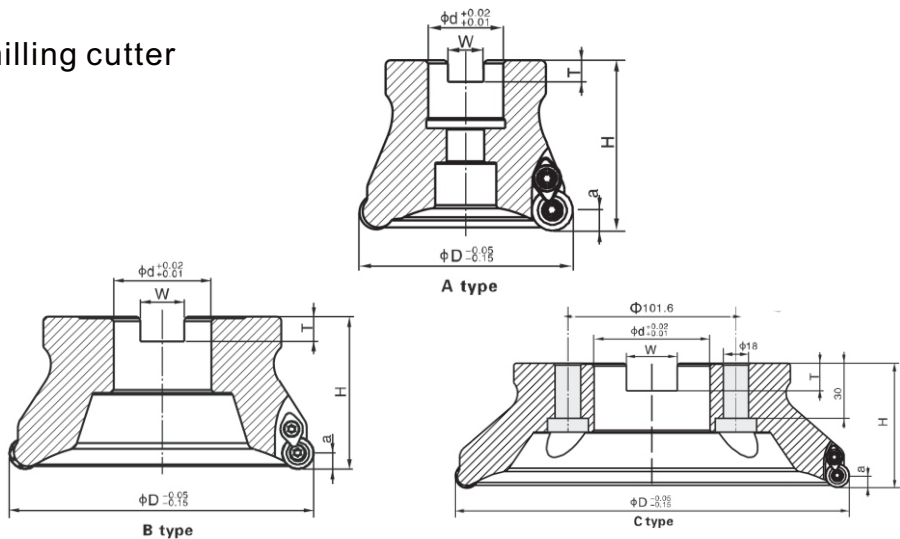
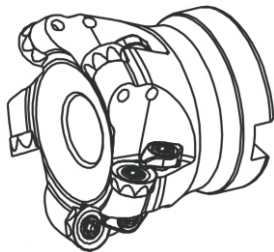
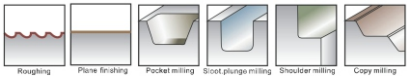


型号 Model	库存 Stock	类型 Manner	刀片数量 NO.of flutes	尺寸 Size (mm)						夹片 Clamp piece	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
				D	d	L	L1	L2	a				
EMR-5Rx26x160-C25	○	A	2	26	25	160	50	-	5	A-5R	RPMW 1003 RPMT 10T3	A40090G M4*9 A35100F M3.5*10	T15F T15
EMR-5Rx26x200-C25	○	A	2	26	25	200	50	-	5				
EMR-5Rx30x110-C20	○	A	2	30	20	110	40	-	5				
EMR-5Rx30x110-C19.05	○	A	2	30	19.05	110	40	-	5	A-5R			
EMR-5Rx30x160-C25	○	A	2	30	25	160	50	-	5				
EMR-5Rx30x200-C25	○	A	2	30	25	200	60	-	5				
EMR-5Rx30x250-C25	○	A	2	30	25	250	60	-	5				
EMR-5Rx30x300-C25	○	B	2	30	25	300	60	-	5				
EMR-5Rx30x300-C32	○	A	2	30	32	300	60	-	5				
EMR-5Rx35x160-C32	○	B	2/3	35	32	160	50	-	5				
EMR-5Rx35x200-C32	○	A	2/3	35	32	200	50	-	5				
EMR-5Rx35x250-C32	○	B	2/3	35	32	250	60	-	5				
EMR-5Rx35x300-C32	○	A	3	35	32	300	60	-	5				
EMR-5Rx35x350-C32	○	B	3	40	32	350	60	-	5				
EMR-5Rx40x160-C32	○	A	3/4	40	32	160	50	-	5				
EMR-5Rx40x200-C32	○	B	4	40	32	200	50	-	5				
EMR-5Rx40x250-C32	○	A	4	40	32	250	60	-	5				
EMR-5Rx40x300-C32	○	B	4	40	32	300	60	-	5				
EMR-5Rx40x350-C32	○	C	4	40	32	350	60	-	5				
EMR-5Rx50x200-C32	○	C	4	50	32	200	60	-	5				
EMR-5Rx50x250-C32	○	C	4	50	32	250	60	-	5				
EMR-5Rx50x300-C32	○	C	4	50	32	300	60	-	5				
EMR-5Rx50x350-C32	○	C	4	50	32	350	60	-	5				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

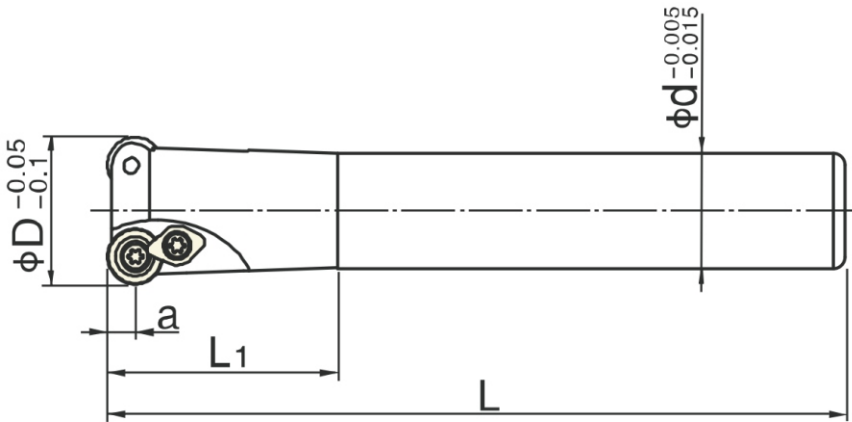
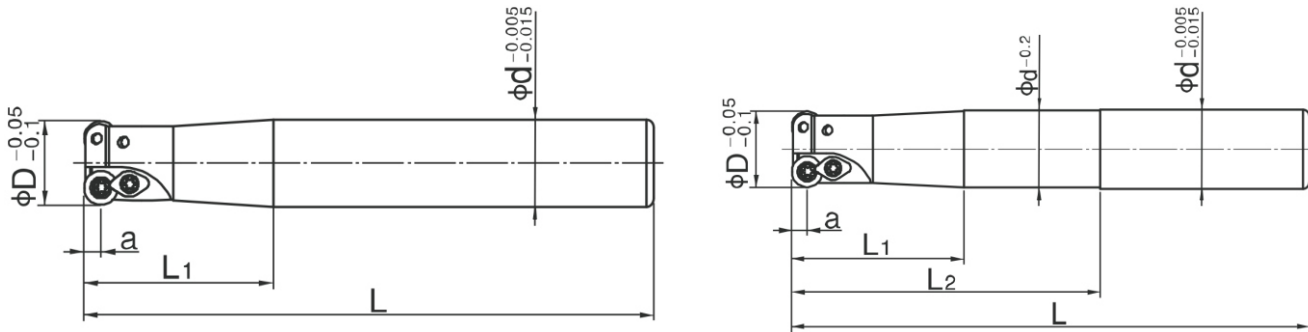
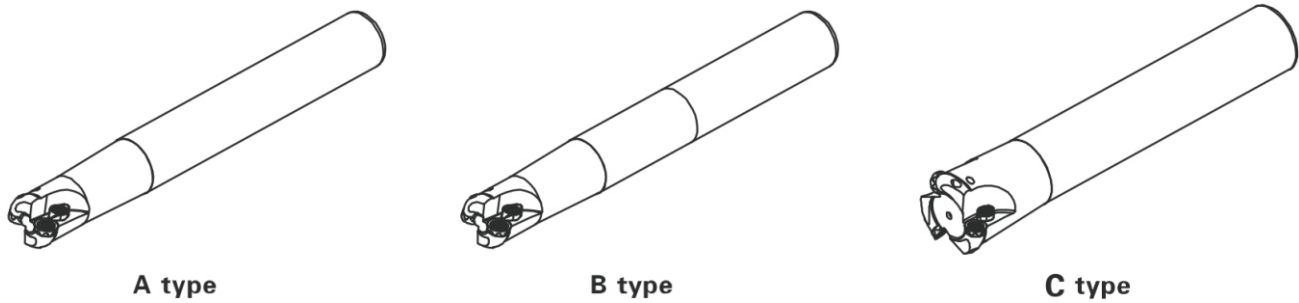
EMRW圆鼻面铣刀
EMRW Round Dowel Face milling cutter



型号 Model	库存 Stock	类型 Manner	尺寸 (mm) Dimensions						夹片 Clamp piece	刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	d	H	W	T	a				
EMRW-6R-50-22-4T	○	A	50	22	50	10.4	6.3	6	A-6R	RPMW 1204 RPMT 1204	A40100J M4*10	T15F T15
EMRW-6R-63-22-4T	○	A	63	22	50	10.4	6.3	6				
EMRW-6R-63-22-5T	○	A	63	22	50	10.4	6.3	6				
EMRW-6R-80-27-6T	○	A	80	27	50	12.4	7	6				
EMRW-6R-100-32-6T	○	B	100	32	50	14.4	8	6				
EMRW-6R-125-40-6T	○	B	125	40	63	16.4	9	6				
EMRW-6R-160-40-9T	○	B	160	40	63	16.4	9	6				
EMRW-6R-200-60-9T	○	C	200	60	63	25.7	14	6				
EMRW-6R-50-25.4-4T	○	A	50	25.4	50	10	6	6				
EMRW-6R-63-25.4-4T	○	A	63	25.4	50	10	6	6				
EMRW-6R-63-25.4-5T	○	A	63	25.4	50	10	6	6				
EMRW-6R-80-25.4-6T	○	A	80	25.4	50	10	6	6				
EMRW-6R-100-31.75-6T	○	B	100	31.75	50	13	8	6				

* 刀片需单独订购。Blades to be ordered separately. ●标准库存 Standard inventory ○订单生产 The order production

EMRW 圆鼻面立铣刀
EMRW Round Dowel End milling cutter



EMRW 圆鼻面立铣刀
EMRW Round Dowel End milling cutter

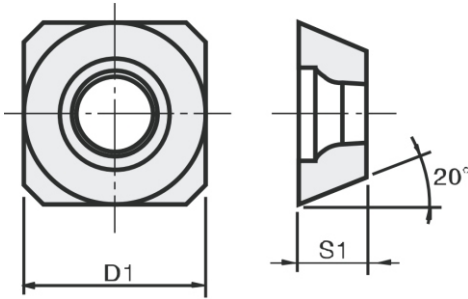
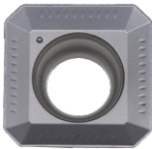


型号 Model	库存 Stock	类型 Manner	刀片数量 NO. of flutes	尺寸 Size (mm)						夹片 Clamp piece	刀片 Insert	螺钉 Screw	扳手 Torx wrench
				D	d	L	L1	L2	a				
EMRW-4Rx12x120	○	A	1	12	12	120	40	-	4	-	RPMW 0802 MO	A30070G M3*7	T8F T8
EMRW-4Rx13x120-C12	○	A	1	13	12	120	40	-	4		RPMW 08T2	A30070E M3*7	T10F T10
EMRW-4Rx16x120-C15	○	A	2	16	15	120	40	-	4				
EMRW-4Rx16x120	○	A	2	16	16	160	40	-	4				
EMRW-4Rx16x160	○	A	2	16	16	160	40	-	4				
EMRW-4Rx16x160-C15	○	A	2	16	15	160	40	-	4				
EMRW-4Rx16x160-C15.6	○	A	2	16	15.6	160	40	-	4				
EMRW-4Rx16x180	○	B	2	16	16	180	40	90	4				
EMRW-4Rx16x180-C15.6	○	A	2	16	15.6	180	40	-	4				
EMRW-4Rx16x200	○	B	2	16	16	200	40	100	4				
EMRW-4Rx16x200-C15	○	A	2	16	15	200	40	-	4				
EMRW-4Rx16x200-C15.6	○	A	2	16	15.6	200	50	-	4				
EMRW-4Rx17x120-C16	○	A	2	17	16	120	40	-	4				
EMRW-4Rx17x160-C16	○	A	2	17	16	160	40	-	4				
EMRW-4Rx17x200-C16	○	A	2	17	16	200	40	-	4				
EMRW-4Rx20x160	○	A	2	20	20	160	50	-	4				
EMRW-4Rx20x160-C19	○	A	2	20	19	160	50	-	4				
EMRW-4Rx20x180	○	B	2	20	20	180	50	90	4				
EMRW-4Rx20x200	○	B	2	20	20	200	50	-	4				
EMRW-4Rx20x200-C19	○	A	2	20	19	200	50	100	4				
EMRW-4Rx21x160-C20	○	A	2	21	20	160	50	-	4	A-6R	RPMW 1204 RPMT 1204	A40100J M4*10 A35100F M3.5*10	T15F T15
EMRW-4Rx21x200-C20	○	A	2	21	20	160	50	-	4				
EMRW-6Rx32x160-C25	○	C	2	32	25	160	50	-	6				
EMRW-6Rx32x160	○	A	2	32	32	160	50	-	6				
EMRW-6Rx32x180-C25	○	C	2	32	25	180	50	-	6				
EMRW-6Rx32x180	○	A	2	32	32	180	50	90	6				
EMRW-6Rx32x200-C25	○	C	2	32	25	200	50	100	6				
EMRW-6Rx32x200	○	A	2	32	32	200	50	-	6				
EMRW-6Rx32x250-C25	○	C	2	32	25	250	50	-	6				
EMRW-6Rx32x250	○	A	2	32	32	250	50	-	6				
EMRW-6Rx32x300-C25	○	C	2	32	25	300	50	-	6				
EMRW-6Rx32x300	○	A	2	32	32	300	50	-	6				
EMRW-6Rx35x160-C32	○	C	3	35	32	160	50	-	6				
EMRW-6Rx35x200-C32	○	C	3	35	32	200	75	-	6				
EMRW-6Rx35x250-C32	○	C	3	35	32	250	60	90	6				
EMRW-6Rx35x300-C32	○	C	3	35	32	300	60	100	6				
EMRW-6Rx35x350-C32	○	C	3	35	32	350	50	-	6				
EMRW-6Rx40x160-C32	○	C	3	40	32	160	50	-	6				
EMRW-6Rx40x200-C32	○	C	3	40	32	200	50	-	6				
EMRW-6Rx40x250-C32	○	C	3	40	32	250	60	-	6				
EMRW-6Rx40x300-C32	○	C	3	40	32	250	60	-	6				
EMRW-6Rx40x350-C32	○	C	3	40	32	350	60	-	6				
EMRW-6Rx50x200-C32	○	C	4	40	32	200	60	-	6				
EMRW-6Rx50x250-C32	○	C	4	40	32	250	60	-	6				
EMRW-6Rx50x300-C32	○	C	4	40	32	300	60	-	6				
EMRW-6Rx50x350-C32	○	C	4	40	32	350	60	-	6				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
SEKT

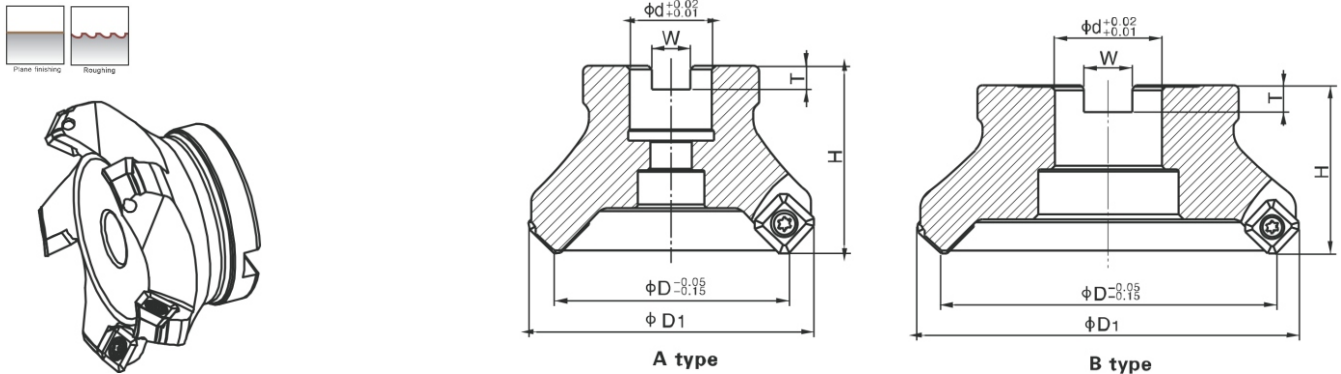


刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			D1	S1				KP1110	KP1230	KP2220	KT20	KW20
	SEKT1204AFEN	○	12.7	4.76					●		●	
钢 Steel								★				
不锈钢 Stainless Steel								★				
铸铁 Cast Iron								★				
有色金属 Nonferrous Metal											★	
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

KM-45°端面铣刀
KM-45° Face milling cutter

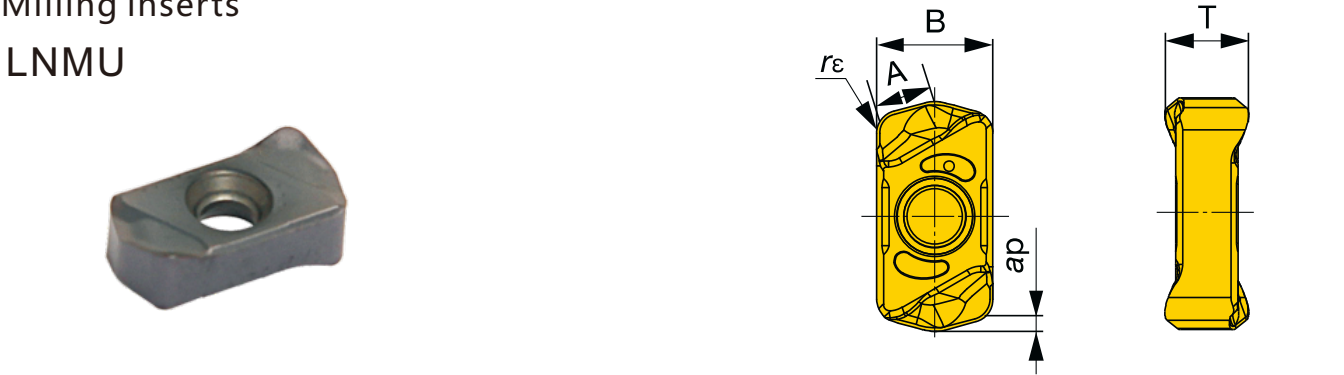


型号 Model	库存 Stock	类型 Manner	尺寸 (mm) Dimensions						刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	D1	d	H	W	T			
KM12-50-22-4T	○	A	50	64	50	10.4	6.3	14	SEKT1204	A50110D M5*11	T20F T20
KM12-63-22-4T	○	A	63	77	50	10.4	6.3	14			
KM12-80-27-5T	○	A	80	94	50	12.4	7	14			
KM12-100-32-5T	○	B	100	114	50	14.4	8	14			
KM12-125-40-6T	○	B	125	139	63	16.4	9	14			
KM12-160-40-9T	○	B	160	174	63	16.4	9	14			
KM12-50-25.4-4T	○	A	50	64	50	10	6	14			
KM12-63-25.4-4T	○	A	63	77	50	10	6	14			
KM12-80-25.4-5T	○	A	80	94	50	10	6	14			
KM12-100-31.75-5T	○	B	100	114	50	13	8	14			
KM12-125-38.1-6T	○	B	125	137	63	16.2	10	14			
KM12-160-38.1-6T	○	B	160	174	63	16.2	10	14			
KM12-200-38.1-9T	○	B	200	174	63	16.2	10	14			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
LNMU

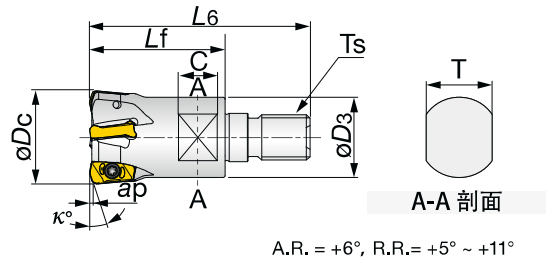
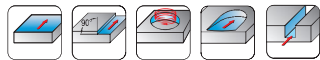


刀片外形 Insert shape	型号 Model	库存 Stock	rε	尺寸与材质 Size and Grades									
				最大切深量 (mm)	A	B	T	KP1110	KP1230	KP2220	KT20	KW20	
 	LNMU0303ZER-MJ	●	1.2	1	3.2	6	4.3		●				
钢 Steel										★			
不锈钢 Stainless Steel										★			
铸铁 Cast Iron										★			
有色金属 Nonferrous Metal													
淬硬钢 Hardened Steel													

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

HXN锁牙式立铣刀头
HXN Locking Modular Endmill Head Cutter



型号 Model	库存 Stock	最大 ap	ØDc	z	L6	Lf	C	T	ØD3	K°	Ts	Kg	刀片 Insert
HXN03R016MM08-02	●	1	16	2	42	25	8	10	12.8	15	M8	0.03	LNMU03...
HXN03R017MM08-02	●	1	17	2	42	25	8	10	14.5	17	M8	0.04	LNMU03...
HXN03R020MM10-03	●	1	20	3	49	30	10	15	17.8	17	M10	0.06	LNMU03...
HXN03R021MM10-03	●	1	21	3	49	30	10	15	17.8	17	M10	0.06	LNMU03...
HXN03R025MM12-04	●	1	25	4	57	35	10	17	20.8	17	M12	0.1	LNMU03...
HXN03R026MM12-05	●	1	26	4	57	35	10	17	20.8	17	M12	0.11	LNMU03...
HXN03R032MM1 6-05	●	1	32	5	63	40	12	22	28.8	17	M16	0.2	LNMU03...
HXN03R033MM1 6-05	●	1	33	5	63	40	12	22	28.8	17	M16	0.21	LNMU03...

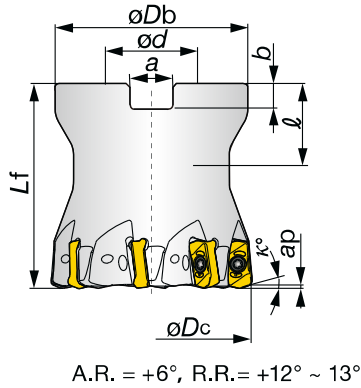
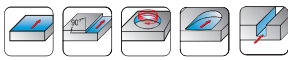
* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
HXN03...	CSPB-2.5	M-1000	IP-8D

TXN高进给面铣刀
TXN High-Feed Face Milling cutter



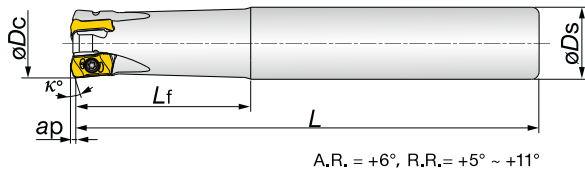
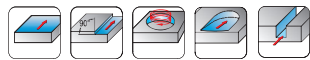
型号 Model	库存 Stock	最大 ap	ØDc	z	ØDb	Ød	ℓ	Lf	b	a	K°	Kg	刀片 Insert
TXN03R040M16.0E05	●	1	40	5	35	16	18	40	5.6	8.4	17	0.2	LNMU03...
TXN03R050M22.0E08	●	1	50	8	47	22	20	50	6.3	10.4	17	0.5	LNMU03...
TXN03R063M22.2-08	●	1	63	8	47	22	20	50	5	8	17	0.5	LNMU03...

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	中心螺栓 The center bolt	扳手 wrench
TXN03R04...	CSPB-2.5	M-1000	CM8X30H	IP-8D
TXN03R05...	CSPB-2.5	M-1000	CM10X30H	IP-8D

EXN高进给立铣刀
EXN High-Feed End Milling cutter



型号 Model	库存 Stock	最大ap	ØDc	z	ØDs	L	Lf	K°	Kg	刀片 Insert
EXN03R016M16.0-02	●	1	16	2	16	160	40	15	0.2	LNMU03...
EXN03R020M20.0-03	●	1	20	3	20	160	50	17	0.3	LNMU03...
EXN03R021M20.0-03	●	1	21	3	20	160	50	17	0.4	LNMU03...
EXN03R021M20.0-03L	●	1	21	3	20	200	50	17	0.5	LNMU03...
EXN03R025M25.0-04	●	1	25	4	25	160	50	17	0.5	LNMU03...
EXN03R025M25.0-04L	●	1	25	4	25	200	50	17	0.6	LNMU03...
EXN03R026M25.0-04	●	1	26	4	25	160	50	17	0.5	LNMU03...
EXN03R026M25.0-04L	●	1	26	4	25	200	50	17	0.7	LNMU03...
EXN03R032M32.0-05	●	1	32	5	32	160	50	17	0.8	LNMU03...
EXN03R032M32.0-05L	●	1	32	5	32	200	50	17	1.1	LNMU03...
EXN03R033M32.0-05	●	1	33	5	32	160	50	17	0.9	LNMU03...
EXN03R033M32.0-05L	●	1	33	5	32	200	50	17	1.0	LNMU03...
EXN03R035M32.0-05	●	1	35	5	32	160	50	17	0.9	LNMU03...
EXN03R035M32.0-05L	●	1	35	5	32	200	50	17	1.2	LNMU03...

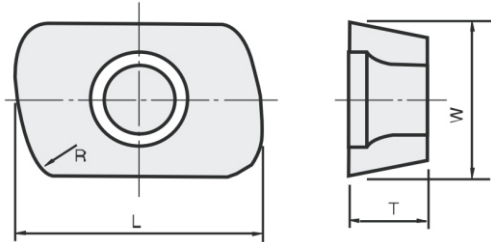
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
EXN03...	CSPB-2.5	M-1000	IP-8D

铣削刀片
Milling inserts
EPNW EPMT

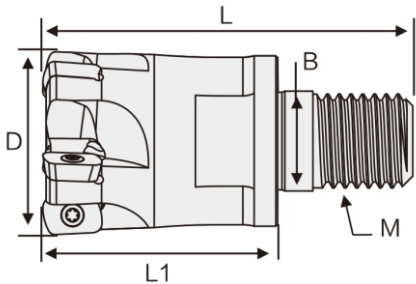
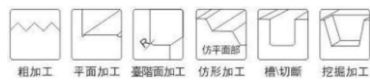


刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			R	L	T	W		KP1110	KP1230	KP2220	KT20	KW20
	EPNW0603TN-8	○	8	10	3.18	6.35			●			
	EPMT0603TN-8	○	8	10	3.18	6.35			●			
钢 Steel											★	
不锈钢 Stainless Steel											★	
铸铁 Cast Iron											★	
有色金属 Nonferrous Metal												
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

ASR 锁牙立铣刀头
ASR Locking Modular Endmill Head Cutter

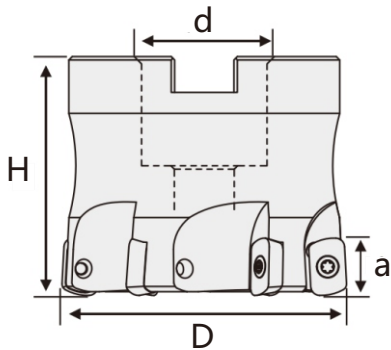
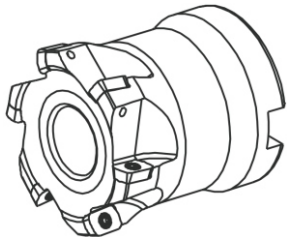


型号 Model	库存 Stock	尺寸 (mm) Dimensions								
		D	L	L1	B	M	齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
ASR2016-M8-2T	○	16	46	28	8.5	M8	2	EPNW0603TN-8 EPMT0603TN-8	M2.5	T8
ASR2017-M8-2T	○	17	46	28	8.5	M8	2			
ASR2020-M10-2T	○	20	49	30	10.5	M10	2			
ASR2021-M10-2T	○	21	49	30	10.5	M10	2			
ASR2025-M12-3T	○	25	57	35	12.5	M12	3			
ASR2026-M12-3T	○	26	57	35	12.5	M12	3			
ASR2032-M16-3T	○	32	63	40	17	M16	3			
ASR2035-M16-4T	○	35	63	40	17	M16	4			
ASR2040-M16-4T	○	40	63	40	17	M16	4			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

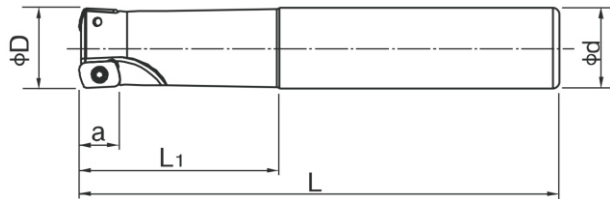
ASR高进给面铣刀
ASR High-Feed Face milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions					 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
		D	d	H	a	T			
ASR2050-22-6T	○	50	22	40	2	6.3	— EPNW0603TN-8 EPMT0603TN-8	A25060G M2.5*6	T8F T8
ASR2050-25.4-6T	○	50	25.4	40	2	6			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

ASR 高进给立铣刀
ASR High-Feed End milling cutter

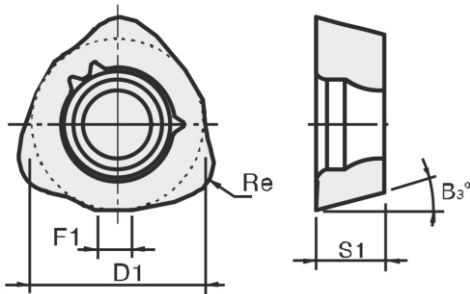
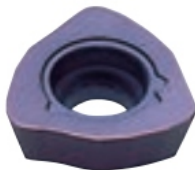


型号 Model	库存 Stock	刀片数量 NO. of flutes	尺寸 Size (mm)				刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	d	L	L1			
ASR2016x120-C16-2T	○	2	16	16	120	40	EPNW0603TN-8 EPMT0603TN-8	A25060G M2.5*6	T8F T8
ASR2017x120-C16-2T	○	2	17	16	120	27			
ASR2016x160-C16-2T	○	2	16	16	160	50			
ASR2017x160-C16-2T	○	2	17	16	160	27			
ASR2020x120-C20-2T	○	2	20	20	120	50			
ASR2020x160-C20-2T	○	2	20	20	160	50			
ASR2021x160-C20-2T	○	2	21	20	160	27			
ASR2025x160-C25-3T	○	3	25	25	160	60			
ASR2025x200-C25-3T	○	3	25	25	200	70			
ASR2026x200-C25-3T	○	3	26	25	200	50			
ASR2032x160-C32-4T	○	4	32	32	160	70			
ASR2033x160-C32-4T	○	4	33	32	160	60			
ASR2032x200-C32-4T	○	4	32	32	200	115			
ASR2033x200-C32-4T	○	4	33	32	200	70			
ASR2035x200-C32-4T	○	4	35	32	200	50			
ASR2040x160-C32-4T	○	4	40	32	160	50			
ASR2040x200-C32-4T	○	4	40	32	200	50			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
JDMW JOMW

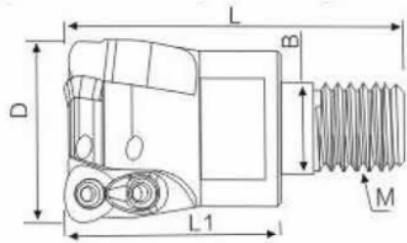


刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			B3°	D1	S1	F1	Re	KP1110	KP1230	KP2220	KT20	KW20
	JOMW06T215ZZSR-FT	○	13	6.35	2.78	1.2	1.5		●			
	JOMW080320ZZSR-FT	○	13	8	3.18	1.4	2		●			
	JDMW09T320ZDSR-FT	○	15	9.525	3.97	1.8	2		●			
	JDMW120420ZDSR-FT	○	15	12	4.76	5	2		●			
	JDMW140520ZDSR-FT	○	15	12	4.76	5	2		●			
钢 Steel									★			
不锈钢 Stainless Steel									★			
铸铁 Cast Iron									★			
有色金属 Nonferrous Metal												
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

★ 首选 Preferred ☆ 可选 optional

●标准库存standard stock ○订单生产order production

AJX 锁牙式立铣刀头
AJX Locking Modular Endmill Head Cutter

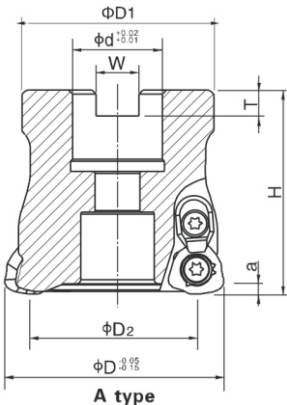
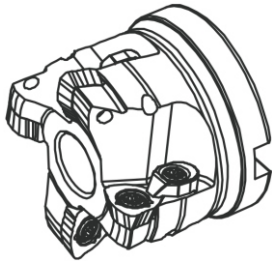


型号 Model	库存 Stock	尺寸 (mm) Dimensions					齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		D	L	L1	B	M				
AJX06-16-M8-2T	○	16	46	28	8.5	M8	2	JOMW06T215ZZSR-FT	M2.5	T8
AJX06-17-M8-2T	○	17	46	28	8.5	M8	2			
AJX08-20-M10-2T	○	20	49	30	10.5	M10	2	JOMW080320ZZSR-FT	M3	T8
AJX08-21-M10-2T	○	21	49	30	10.5	M10	2			
AJX08-25-M12-2T	○	25	57	35	12.5	M12	2	JOMW080320ZZSR-FT	M3.5	T15
AJX08-26-M12-2T	○	26	57	35	12.5	M12	2			
AJX12-32-M16-2T	○	32	63	40	17	M16	2	JDMW120420ZDSR-FT	M4	T15
AJX12-33-M16-2T	○	33	63	40	17	M16	2			
AJX12-35-M16-2T	○	35	63	40	17	M16	2			
AJX12-40-M16-3T	○	40	63	40	17	M16	3			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

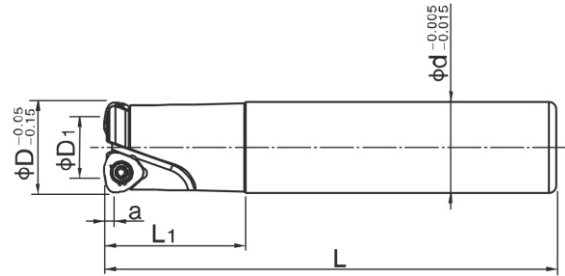
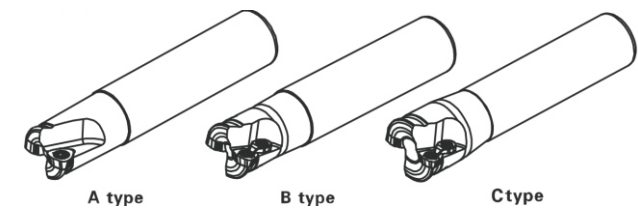
AJX高进给面铣刀
AJX High-Feed Face milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions								刀片 Insert	螺钉 Screw	扳手 Torx wrench
		D	D1	D2	d	H	W	T	a			
AJX12-50-22-3T	○	50	47	38.3	22	150	10.4	6.3	1.5	JDMW120420 ZDSR-FT	A40100J M4*10	T15F T15
AJX12-50-22-4T	○	50	47	38.3	22	50	10.4	6.3	1.5			
AJX12-63-22-4T	○	63	60	51.3	22	50	10.4	6.3	1.5	JDMW140520 ZDSR-FT	A50120J M5*12	T20F T20
AJX14-63-22-3T	○	63	60	51.1	22	50	10.4	6.3	2			
AJX14-63-22-4T	○	63	60	51.1	22	50	10.4	6.3	2			
AJX14-80-27-4T	○	80	76	68.1	27	50	12.4	7	2			
AJX14-80-27-5T	○	80	76	68.1	27	50	12.4	7	2	JDMW120420 ZDSR-FT	A40100J M4*10	T15F T15
AJX14-100-32-5T	○	100	96	88.1	32	63	14.4	8	2			
AJX12-50-25.4-3T	○	50	47	38.3	25.4	50	10	6	1.5			
AJX12-50-25.4-4T	○	50	47	38.3	25.4	50	10	6	1.5	JDMW140520 ZDSR-FT	A50120J M5*12	T20F T20
AJX12-63-25.4-4T	○	63	60	51.3	25.4	50	10	6	1.5			
AJX14-63-25.4-3T	○	63	60	51.1	25.4	50	10	6	2			
AJX14-63-25.4-4T	○	63	60	51.1	25.4	50	10	6	2			
AJX14-80-25.4-4T	○	80	76	68.1	25.4	50	10	6	2			
AJX14-80-25.4-5T	○	80	76	68.1	25.4	50	10	6	2			
AJX14-100-31.75-5T	○	100	96	88.1	31.75	63	13	8	2			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

AJX 高进给立铣刀
AJX High-Feed End milling cutter

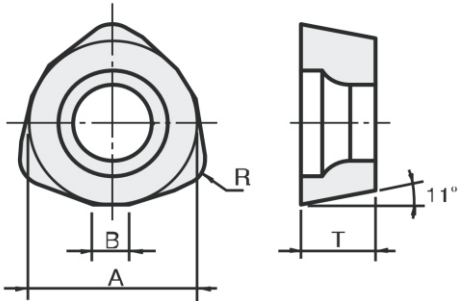
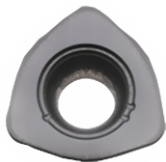


型号 Model	库存 Stock	类型 Manner	刀片数量 NO.of flutes	尺寸 Size (mm)						夹片 Clamp piece	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
				D	D1	a	L	L1	a				
AJX06-16x120	○	A	2	16	8.9	16	120	40	1	-	JOMW06T215ZZSR	A25065G M2.5*6	T8F T8
AJX06-16x160	○	A	2	16	9.9	16	160	40	1				
AJX06-17x160-C16	○	A	2	17	9.9	16	160	40	1				
AJX08-20x120	○	A	2	20	11.4	20	120	40	1.5	-	JOMW080320ZZSR	A30070G M3*7	T10F T10
AJX08-20x160	○	A	2	20	11.4	20	160	50	1.5				
AJX08-20x200	○	A	2	20	11.4	20	200	50	1.5				
AJX08-21x160-C20	○	A	2	21	12.4	20	160	50	1.5				
AJX08-21x200-C20	○	A	2	21	12.4	20	200	50	1.5				
AJX09-25x160	○	A	2	25	14.9	25	160	60	2	CSY-15	JDMW09T320ZSR	A35085J M3.5*8.5 A40100J M4*10	T15F T15
AJX09-25x200	○	A	2	25	14.9	25	200	120	2				
AJX09-26x160-C25	○	A	2	26	15.9	25	160	50	2				
AJX09-26x200-C25	○	A	2	26	15.9	25	200	50	2	AMS-4	JDMW120420ZDSR	A40100 JM4*10	T15F T15
AJX12Rx32x160	○	B	2	32	20.3	32	160	60	2				
AJX12Rx32x200	○	B	2	32	20.3	32	200	80	2				
AJX12Rx32x250	○	B	2	32	20.3	32	250	135	2				
AJX12Rx32x300	○	B	2	32	20.3	32	300	160	2				
AJX12Rx33x160-C32	○	B	2	33	21.3	32	160	50	2				
AJX12Rx33x200-C32	○	B	2	33	21.3	32	200	50	2				
AJX12Rx33x250-C32	○	B	2	33	21.3	32	250	60	2				
AJX12Rx33x300-C32	○	B	2	33	21.3	32	300	60	2				
AJX12Rx35x160-C32	○	C	2	35	23.3	32	160	50	2				
AJX12Rx35x200-C32	○	C	2	35	23.3	32	200	50	2				
AJX12Rx35x250-C32	○	C	2	35	23.3	32	252	60	2				
AJX12Rx35x300-C32	○	C	2	35	23.3	32	300	60	2				
AJX12Rx40x160-C32	○	C	3	40	28.3	32	160	50	2				
AJX12Rx40x200-C32	○	C	3	40	28.3	32	200	50	2				
AJX12Rx40x250-C32	○	C	3	40	28.3	32	250	60	2				
AJX12Rx40x300-C32	○	C	3	40	28.3	32	300	60	2				
AJX12Rx40x350-C32	○	C	3	40	28.3	32	350	60	2				
AJX12Rx40x350-C42	○	C	3	40	28.3	42	350	80	2				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
WDMW

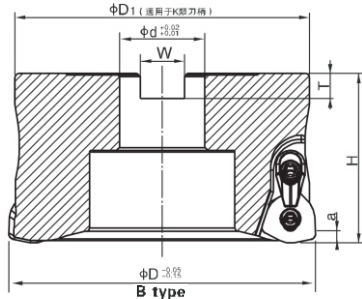
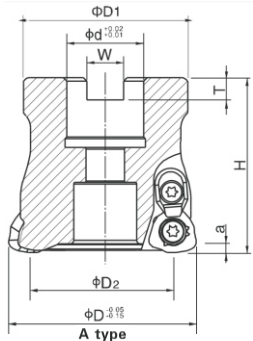
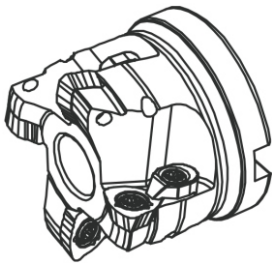


刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			A	B	T	R		KP1110	KP1230	KP2220	KT20	KW20
	WDMW050316ZTR	○	8	1.0	3.2	1.6			●			
	WDMW06T320ZTR	○	10	1.2	3.97	2			●			
	WDMW080520ZTR	○	13	1.5	5.5	2			●			
	WDMW10X620ZTR	○	16	2.0	6	2			●			
钢 Steel									★			
不锈钢 Stainless Steel									★			
铸铁 Cast Iron									★			
有色金属 Nonferrous Metal												
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

SKS高进给面铣刀
SKS High-Feed Face milling cutter

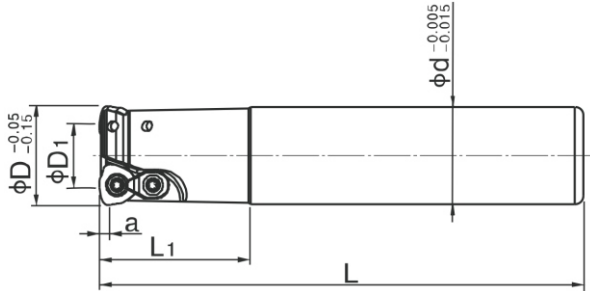
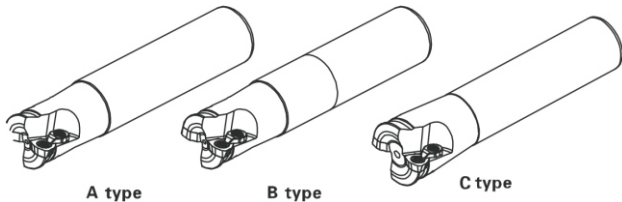


型号 Model	库存 Stock	类型 Manner	尺寸 (mm) Dimensions						夹片 Clamp piece	刀片 Insert	螺钉 Screw	扳手 Torx wrench
			D	D1	d	H	W	T				
SKS06-40-16-3T	○	A	40	37	16	45	8.4	5.6	AMS-4	WDMW06T320ZTR	A40090F M4*9	T15F T15
SKS08-50-22-3T	○	A	50	47	22	50	10.4	6.3				
SKS08-52-22-3T	○	A	52	47	22	50	10.4	6.3				
SKS08-52-22-4T	○	A	52	47	22	50	10.4	6.3				
SKS08-63-22-3T	○	A	63	60	22	50	10.4	6.3				
SKS08-63-22-4T	○	A	63	60	22	50	10.4	6.3				
SKS08-63-27-3T	○	A	63	60	27	50	12.4	7				
SKS08-63-27-4T	○	A	63	60	27	50	12.4	7				
SKS08-66-27-4T	○	A	66	60	27	50	12.4	7				
SKS08-80-27-5T	○	A	80	76	27	55	12.4	7				
SKS08-100-32-6T	○	B	100	96	32	55	14.4	8	CYS20	WDMW080520ZTR	A45105F M4.5*10.5 A50110D M5*11	T20F T20
SKS10-63-22-4T	○	A	63	60	22	50	10.4	6.3				
SKS10-63-27-4T	○	A	63	60	27	50	12.4	7				
SKS10-80-27-5T	○	A	80	76	32	55	12.4	7				
SKS10-100-32-5T	○	B	100	96	40	55	14.4	8				
SKS10-125-40-6T	○	B	125	96	40	55	16.4	9				
SKS10-160-40-7T	○	B	160	96	40	55	16.4	9				
SKS08-63-25.4-3T	○	A	63	60	25.4	50	10	6				
SKS08-63-25.4-4T	○	A	63	60	25.4	50	10	6				
SKS08-80-31.75-5T	○	A	80	76	31.75	63	13	8				
SKS08-100-31.75-5T	○	B	100	96	31.75	63	13	8	CYS20	WDMW080520ZTR	A45105F M4.5*10.5 A50110D M5*11	T20F T20
SKS10-63-25.4-4T	○	A	63	60	25.4	50	10	6				
SKS10-80-31.75-5T	○	A	80	76	31.75	63	13	8				
SKS10-100-31.75-5T	○	B	100	96	31.75	63	13	8				
SKS10-125-38.1-6T	○	B	125	96	38.1	63	16.2	10				
SKS10-160-50.8-7T	○	B	160	96	50.8	63	19.3	11				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

SKS 高进给立铣刀
SKS High-Feed End milling cutter

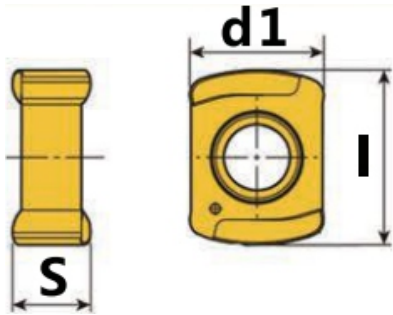


型号 Model	库存 Stock	类型 Manner	刀片数量 NO.of flutes	尺寸 Size (mm)						夹片 Clamp piece	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
				D	d	L	L1	L2	a				
SKS05-20x130	○	A	2	20	20	130	50	-	1.25	-	WDMW050316ZTR	A30070G M3*7	T10F T10
SKS05-20x180	○	A	2	20	20	180	100	-	1.25				
SKS05-21x130-C20	○	A	2	21	20	130	50	-	1.25				
SKS05-21x180-C20	○	A	2	21	20	180	50	-	1.5				
SKS06-25x140	○	A	2	25	25	140	60	-	1.5	AMS-4	WDMW06T320ZTR	A40090F M4*9	T15F T15
SKS06-25x200	○	A	2	25	25	200	120	-	1.5				
SKS06-26x140-C25	○	A	2	26	25	140	60	-	1.5				
SKS06-26x200-C25	○	B	2	26	25	200	60	-	1.5				
SKS06-30x150-C32	○	A	2	30	32	150	70	-	1.5				
SKS06-30x200-C32	○	B	2	30	32	200	120	100	1.5				
SKS06-32x150	○	A	3	32	32	150	70	-	1.5				
SKS06-32x200	○	B	3	32	32	200	120	100	1.5				
SKS06-33x150-C32	○	A	2	33	32	150	70	-	1.5				
SKS06-33x200-C32	○	B	2	33	32	200	70	-	1.5				
SKS06-33x150-C32	○	A	3	33	32	150	70	-	1.5				
SKS06-33x200-C32	○	B	3	33	32	200	70	-	1.5				
SKS08-32x150	○	A	2	32	32	150	70	-	2	CSY20	WDMW080520ZTR	A45105F M4.5*10.5 A50110D M5*11	T20F T20
SKS08-32x200	○	B	2	32	32	200	120	100	2				
SKS08-40x150-C32	○	C	3	40	32	150	50	-	2				
SKS08-40x200-C32	○	C	3	40	32	200	50	-	2				
SKS08-50x150-C32	○	C	3	50	32	150	50	-	2				
SKS08-50x150-C42	○	C	3	50	40	150	50	-	2				
SKS08-50x250-C42	○	C	3	50	40	200	50	-	2				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

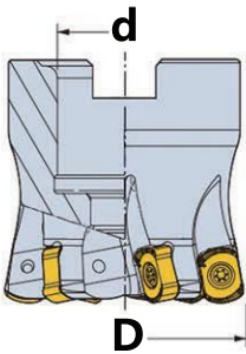
铣削刀片
Milling inserts
BLMP



刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades				
		l	d1	S	KP1110	KP1230
	BLMP0603R-M	9.0	6.39	3.73		●
	BLMP0904R-M	11.9	9.18	3.20		●
钢 Steel						★
不锈钢 Stainless Steel						★
铸铁 Cast Iron						★
有色金属 Nonferrous Metal						
耐热合金 Heat Resistant Alloy						
淬硬钢 Hardened Steel						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

KBL高进给面铣刀
KBL High-Feed Face milling cutter



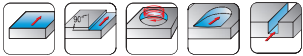
型号 Model	库存 Stock R L	外形尺寸 Size (mm)		刀片数量 Number of blades	刀片 Insert
		D	d		
KBLMP0603R40D16d6T	○	40	16	6	BLMP0603R-M KP1230
KBLMP0603R40D22d6T	○	40	22	6	
KBLMP0603R50D22d8T	○	50	22	8	
KBLMP0603R63D22d8T	○	63	22	8	
KBLMP0603R80D27d10T	○	80	27	10	
KBLMP0603R100D32d12T	○	100	32	12	
KBLMP0904R50D22d6T	○	50	22	6	BLMP0904R-M KP1230
KBLMP0904R63D22d7T	○	63	22	7	

* 刀片需单独订购。Blades to be ordered separately. ● 标准库存Standard inventory ○ 订单生产The order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast Iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

KBL高进给立铣刀
KBL High-Feed End milling cutter



型号 Model	库存 Stock		外形尺寸 Size (mm)			刃数 Teeth	刀片 Insert
	R	L	D	d	L		
KBLMP0603R16D15d120L2T	○		16	15	120	2	BLMP0603R-M KP1230
KBLMP0603R16D15d150L2T	○		15	15	150	2	
KBLMP0603R16D15d200L2T	○		15	15	200	2	
KBLMP0603R16D16d120L2T	○		16	16	120	2	
KBLMP0603R16D16d150L2T	○		16	16	150	2	
KBLMP0603R16D16d200L2T	○		16	16	200	2	
KBLMP0603R17D16d120L2T	○		17	16	120	2	
KBLMP0603R17D16d150L2T	○		17	16	150	2	
KBLMP0603R17D16d200L2T	○		17	16	200	2	
KBLMP0603R20D19d120L3T	○		20	19	120	3	
KBLMP0603R20D19d150L3T	○		20	19	150	3	
KBLMP0603R20D19d200L3T	○		20	19	200	3	
KBLMP0603R20D19d250L3T	○		20	19	250	3	
KBLMP0603R20D20d120L3T	○		20	20	120	3	
KBLMP0603R20D20d150L3T	○		20	20	150	3	
KBLMP0603R20D20d200L3T	○		20	20	200	3	
KBLMP0603R20D20d250L3T	○		20	20	250	3	
KBLMP0603R21D20d120L3T	○		21	20	120	3	
KBLMP0603R21D20d150L3T	○		21	20	150	3	
KBLMP0603R21D20d200L3T	○		21	20	200	3	
KBLMP0603R21D20d250L3T	○		21	20	250	3	
KBLMP0603R22D20d150L3T	○		22	20	150	3	
KBLMP0603R22D20d200L3T	○		22	20	200	3	
KBLMP0603R25D24d150L4T	○		25	24	150	4	
KBLMP0603R25D24d200L4T	○		25	24	200	4	
KBLMP0603R25D24d250L4T	○		25	24	250	4	
KBLMP0603R25D25d150L4T	○		25	25	150	4	
KBLMP0603R25D25d200L4T	○		25	25	200	4	
KBLMP0603R25D25d250L4T	○		25	25	250	4	

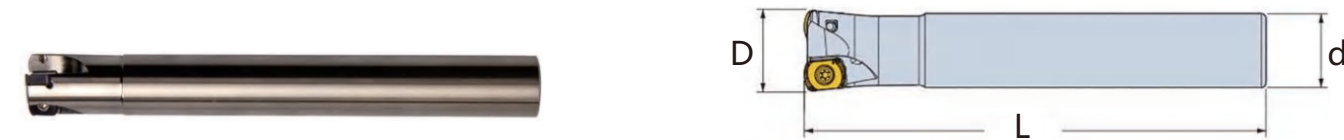
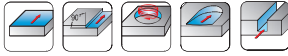
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
HM4...	CSPB-2.5	M-1000	IP-8D

KBL高进给立铣刀
KBL High-Feed End milling cutter



型号 Model	库存 Stock		外形尺寸 Size (mm)			刃数 Teeth	刀片 Insert
	R	L	D	d	L		
KBLMP0603R26D25d150L4T	○		26	25	150	4	BLMP0603R-M KP1230
KBLMP0603R26D25d200L4T	○		26	25	200	4	
KBLMP0603R26D25d250L4T	○		26	25	250	4	
KBLMP0603R28D25d170L4T	○		28	25	170	4	
KBLMP0603R32D32d150L5T	○		32	32	150	5	
KBLMP0603R32D32d200L5T	○		32	32	200	5	
KBLMP0603R32D32d250L5T	○		32	32	250	5	
KBLMP0603R33D32d150L5T	○		33	32	150	5	
KBLMP0603R33D32d200L5T	○		33	32	200	5	
KBLMP0603R33D32d250L5T	○		33	32	250	5	
KBLMP0603R35D32d150L5T	○		35	32	150	5	
KBLMP0603R35D32d200L5T	○		35	32	200	5	
KBLMP0603R35D32d250L5T	○		35	32	250	5	
KBLMP0603R40D32d150L6T	○		40	32	150	6	
KBLMP0603R40D32d200L6T	○		40	32	200	6	BLMP0904R-M KP1230
KBLMP0603R40D32d250L6T	○		40	32	250	6	
KBLMP0904R26D25d210L3T	○		26	25	210	3	
KBLMP0904R30D25d150L3T	○		30	25	150	3	
KBLMP0904R35D32d160L4T	○		35	32	160	4	BLMP0904R-M KP1230
KBLMP0904R35D32d210L4T	○		35	32	210	4	

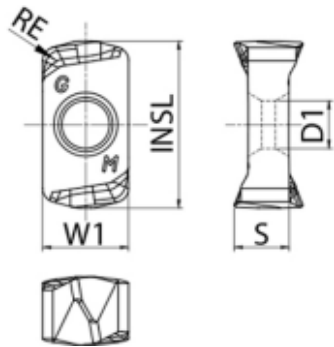
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
HM4...	CSPB-2.5	M-1000	IP-8D

铣削刀片
Milling inserts
LOGU



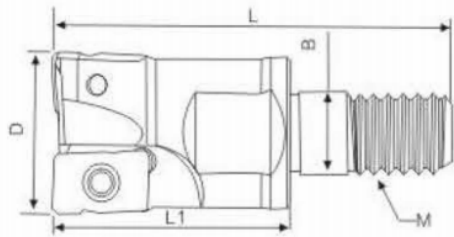
刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades									
		W1	S	D1	INSL	RE	KP1110	KP1230	KP2220	KT20	KW20
	LOGU030310ER-GM	0.244	0.156	0.136	0.469	0.039		●			
钢 Steel								★			
不锈钢 Stainless Steel								★			
铸铁 Cast Iron								★			
有色金属 Nonferrous Metal											
耐热合金 Heat Resistant Alloy											
淬硬钢 Hardened Steel											

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

MFH 双面刃锁牙式立铣刀头
MFH Double-sided Lockong Modular Endmill Head Cutter

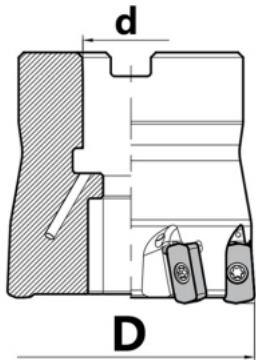


型号 Model	库存 Stock	尺寸 (mm) Dimensions						齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		D	L	L1	B	M					
MFH03-16-M8-2T	○	16	46	28	8.5	M8	2		LOGU030310ER-GM	M2.5*6	T8
MFH03-17-M8-2T	○	17	46	28	8.5	M8	2				
MFH03-20-M10-3T	○	20	49	30	10.5	M10	3				
MFH03-21-M10-3T	○	21	49	30	10.5	M10	3				
MFH03-25-M12-4T	○	25	57	35	12.5	M12	4				
MFH03-26-M12-4T	○	26	57	35	12.5	M12	4				
MFH03-32-M16-5T	○	32	63	40	17	M16	5				
MFH03-33-M16-5T	○	33	63	40	17	M16	5				
MFH03-35-M16-5T	○	35	63	40	17	M16	5				
MFH03-40-M16-5T	○	40	63	40	17	M16	5				

* 刀片需单独订购。Blades to be ordered separately. ● 标准库存Standard inventory ○ 订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

MFH高进给面铣刀
MFH High-Feed Face milling cutter

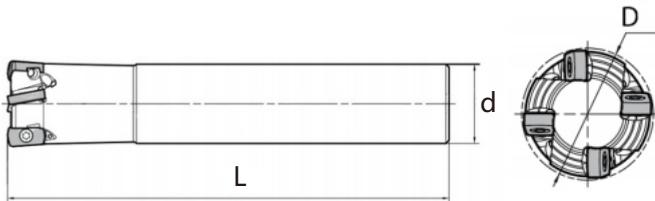


型号 Model	库存 Stock		外形尺寸 Size (mm)		刀片数量 Number of blades	刀片 Insert
	R	L	D	d		
MFH03R40-16-6T	○		40	16	6	LOGU030310ER-GM
MFH03R40-22-6T	○		40	22	6	
MFH03R50-22-8T	○		50	22	8	
MFH03R63-22-8T	○		63	22	8	
MFH03R80-27-10T	○		80	27	10	
MFH03R100-32-12T	○		100	32	12	

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

MFH高进给立铣刀
MFH High-Feed End milling cutter



型号 Model	库存 Stock		外形尺寸 Size (mm)			刃数 Teeth	刀片 Insert
	R	L	D	d	L		
MFH03R16-15-120-2T	○		16	15	120	2	LOGU030310ER-GM KP1230
MFH03R16-15-150-2T	○		16	15	150	2	
MFH03R16-15-200-2T	○		16	15	200	2	
MFH03R16-16-120-2T	○		16	16	120	2	
MFH03R16-16-150-2T	○		16	16	150	2	
MFH03R16-16-200-2T	○		16	16	200	2	
MFH03R17-16-120-2T	○		17	16	120	2	
MFH03R17-16-150-2T	○		17	16	150	2	
MFH03R17-16-200-2T	○		17	16	200	2	
MFH03R20-19-120-3T	○		20	19	120	3	
MFH03R20-19-150-3T	○		20	19	150	3	
MFH03R20-19-200-3T	○		20	19	200	3	
MFH03R20-19-250-3T	○		20	20	250	3	
MFH03R20-20-120-3T	○		20	20	120	3	
MFH03R20-20-150-3T	○		20	20	150	3	
MFH03R20-20-200-3T	○		20	20	200	3	
MFH03R20-20-250-3T	○		20	20	250	3	
MFH03R21-20-120-3T	○		21	20	120	3	
MFH03R21-20-150-3T	○		21	20	150	3	
MFH03R21-20-200-3T	○		21	20	200	3	
MFH03R21-20-250-3T	○		21	20	250	3	
MFH03R22-20-150-3T	○		22	20	150	3	
MFH03R22-20-200-3T	○		22	20	200	3	

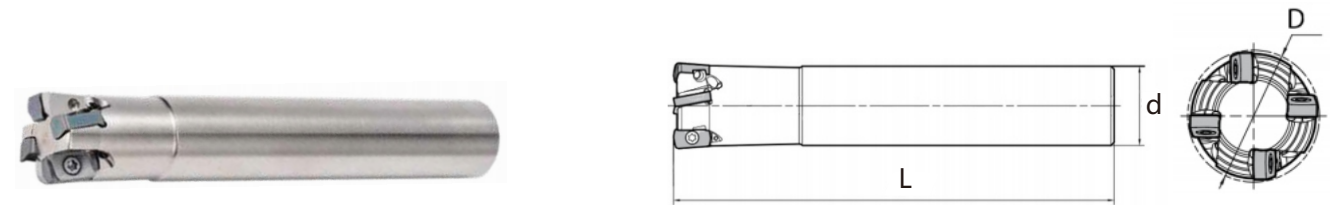
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
HM4...	CSPB-2.5	M-1000	IP-8D

MFH高进给立铣刀
MFH High-Feed End milling cutter



型号 Model	库存 Stock		外形尺寸 Size (mm)			刀数 Teeth	刀片 Insert
	R	L	D	d	L		
MFH03R25-24-150-4T	○		25	24	150	4	LOGU030310ER-GM KP1230
MFH03R25-24-200-4T	○		25	24	200	4	
MFH03R25-24-250-4T	○		25	24	250	4	
MFH03R25-25-150-4T	○		25	25	150	4	
MFH03R25-25-200-4T	○		25	25	200	4	
MFH03R25-25-250-4T	○		25	25	250	4	
MFH03R26-25-150-4T	○		26	25	150	4	
MFH03R26-25-200-4T	○		26	25	200	4	
MFH03R26-25-250-4T	○		26	25	250	4	
MFH03R28-25-170-4T	○		28	25	170	4	
MFH03R32-32-150-5T	○		32	32	150	5	
MFH03R32-32-200-5T	○		32	32	200	5	
MFH03R32-32-250-5T	○		32	32	250	5	
MFH03R33-32-150-5T	○		33	32	150	5	
MFH03R33-32-200-5T	○		33	32	200	5	
MFH03R33-32-250-5T	○		33	32	250	5	
MFH03R35-32-150-5T	○		35	32	150	5	
MFH03R35-32-200-5T	○		35	32	200	5	
MFH03R35-32-250-5T	○		35	32	250	5	
MFH03R40-32-150-6T	○		40	32	150	6	
MFH03R40-32-200-6T	○		40	32	200	6	
MFH03R40-32-250-6T	○		40	32	250	6	

* 刀片需单独订购。Blades to be ordered separately.

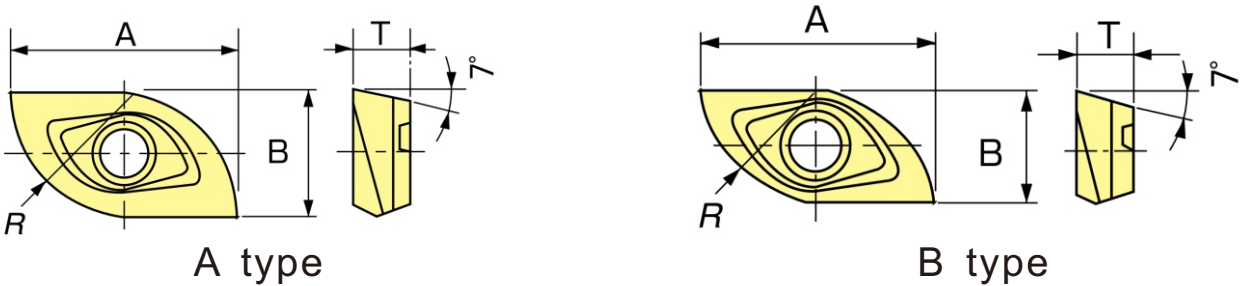
●标准库存Standard inventory ○订单生产The order production

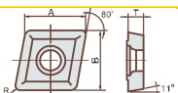
备件The spare parts

型号 model	锁紧螺钉 Lock screw	润滑剂 lubricant	扳手 wrench
HM4...	CSPB-2.5	M-1000	IP-8D

铣削刀片
Milling inserts

ZCET ZCEW

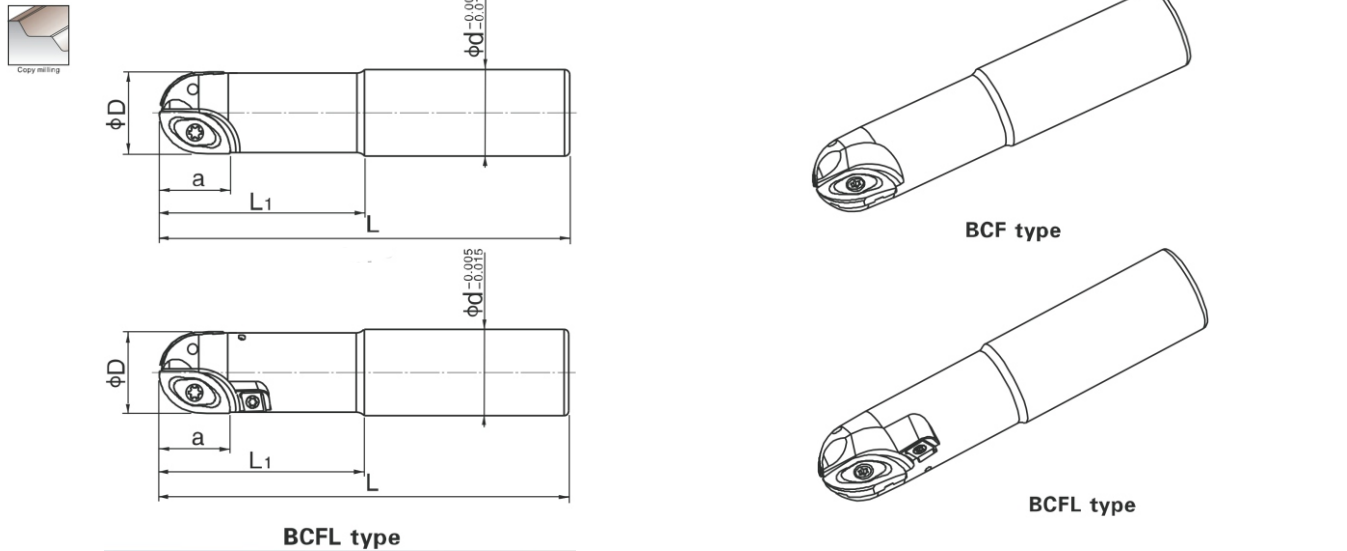


刀片外形 Insert shape	型号 Model	类型 Manner	库存 Stock	尺寸与材质 Size and Grades									
				R	A	B	T		KP1110	KP1230	KP2220	KT20	KW20
	ZCET100CE	A	○	10	18.3	10.0	4.74			●			
	ZCET125CE	A	○	12.5	23.1	12.3	6.1			●			
	ZCET150CE	A	○	15	28.3	14.9	7.59			●			
	ZCET160CE	A	○	16	28.8	15.4	7.45			●			
	ZCEW100CE	A	○	10	18.3	10.0	4.74			●			
	ZCEW125CE	A	○	12.5	23.1	12.3	6.1			●			
	ZCEW150CE	A	○	15	28.3	14.9	7.59			●			
	ZCEW200CE	A	○	16	35.4	20.1	8.0			●			
	ZCET100SE	B	○	10	16.7	8.1	4.24			●			
	ZCET125SE	B	○	12.5	20.8	9.3	5.40			●			
	ZCET150SE	B	○	15	25.7	11.8	7.09			●			
	ZCET160SE	B	○	16	26.3	12.4	6.96			●			
	ZCEW100SE	B	○	10	16.7	8.1	4.24			●			
	ZCEW125SE	B	○	12.5	20.8	9.3	5.40			●			
	ZCEW150SE	B	○	15	25.7	11.8	7.09			●			
	ZCEW200SE	B	○	20	31.9	15.7	7.0			●			
 	CPMT080204		○	0.4	7.94	7.94	2.38			●			
	CPMT090308		○	0.8	9.525	9.525	3.18			●			
钢 Steel										★			
不锈钢 Stainless Steel										★			
铸铁 Cast Iron										★			
有色金属 Nonferrous Metal													
耐热合金 Heat Resistant Alloy													
淬硬钢 Hardened Steel													

★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

BCF BCFL 仿形立铣刀
BCF BCFL Profile End milling cutter



型号 Model	库存 Stock	尺寸 Size (mm)					Master Insert	Slave Insert			
		D	d	L	L1	a			刀片 Peripheral Insert	螺钉 Screw	扳手 Torx wrench
10Rx150-C20	○	20	20	150	70	30	ZCEWT100CE	ZCEWT100SE	CPMT080204	A30095J M3*9.5 A25060G M2.5*6	T10F/T10 T8F/T8
10Rx150-C25	○	20	25	150	70	30					
10Rx180-C20	○	20	20	180	80	30					
10Rx180-C25	○	20	25	180	80	30					
10Rx220-C20	○	20	20	220	80	30					
10Rx220-C25	○	20	25	220	100	30					
10Rx250-C20	○	20	20	250	150	30					
10Rx250-C25	○	20	25	250	150	30					
10Rx250-C32	○	20	32	250	150	30					
10Rx300-C25	○	20	25	300	150	30					
10Rx300-C32	○	20	32	300	150	30	ZCEWT125CE	ZCEWT125SE	CPMT090308	A40090F M4*9 A40110G M4*11	T15F T15
12.5Rx150-C25	○	25	25	150	70	39					
12.5Rx150-C32	○	25	32	150	70	39					
12.5Rx180-C25	○	25	25	180	80	39					
12.5Rx180-C32	○	25	32	180	80	39					
12.5Rx220-C25	○	25	25	220	80	39					
12.5Rx220-C32	○	25	32	220	100	39					
12.5Rx250-C25	○	25	25	250	150	39					
12.5Rx250-C32	○	25	32	250	150	39					
12.5Rx300-C32	○	25	32	300	150	39					
15Rx160-C32	○	30	32	160	80	43					
15Rx200-C32	○	30	32	200	100	43					
15Rx250-C32	○	30	32	250	100	43					
15Rx300-C32	○	30	32	300	150	43					
15Rx350-C32	○	30	32	350	200	43	ZCET160CE	ZCET160SE	CPMT090308	A40090F M4*9	T15F T15
16Rx160-C32	○	32	32	160	80	43					
16Rx200-C32	○	32	32	200	100	43					
16Rx250-C32	○	32	32	250	150	43					
16Rx300-C32	○	32	32	300	150	43					
16Rx350-C32	○	32	32	350	200	43	ZCEW200CE	ZCEW200SE	CPMT090308	A60180J M6*18 A40090F M4*9	T30D T30 T15F T15
20Rx200-C42	○	40	42	200	100	50					
20Rx250-C42	○	40	42	250	150	50					
20Rx300-C42	○	40	42	300	150	50					
20Rx350-C42	○	40	42	350	200	50	ZCEW250CE	ZCEW250SE	CPMT120408	A60180J M6*18 A50120F M5*12	T30D T30 T20F T20
25Rx200-C42	○	50	42	200	100	50					
25Rx250-C42	○	50	42	250	150	50					
25Rx300-C42	○	50	42	300	150	50					
25Rx350-C42	○	50	42	350	200	50					

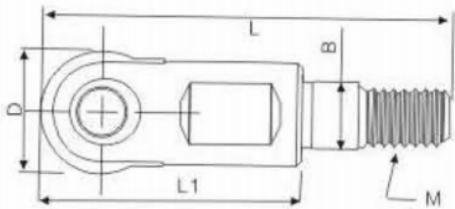
* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
P3202

刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades									
			DC	D1	L1	S		KP1110	KP1230	KP2220	KT20	KW20
	P3202-D08	○	8	3	4	2.0			●			
	P3202-D10	○	10	4	5	2.5			●			
	P3202-D12	○	12	5	6	2.5			●			
	P3202-D16	○	16	5	6	3.0			●			
	P3202-D20	○	20	5	6	3.0			●			
	P3202-D25	○	25	6	9	4.0			●			
	P3202-D30	○	30	8	10	5.0			●			
	P3202-D32	○	32	8	10	5.0			●			
钢 Steel									★			
不锈钢 Stainless Steel									★			
铸铁 Cast Iron									★			
有色金属 Nonferrous Metal												
耐热合金 Heat Resistant Alloy												
淬硬钢 Hardened Steel												

★ 首选Preferred ☆ 可选optional ●标准库存standard stock ○订单生产order production

T2139 锁牙式立铣刀头
T2139 Locking Modular Endmill Head Cutter

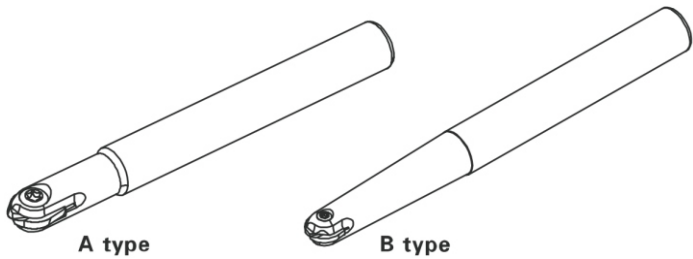
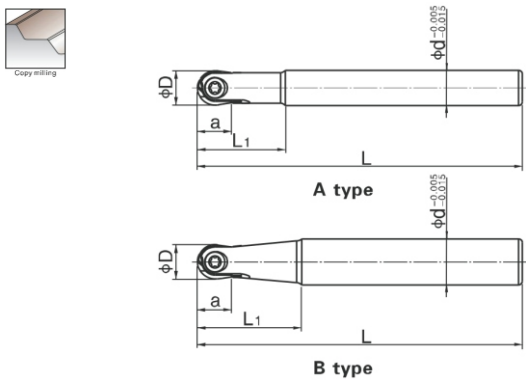


型号 Model	库存 Stock	尺寸 (mm) Dimensions					 齿数 No.of teeth	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
		D	L	L1	B	M				
T2139-R5-M5-1T	○	10	34.5	20	5.5	M5	1	P3202-D10	D10	T15
T2139-R6-M6-1T	○	12	35.5	20	6.5	M6	1	P3202-D12	D12	T20
T2139-R8-M8-1T	○	16	46	28	8.5	M8	1	P3202-D16	D16	T20
T2139-R10-M10-1T	○	20	46	30	10.5	M10	1	P3202-D20	D20	T20
T2139-R12.5-M12-1T	○	25	57	35	12.5	M12	1	P3202-D25	D25	T20
T2139-R15-M16-1T	○	30	63	40	12.5	M16	1	P3202-D30	D30	T30

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

* 配套刀杆、刀柄在P H98-P H100。Matching tool holder and handle in P H98-P H100.

T2139 仿形立铣刀
T2139 Profile End Milling cutter

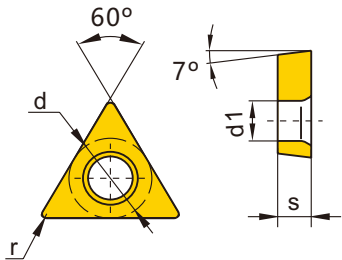


型号 Model	库存 Stock	类型 Manner	尺寸 Size (mm)					 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
D	d	L	L1	a						
T2139-4Rx110-C8	○	B	8	8	110	25	5	P3202-D08	A30070J-4R	T8F T8
T2139-4Rx110-C10	○	B	8	10	110	25	5			
T2139-4Rx140-C12	○	B	8	12	140	55	5			
T2139-5Rx130-C10	○	A	10	10	130	30	7	P3202-D10	A40090J-5R	T15F T15
T2139-5Rx130-C12	○	A	10	12	130	30	7			
T2139-5Rx160-C10	○	A	10	10	160	30	7			
T2139-5Rx160-C12	○	B	10	12	160	30	7	P3202-D12	A50090J-6R	T20F T20
T2139-6Rx130-C12	○	A	12	12	130	32	8			
T2139-6Rx160-C12	○	A	12	12	160	32	8			
T2139-6Rx160-C16	○	B	12	16	160	58.5	8	P3202-D16	A50130J-8R	
T2139-8Rx160-C16	○	A	16	16	160	65	10			
T2139-8Rx200-C16	○	A	16	16	200	65	10			
T2139-8Rx200-C20	○	B	16	20	200	65	10	P3202-D20	A50165J-10R	
T2139-10Rx160-C20	○	A	20	20	160	45	12.5			
T2139-10Rx200-C20	○	A	20	20	200	76	12.5			
T2139-10Rx250-C25	○	B	20	25	250	120	12.5	P3202-D25	A60120J-12.5R	T30D T30
T2139-12.5Rx160-C25	○	A	25	25	160	45	15			
T2139-12.5Rx200-C25T	○	A	25	25	200	76	15			
2139-12.5Rx200-C32T	○	B	25	32	200	98	15	P3202-D30	A80250J-15R/16R	
T2139-12.5Rx250-C32T	○	B	25	32	250	120	15			
T2139-15Rx200-C32T	○	B	30	32	200	80	18			
T2139-15Rx250-C40T	○	B	30	40	250	121	18	P3202-D32	A80250J-15R/16R	
T2139-16Rx200-C32T	○	A	32	32	200	80	19			
T2139-16Rx250-C40	○	B	32	40	250	121	19			

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

车削刀片(正型)
Turning Inserts (Positive)

TCMT

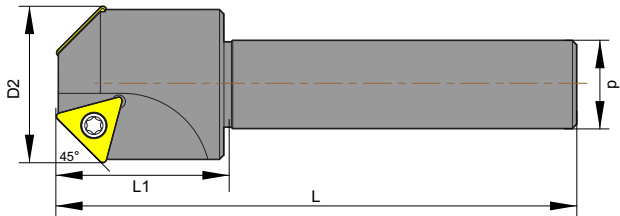


型号 Model	尺寸 Size (mm)		
	d	s	d1
TC..0902..	5.56	2.38	2.5
TC..1102..	6.35	2.38	2.8
TC..16T3..	9.525	3.97	4.4

刀片外形 Insert shape	型号 Model	r	进给fn mm/rev	刀片材质及适用加工材料 Insert grades and application							
				KC3110	KC3125	KC1115	KC1125	KP2130	KP1110	KP2120	
	TCMT090202	0.4	0.04-0.14					●			
	TCMT090204	0.8	0.05-0.16					●			
	TCMT110202	0.2	0.02-0.07					●			
	TCMT110204	0.4	0.05-0.16					●			
	TCMT110208	0.8	0.10-0.32					●			
	TCMT16T304	0.4	0.05-0.16					●			
	TCMT16T308	0.8	0.10-0.32					●			
钢 Steel								★			
不锈钢 Stainless Steel								★			
铸铁 Cast Iron											
有色金属 Nonferrous Metal											
耐热合金 Heat Resistant Alloy											
淬硬钢 Hardened Steel								☆			

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

TCM倒角立铣刀
TCM Chamfer End milling cutter



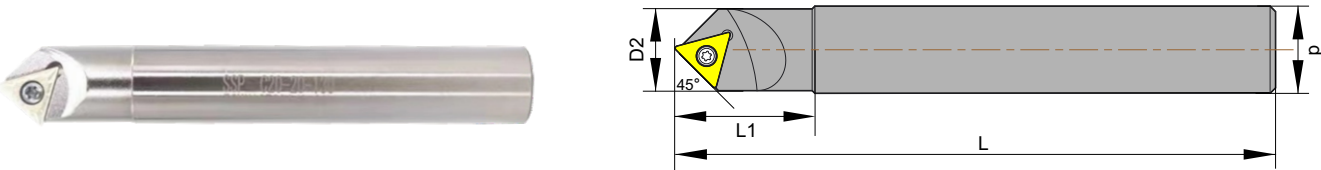
型号 Model	库存 Stock	柄径 d	头部直径 D	总长 L	单边度数 (°)	倒角范围 C	颈径 d1	顶径 d2	刃数 T	重量 (KG)
TCM-C12-20-110L-1T-45°	○	12	22	110	45	3-22	20	3.5	1	0.16
TCM-C16-20-110L-1T-45°	○	16	22	110	45	3-22	20	3.5	1	0.21
TCM-C16-25-110L-1T-45°	○	16	24	110	45	4-24	23.4	5.09	1	0.27
TCM-C20-25-110L-1T-45°	○	20	25	110	45	5-25	23.4	5.09	1	0.33
TCM-C20-30-110L-1T-45°	○	20	30	110	45	9-30	28.4	8.15	1	0.27
TCM-C20-30-110L-2T-45°	○	20	31	110	45	10-31	28.4	8.15	2	0.27
TCM-C20-35-120L-2T-45°	○	20	35	120	45	14-35	34.2	12.15	2	0.40
TCM-C20-40-110L-2T-45°	○	20	39	110	45	19-39	38.2	18.39	2	0.27
TCM-C25-28-110L-1T-45°	○	25	28	110	45	8-28	27.2	7.85	2	0.44
TCM-C25-50-120L-2T-45°	○	25	49	120	45	29-49	48.2	28.15	2	0.46
TCM-C25-40-120L-2T-45°	○	25	39	120	45	17-39	38.2	18.15	2	0.46

* 刀片需单独订购。Blades to be ordered separately. ● 标准库存Standard inventory ○ 订单生产The order production

备件The spare parts

刀片 Insert	锁紧螺钉 Lock screw	扳手 wrench
TCMT...	M4.0*9.0L	MT-15

SSP倒角立铣刀
SSP Chamfer End milling cutter



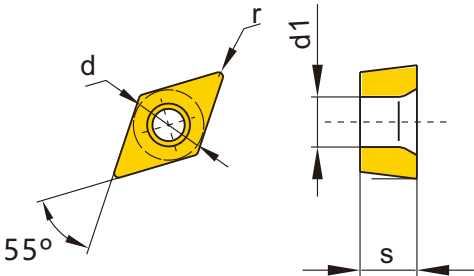
型号 Model	库存 Stock	柄径 d	头部直径 D	总长 L	单边度数 (°)	倒角范围 C	刃数 T	重量 (KG)	刀片 Insert	螺钉 Screw	扳手 Torx wrench
SSP-C12-12-110L-1T-45°	○	12	12	110	45	2-12	1	0.09	TCMT090204	M2.2*5.0L	T6
SSP-C12-20-100L-1T-45°	○	12	20	100	45	4-22	1	0.12	TCMT16T304	M4.0*9.0L	T15
SSP-C16-15-110L-1T-45°	○	16	16	110	45	3-16	1	0.16	TCMT110204	M2.5*6.0L	T8
SSP-C16-16-110L-1T-45°	○	16	16	110	45	3-16	1	0.17			
SSP-C20-20-130L-1T-45°	○	20	22	130	45	4-22	1	0.32	TCMT16T304	M4.0*9.0L	T15
SSP-C20-25-130L-1T-45°	○	20	27	130	45	6-27	1	0.40			
SSP-C20-30-130L-1T-45°	○	20	29	130	45	9-29	1	0.48			
SSP-C20-20-200L-1T-45°	○	20	22	200	45	4-22	1	0.49			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

车削刀片(正型)
Turning Inserts (Positive)

DCEX



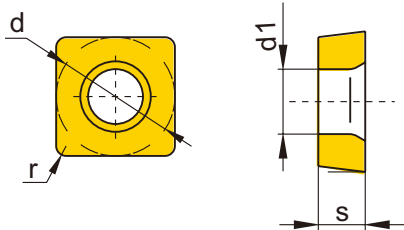
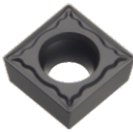
刀片外形 Insert shape		型号 Model	刀片材质及适用加工材料 Insert grades and application																
			r	进给fn mm/rev	KC3110	KC3125	KC1115	KC1125	KC1135	KP1110	KP2120	KP2130	KP6105	KP6110	KT20	KCT20	KW20	KCW20	
半精加工 Semi-Finishing		DCEX070204	0.4	0.06-0.15								●							
		DCEX11T304	0.4	0.08-0.21									●						
钢 Steel													★						
不锈钢 Stainless Steel													★						
铸铁 Cast iron																			
有色金属 Nonferrous Metal																			
耐热合金 Heat Resistant Alloy													☆						
淬硬钢 Hardened Steel																			

★首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

车削刀片(正型)
Turning Inserts (Positive)

SEM X

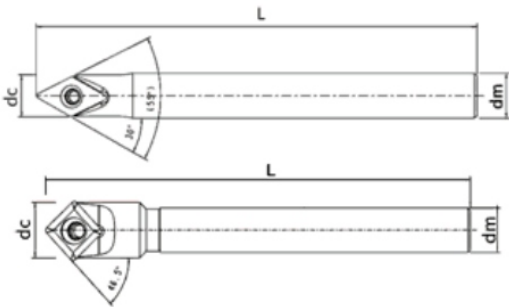
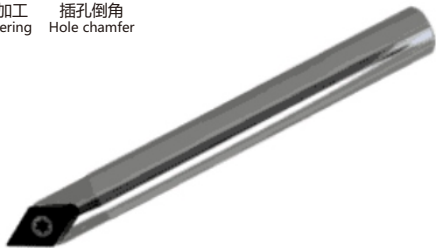


刀片外形 Insert shape		型号 Model	r	进给fn mm/rev	刀片材质及适用加工材料 Insert grades and application													
					KC3110	KC3125	KC1115	KC1125	KC1135	KP1110	KP2120	KP2130	KP6105	KP6110	KT20	KCT20	KW20	KCW20
半精加工 Semi-Finishing		SEM X050204	0.4									●						
		SEM X060204	0.8									●						
		SEM X090408	0.8									●						
		SEM X110408	0.8								●							
钢 Steel												★						
不锈钢 Stainless Steel												★						
铸铁 Cast Iron																		
有色金属 Nonferrous Metal																		
耐热合金 Heat Resistant Alloy																		
淬硬钢 Hardened Steel												☆						

★首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

定点倒角立铣刀
Indexable Spot Drill Chamfer End milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions			 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench
		dc	dm	L			
SSP-0808-80L-60°	○	8	8	80	DCEX070204	M2.5	T8
SSP-1010-110L-60°	○	12	10	110	DCEX11T304	M4.0	T15
SSP-1212-110L-60°	○	12	12	110			
SSP-1012-150L-60°	○	12	12	150			
YYD-D6-90°	○	6	6	70	SEMXX050204	M2.5	T8
YYD-D8-90°	○	8	8	80	SEMXX060204		
YYD-D10-100L-90°	○	12	10	100	SEMXX090408	M3.5	T15
YYD-D12-100L-90°	○	13	12	100			
YYD-D12-150L-90°	○	13	12	160			
YYD-D16-C16-100L-90°	○	16	16	100	SEMXX110408	M4.0	
YYD-D16-C20-100L-90°	○	16	20	100			

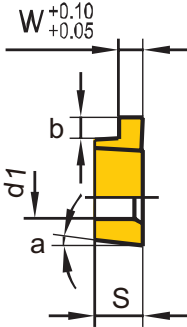
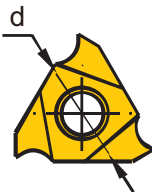
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

槽铣刀片
Grooving Milling Inserts
TN1635



适用于右刀
Suitable Right tool



刀片外形 Insert shape	型号 Model	库存 Stock	尺寸与材质 Size and Grades										
			w	b	d	d1	s	α	KP1210	KP1230	KP2220	KT20	KW20
	TN1635 R110	○	1.1	0.9	9.53	3.8	3.5	0°		●			
	TN1635 R130	○	1.3	1.3	9.53	3.8	3.5	0°		●			
	TN1635 R160	○	1.6	1.4	9.53	3.8	3.5	0°		●			
	TN1635 R185	○	1.85	1.7	9.53	3.8	3.5	0°		●			
	TN1635 R215	○	2.15	2	9.53	3.8	3.5	0°		●			
	TN1635 R265	○	2.65	2.2	9.53	3.8	3.5	0°		●			
钢 Steel									★	★	★		
不锈钢 Stainless Steel										★	☆		
铸铁 Cast Iron										★		★	
有色金属 Nonferrous Metal												★	
淬硬钢 Hardened Steel									★				

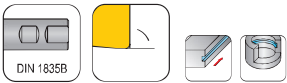
★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

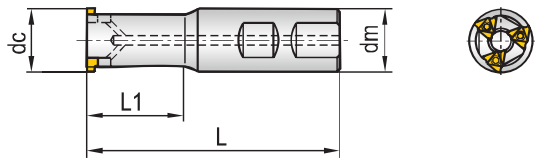
推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

CMT 可转位槽铣刀
CMT Indexable slot End milling cutter



- 适用于内、外槽的铣削加工。
- Suitable for milling inside and outside groove.

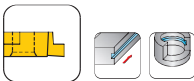


型号 Model	库存 Stock	尺寸 (mm) Dimensions				齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench	重量 Weight
		dc	dm	L1	L					
CMT-20TN16	○	20	20	30	90	1	TN1635 R	L60-M3.5x8.8A	T15	0.2
CMT-25TN16	○	25	25	40	105	1				0.3
CMT-32TN16	○	32	32	55	125	3				0.5
CMT-40TN16	○	40	32	70	135	3				0.8

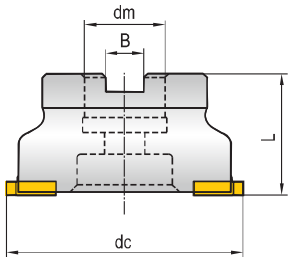
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

FMT 可转位立铣刀
FMT Indexable slot Face milling cutter



- 适用于内、外槽的铣削加工。
- Suitable for milling inside and outside groove.



型号 Model	库存 Stock	尺寸 (mm) Dimensions				齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench	重量 Weight
		dc	dm	B	L					
FMT-51TN16	○	51	22	10.4	40	4	TN1635 R..	L60-M3.5x8.8A	WT15	0.4
FMT-63TN16	○	63	22	10.4	40	6				0.6
FMT-80TN16	○	80	27	12.4	50	6				0.9

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

特殊形状的刀片

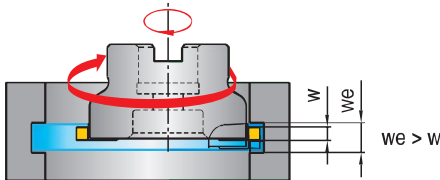
Special shaped blade

- 根据不同的槽，定制特殊的刀片。
- Customized special blades for different slots.

- 刀片宽度W可根据用户产品要求特殊订货，总厚度应小于刀片厚度S
- Blade width W can be specially ordered according to user's product requirements, the total thickness should be less than blade thickness S



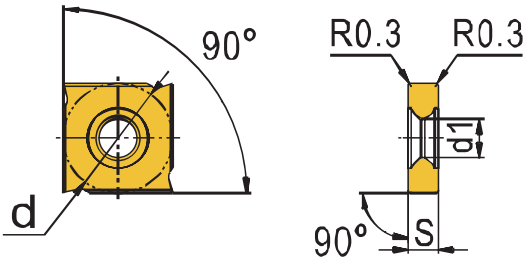
不允许轴向进给
Axial feed is not allowed



- 当槽的宽度 (we) 大于刀片宽度 (w)
时请两刀或多次加工。

- When the slot width (WE) is greater than the blade width (W)
When please two knife or many processing.

铣削刀片
Milling inserts
SNCQ



刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades							
		d	s	d1	KP1110	KP1230	KP2220	KT20	KW20
	SNCQ123503N	12.7	3.5	4.5		●			
	SNCQ120403N	12.7	4	4.5		●			
	SNCQ124503N	12.7	4.5	4.5		●			
	SNCQ120503N	12.7	5	4.5		●			
						●			
钢 Steel					★	★		★	
不锈钢 Stainless Steel						★	★	★	
铸铁 Cast Iron						★		☆	
有色金属 Nonferrous Metal									★
耐热合金 Heat Resistant Alloy							☆	☆	
淬硬钢 Hardened Steel					★				

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

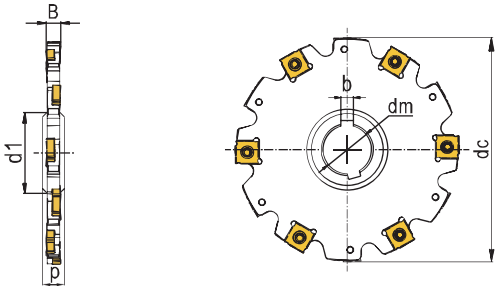
推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

S3M 三面刃盘铣刀
S3M Side and Face Disc milling cutter



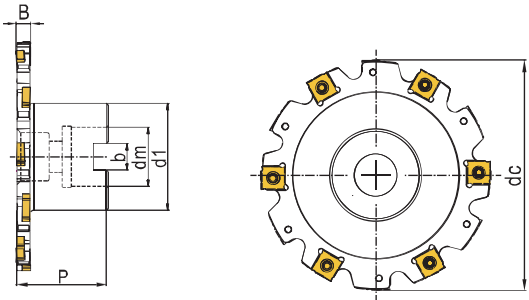
- 适用于内、外槽的铣削加工。
- Suitable for milling inside and outside groove.



型号 Model	库存 Stock	尺寸 (mm) Dimensions						齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	d1	dm	P	B	b				
S3M-80P12B6SN1235.XS22	○	80	38	22	12	6	6	4x2	SNCQ123503N	ST4073-91F	WT15
S3M-100P12B6SN1235.XS27	○	100	45	27	12	6	7	5x2		ST4073-91F	WT15
S3M-125P12B6SN1235.XS40	○	125	55	40	12	6	10	6x2		ST4073-91F	WT15
S3M-160P12B6SN1235.XS40	○	160	55	40	12	6	10	8x2		ST4073-91F	WT15
S3M-200P12B6SN1235.XS50	○	200	69	50	12	6	12	9x2		ST4073-91F	WT15
S3M-250P12B6SN1235.XS50	○	250	69	50	12	6	12	12x2	SNCQ120403N	ST4073-91F	WT15
S3M-80P12B7SN1204.XS22	○	80	38	22	12	7	6	4x2		ST409-91F	WT15
S3M-100P12B7SN1204.XS27	○	100	45	27	12	7	7	5x2		ST409-91F	WT15
S3M-125P12B7SN1204.XS40	○	125	55	40	12	7	10	6x2		ST409-91F	WT15
S3M-160P12B7SN1204.XS40	○	160	55	40	12	7	10	8x2		ST409-91F	WT15
S3M-200P12B7SN1204.XS50	○	200	69	50	12	7	12	9x2	SNCQ124503N	ST409-91F	WT15
S3M-250P12B7SN1204.XS50	○	250	69	50	12	7	12	12x2		ST409-91F	WT15
S3M-80P12B8SN1245.XS22	○	80	38	22	12	8	6	4x2		ST409-91F	WT15
S3M-100P12B8SN1245.XS27	○	100	45	27	12	8	7	5x2		ST409-91F	WT15
S3M-125P12B8SN1245.XS40	○	125	55	40	12	8	10	6x2		ST409-91F	WT15
S3M-160P12B8SN1245.XS40	○	160	55	40	12	8	10	8x2	SNCQ120503N	ST409-91F	WT15
S3M-200P12B8SN1245.XS50	○	200	69	50	12	8	12	9x2		ST409-91F	WT15
S3M-250P12B8SN1245.XS50	○	250	69	50	12	8	12	12x2		ST409-91F	WT15
S3M-100P12B9SN1205.XS27	○	100	45	27	12	9	7	5x2		ST409-91F	WT15
S3M-125P12B9SN1205.XS40	○	125	55	40	12	9	10	6x2		ST409-91F	WT15
S3M-160P12B9SN1205.XS40	○	160	55	40	12	9	10	8x2	SNCQ120503N	ST409-91F	WT15
S3M-200P12B9SN1205.XS50	○	200	69	50	12	9	12	9x2		ST409-91F	WT15
S3M-250P12B9SN1205.XS50	○	250	69	50	12	9	12	12x2		ST409-91F	WT15

* 刀片需单独订购。Blades to be ordered separately. ● 标准库存Standard inventory ○ 订单生产The order production

S3M 三面刃盘铣刀
S3M Side and Face Disc milling cutter

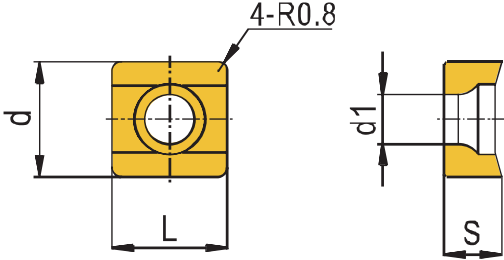


型号 Model	库存 Stock	尺寸 (mm) Dimensions										
		dc	d1	dm	P	B	b	齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench	
S3M-63P40B6SN1235.XMB22	○	63	42	22	50	6	10.4	3x2	SNCQ123503N	ST4073-91F	Wt15	
S3M-80P50B6SN1235.XMB22	○	80	42	22	50	6	10.4	4x2		ST4073-91F	WT15	
S3M-100P50B6SN1235.XMB27	○	100	60	27	50	6	12.4	5x2		ST4073-91F	WT15	
S3M-125P50B6SN1235.XMB32	○	125	78	32	50	6	14.4	6x2		ST4073-91F	WT15	
S3M-160P50B6SN1235.XMB40	○	160	89	40	50	6	16.4	8x2	SNCQ120403N	ST4073-91F	WT15	
S3M-63P40B7SN1204.XMB22	○	63	42	22	50	7	10.4	3x2		ST409-91F	WT15	
S3M-80P50B7SN1204.XMB22	○	80	42	22	50	7	10.4	4x2		ST409-91F	WT15	
S3M-100P50B7SN1204.XMB27	○	100	60	27	50	7	12.4	5x2		ST409-91F	WT15	
S3M-125P50B7SN1204.XMB32	○	125	78	32	50	7	14.4	6x2	SNCQ124503N	ST409-91F	WT15	
S3M-160P50B7SN1204.XMB40	○	160	89	40	50	7	16.4	8x2		ST409-91F	WT15	
S3M-63P40B8SN1245.XMB22	○	63	42	22	50	8	10.4	3x2		ST409-91F	WT15	
S3M-80P50B8SN1245.XMB22	○	80	42	22	50	8	10.4	4x2		ST409-91F	WT15	
S3M-100P50B8SN1 245.XMB27	○	100	60	27	50	8	12.4	5x2	SNCQ124503N	ST409-91F	WT15	
S3M-125P50B8SN1245.XMB32	○	125	78	32	50	8	14.4	6x2		ST409-91F	WT15	
S3M-160P50B8SN1245.XMB40	○	160	89	40	50	8	16.4	8x2		ST409-91F	WT15	
S3M-100P50B9SN1205.XMB27	○	100	60	27	50	8	12.4	5x2		ST409-91F	WT15	
S3M-125P50B9SN1205.XMB32	○	125	78	40	50	8	14.4	6x2	SNCQ120503N	ST409-91F	WT15	
S3M-160P50B9SN1205.XMB40	○	160	89	40	50	8	16.4	8x2		ST409-91F	WT15	

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
LNCT



刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades							
		L	d	s	d1	KP1110	KP1230	KP2220	KP3220
	LNCT070408N	7 94	9.525	4.76	4.7	●	●	●	●
	LNCT090408N	9.525	9.525	4.76	5.8	●	●	●	●
	LNCT120508N	12.7	11.5	5.56	6	●	●	●	●
钢 Steel		★							
不锈钢 Stainless Steel		★							
铸铁 Cast iron		★							
有色金属 Nonferrous Metal		★							
耐热合金 Heat Resistant Alloy		★							
淬硬钢 Hardened Steel		★							

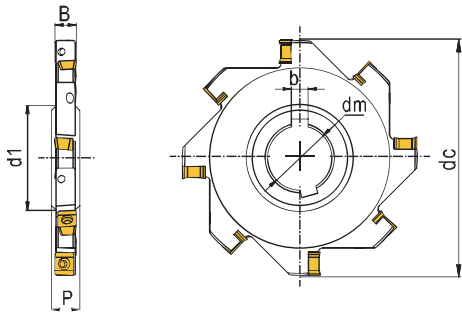
★ 首选Preferred ☆ 可选optional

●标准库存standard stock ○订单生产order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

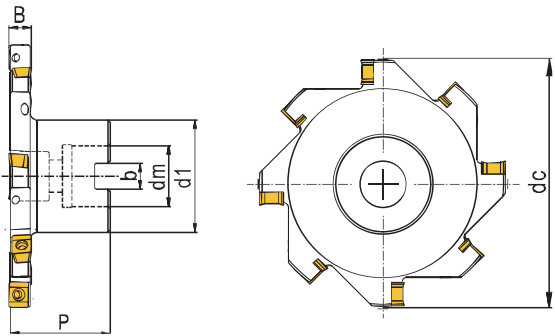
S3M 三面刃盘铣刀
S3M Side and Face Disc milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions						齿数 No. of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	d1	dm	P	B	b				
S3M-100P16B10L NO7.XS32	○	100	46	32	16	10	8	4x2	LNCTO70408N	C030A07S	WT9
S3M-125P16B10L NO7.XS40	○	125	55	40	16	10	10	5x2		C030A08S	WT9
S3M-160P 16B10LN07.XS40	○	160	55	40	16	10	10	6x2		C030A09S	WT9
S3M-200P16B10LN07.XS50	○	200	69	50	16	10	12	7x2		C030A10S	WT9
S3M-100P18B12LN09.XS32	○	100	46	32	18	12	8	4x2	LNCTO90408N	C035A08S	WT15
S3M-125P 18B12L NO9.XS40	○	125	55	40	18	12	10	5x2		C035A08S	WT15
S3M-160P18B12LN09.XS40	○	160	55	40	18	12	10	6x2		C035A08S	WT15
S3M-200P18B12L NO9.XS50	○	200	69	50	18	12	12	7x2		C035A08S	WT15
S3M-250P 18B12LN09.XS50	○	250	69	50	18	12	12	8x2	LNCT120508N	C035A08S	WT15
S3M-125P24B16LN12.XS40	○	125	55	40	24	16	10	5x2		C035A09S	WT15
S3M-160P24B16LN12.XS40	○	160	55	40	24	16	10	6x2		C035A09S	WT15
S3M-200P24B16LN12.XS50	○	200	69	50	24	16	12	7x2		C035A09S	WT15
S3M-250P24B16LN12.XS50	○	250	69	50	24	12	12	8x2		C035A09S	WT15

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

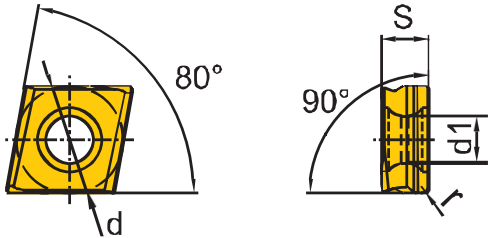
S3M 三面刃盘铣刀
S3M Side and Face Disc milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions						齿数 No. of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	d1	dm	P	B	b				
S3M-80P50B10LNO7.XMB22	○	80	42	22	50	10	10.4	4x2	LNCTO70408N	C030A07S	WT9
S3M-100P50B10LNO7.XMB27	○	100	60	27	50	10	12.4	5x2		C030A07S	WT9
S3M-125P50B10LNO7.XMB32	○	125	78	32	50	10	14.4	6x2		C030A07S	WT9
S3M-160P50B10LNO7.XMB40	○	160	89	40	50	10	16.4	7x2		C030A07S	WT9
S3M-100P50B12LN09.XMB27	○	100	60	27	50	12	12.4	5x2	LNCTO90408N	C035A08S	WT15
S3M-125P50B12LN09.XMB32	○	125	78	32	50	12	14.4	6x2		C035A08S	WT15
S3M-1 60P50B12LN09.XMB40	○	160	89	40	50	12	16.4	7x2		C035A08S	WT15
S3M-200P50B12LN09.XMB40	○	200	89	40	50	12	16.4	8x2		C035A08S	WT15
S3M-125P50B16LN12.XMB32	○	125	78	32	50	16	14.4	5x2	LNCT120508N	C040A09S	WT15
S3M-160P50B16LN12.XMB40	○	160	89	40	50	16	16.4	6x2		C040A09S	WT15
S3M-200P50B16LN12.XMB40	○	200	89	40	50	16	16.4	7x2		C040A09S	WT15
S3M-250P50B16LN12.XMB60	○	250	129	60	50	16	25.7	8x2		C040A09S	WT15

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

铣削刀片
Milling inserts
CNCQ



刀片外形 Insert shape	型号 Model	尺寸与材质 Size and Grades								
		r	d	s	d1	KP1110	KP1230	KP2220	KT20	KW20
	CNCQ090504L/R	0.4	9.525	5.56	4.4		●			
	CNCQ090508L/R	0.8	9.525	5.56	4.4		●			
	CNCQ120504L/R	0.4	12.7	5.56	5.5		●			
	CNCQ120508L/R	0.8	12.7	5.56	5.5		●			
	CNCQ150504L/R	0.4	15.875	5.56	5.5		●			
钢 Steel						★	★		★	
不锈钢 Stainless Steel							★	★	★	
铸铁 Cast Iron									☆	
有色金属 Nonferrous Metal										★
耐热合金 Heat Resistant Alloy								☆	☆	
淬硬钢 Hardened Steel							★			

★ 首选Preferred ☆ 可选optional ●标准库存standard stock ○订单生产order production

推荐切削条件表
Recommended Cutting Conditions

工件材料 Workpiece Materials		布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/z)	ap(mm)
P	钢 Steel	<180	KP1230	120-180-250	0.1-0.3	
		180-280	KP1230	100-160-220	0.1-0.3	
		280-350	KP1230	80-140-180	0.1-0.3	
M	不锈钢 Stainless Steel	<270	KP1230	80-160-250	0.1-0.25	
K	铸铁 Cast iron	180-250	KP1230			
N	铝合金 Aluminium Alloys					
H	高硬钢 Hardness	HRC50-60				

S3M 三面刃盘铣刀
S3M Side and Face Disc milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions						齿数 No. of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	d1	dm	P	B	b				
S3M-100P16B14CN09.XS32	○	100	46	32	16	14	8	4x2	CNCQ0905..L CNCQ0905..R	C040A09S	WT15
S3M-125P16B14CN09.XS40	○	125	55	40	16	14	10	4x2		C040A09S	WT15
S3M-160P16B14CN09.XS40	○	160	55	40	16	14	10	6x2		C040A09S	WT15
S3M-200P16B14CN09.XS50	○	200	69	50	16	14	12	7x2		C040A09S	WT15
S3M-250P16B14CN09.XS50	○	250	69	50	16	14	12	9x2	CNCQ1205..L CNCQ1205..R	C040A09S	WT15
S3M-100P16B14CN09.XS32	○	100	46	32	22	20	8	4x2		C050A12S	WT20
S3M-125P22B20CN12.XS40	○	125	55	40	22	20	10	4x2		C050A12S	WT20
S3M-160P22B20CN12.XS40	○	160	55	40	22	20	10	6x2		C050A12S	WT20
S3M-200P22B20CN12.XS50	○	200	69	50	22	20	12	7x2	CNCQ1505..L CNCQ1505..R	C050A12S	WT20
S3M-250P22B20CN12.XS50	○	250	69	50	21	20	12	9x2		C050A12S	WT20
S3M-125P27B24CN15.XS40	○	125	55	40	27	24	10	4x2		C050A12S	WT20
S3M-160P27B24CN15.XS40	○	160	55	40	27	24	10	6x2		C050A12S	WT20
S3M-200P27B24CN15.XS50	○	200	69	50	27	24	12	7x2	CNCQ1505..L CNCQ1505..R	C050A12S	WT20
S3M-250P27B24CN15.XS50	○	250	69	50	27	24	12	9x2		C050A12S	WT20

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

S3M 三面刃盘铣刀
S3M Side and Face Disc milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions						齿数 No. of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench
		dc	d1	dm	P	B	b				
S3M-80P50B14CN09.XMB22	○	80	42	22	50	14	10.4	3x2	CNCQ0905..L CNCQ0905..R	C040A09S	WT15
S3M-100P50B14CN09.XMB27	○	100	60	27	50	14	12.4	4x2		C040A09S	WT15
S3M-125P50B14CN09.XMB32	○	125	78	32	50	14	14.4	4x2		C040A09S	WT15
S3M-160P50B14CN09.XMB40	○	160	89	40	50	14	16.4	6x2		C040A09S	WT15
S3M-100P50B20CN12.XMB27	○	100	60	27	50	20	12.4	4x2	CNCQ1205..L CNCQ1205..R	C050A12S	WT20
S3M-125P50B20CN12.XMB32	○	125	78	32	50	20	14.4	4x2		C050A12S	WT20
S3M-160P50B20CN12.XMB40	○	160	89	40	50	20	16.4	6x2		C050A12S	WT20
S3M-200P50B20CN12.XMB40	○	200	89	40	50	20	16.4	8x2		C050A12S	WT20
S3M-125P50B24CN1 5.XMB32	○	125	78	32	50	24	14.4	4x2	CNCQ1505..L CNCQ1505..R	C050A12S	WT20
S3M-160P50B24CN15.XMB40	○	160	89	40	50	24	16.4	6x2		C050A12S	WT20
S3M-200P50B24CN15.XMB40	○	200	89	40	50	24	16.4	7x2		C050A12S	WT20
S3M-250P50B24CN15.XMB60	○	250	129	60	50	24	25.7	9x2		C050A12S	WT20

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

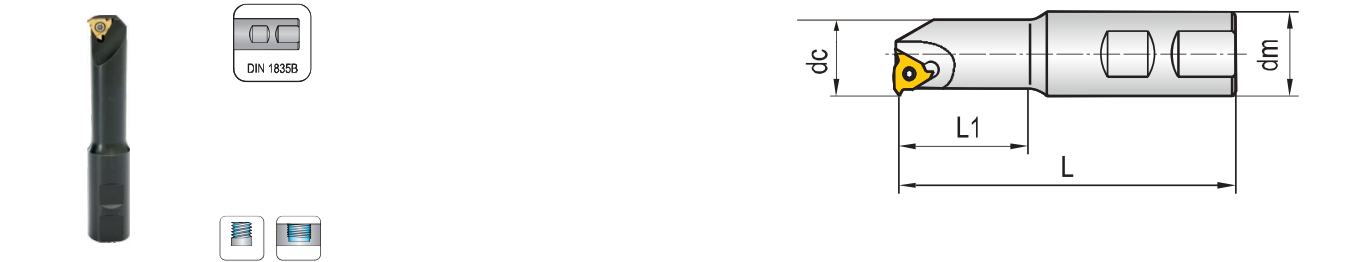
ISO 螺纹铣刀片
ISO Threading Milling inserts



螺距 Pitch(mm)		库存 Stock	刀片尺寸 (mm) Insert size				刀片材质及适用加工材料 Grade and application		
			14mm(1)	21mm	30mm	40mm	KTX	KVX	KW20
0.50	外EXT	○					●	●	●
	内INT	○	14I0.50 ISO						
0.75	外EXT	○	14E0.75 ISO				●	●	●
	内INT	○	14I0.75 ISO						
1.00	外EXT	○	14E1.00 ISO	21E1.00 ISO			●	●	●
	内INT	○	14I1.00 ISO	21I1.00 ISO			●	●	●
1.25	外EXT	○	14E1.25 ISO				●	●	●
	内INT	○	14I1.25 ISO						
1.50	外EXT	○	14E1.50 ISO	21E1.50 ISO	30E1.50 ISO	40E1.50 ISO	●	●	●
	内INT	○	14I1.50 ISO	21I1.50 ISO	30I1.50 ISO	40I1.50 ISO	●	●	●
1.75	外EXT	○	14E1.75 ISO				●	●	●
	内INT	○	14I1.75 ISO				●	●	●
2.00	外EXT	○	14E2.00 ISO	21E2.00 ISO	30E2.00 ISO	40E2.00 ISO	●	●	●
	内INT	○	14I2.00 ISO	21I2.00 ISO	30I2.00 ISO	40I2.00 ISO	●	●	●
2.50	外EXT	○	14E2.50 ISO	21E2.50 ISO			●		●
	内INT	○	14I2.50 ISO	21I2.50 ISO			●	●	●
3.00	外EXT	○	21E3.00 ISO				●	●	●
	内INT	○	21I3.00 ISO				●		●
3.50	外EXT	○	30E3.50 ISO				●		●
	内INT	○	21I3.50 ISO				●	●	●
4.00	外EXT	○	30E4.00 ISO				●	●	●
	内INT	○	30I4.00 ISO				●	●	●
4.50	外EXT	○	30I4.50 ISO						
	内INT	○	30I4.50 ISO				●	●	●
5.00	外EXT	○	40E5.00 ISO				●	●	●
	内INT	○	40I5.00 ISO				●	●	●
5.50	外EXT	○	40I5.50 ISO				●	●	●
	内INT	○	40I5.50 ISO						
6.00	外EXT	○	40E6.00 ISO				●	●	●
	内INT	○	40I6.00 ISO				●		●
H		○	7.5	12	16	20	钢 Steel	不锈钢 Stainless Steel	有色金属 Nonferrous metal
T		○	3.1	4.7	5.5	6.3		铸钢 Cast iron	

●标准库存standard stock ○订单生产order production

SMT 可转位螺纹立铣刀
SMT Indexable Thread End milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions				刀片 Insert	螺钉 Screw	扳手 Torx wrench	重量 Weight
		dc	dm	L1	L				
SMT-25-16	○	25	25	75	140	16....	C035A08S	T15	0.7
SMT-40-16	○	40	32	85	150	16....	C035A08S	T15	1.1

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

刀片使用: 加工外螺纹: 16EL....
Blade use: processing external thread: 16EL....
加工内螺纹: 16NR....
Machining internal thread: 16NR....

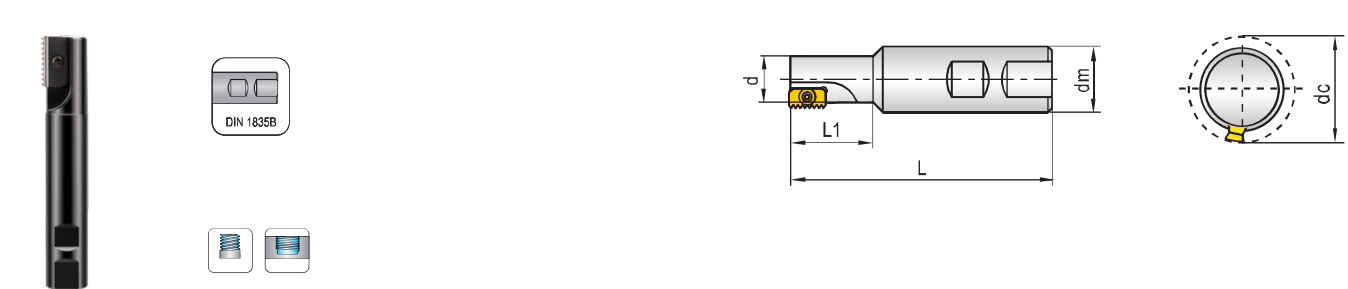
外螺纹铣削方法
Exterior thread milling method

右旋螺纹-R Right hand thread -R	左旋螺纹-L L-L	右旋螺纹-R Right hand thread -R	左旋螺纹-L L-L
顺时针进给, 顺铣 Feed clockwise and mill down	顺时针进给, 顺铣 Feed clockwise and mill down	顺时针进给, 顺铣 Feed clockwise and mill down	顺时针进给, 顺铣 Feed clockwise and mill down
刀片: 16EL.... The blade	刀片: 16EL.... The blade	刀片: 16EL.... The blade	刀片: 16EL.... The blade

内螺纹铣削方法
Internal thread milling method

右旋螺纹-R Right hand thread -R	左旋螺纹-L L-L	右旋螺纹-R Right hand thread -R	左旋螺纹-L L-L
顺时针进给, 顺铣 Feed clockwise and mill down	顺时针进给, 顺铣 Feed clockwise and mill down	顺时针进给, 顺铣 Feed clockwise and mill down	顺时针进给, 顺铣 Feed clockwise and mill down
刀片: 16ER.... The blade	刀片: 16ER.... The blade	刀片: 16ER.... The blade	刀片: 16ER.... The blade

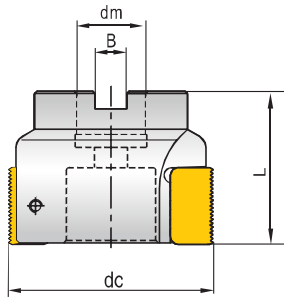
SMT 可转位螺纹立铣刀
SMT Indexable Thread End milling cutter



型号 Model	库存 Stock	尺寸 (mm) Dimensions									
		dc	dm	d	L1	L	齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench	重量 Weight
SMT-14.5-14	○	14.5	20	11	25	85	1	14...	C030A07S	T9	0.2
SMT-17-14	○	17	20	14	30	85	1	14...	C030A07S	T9	0.3
SMT-20-14	○	20	20	17	35	90	1	14...	C030A07S	T9	0.3
SMT-25-14	○	25	25	22	40	100	1	14...	C030A07S	T9	0.4
SMT-18-21	○	18	20	14	30	85	1	21...	C040A09S	T15	0.3
SMT-21-21	○	21	20	17	40	95	1	21...	C040A09S	T15	0.3
SMT-25-21	○	25	25	21	50	115	1	21...	C040A09S	T15	0.4
SMT-29-30	○	29	25	24	50	115	1	30...	C050A12S	T20	0.6
SMT-48-40	○	48	40	40	80	160	1	40...	C050A12S	T20	2.3

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

SMF 可转位螺纹立铣刀
SMF Indexable Thread Face milling cutter

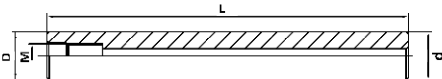
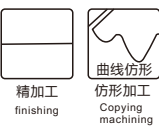


型号 Model	库存 Stock	尺寸 (mm) Dimensions				 齿数 No.of teeth	 刀片 Insert	 螺钉 Screw	 扳手 Torx wrench	 重量 Weight
		dc	dm	B	L					
SMF-50-14	○	50	22	10.4	40	5	14...	C030A07S	WT9	0.4
SMF-63-21	○	63	22	10.4	50	5	21...	C040A09S	WT15	0.6
SMF-80-21	○	80	27	12.4	50	6	21...	C040A09S	WT15	1.1
SMF-80-30	○	80	27	12.4	55	4	30...	C050A12S	WT20	1.1
SMF-100-30	○	100	32	14.4	60	4	30...	C050A12S	WT20	1.9
SMF-80-40	○	80	27	12.4	65	4	40...	C050A12S	WT20	1.1
SMF-100-40	○	100	32	14.4	70	4	40...	C050A12S	WT20	1.9

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

直杆系列-锁牙式抗震钨钢刀杆
Straight bar series-Locking Tungsten carbide Modular boring bar



型号 Model	库存 Stock		尺寸 Size (mm)		d	L	L1
	R	L	M	D			
8-M4-100	○		M4	8	8	100	
10-M5-100	○		M5	10	10	100	
10-M5-150	○		M5	10	10	150	
12-M6-100	○		M6	12	12	100	
12-M6-150	○		M6	12	12	150	
12-M6-200	○		M6	12	12	200	
15-M8-100	○		M8	15	15	100	
15-M8-150	○		M8	15	15	150	
15-M8-200	○		M8	15	15	200	
16-M8-100	○		M8	16	16	100	
16-M8-150	○		M8	16	16	150	
16-M8-200	○		M8	16	16	200	
16-M8-250	○		M8	16	16	250	
16-M8-300	○		M8	16	16	300	
19-M10-150	○		M10	19	19	150	
19-M10-200	○		M10	19	19	200	
19-M10-250	○		M10	19	19	250	
20-M10-100	○		M10	20	20	100	
20-M10-150	○		M10	20	20	150	
20-M10-200	○		M10	20	20	200	
20-M10-250	○		M10	20	20	250	
20-M10-300	○		M10	20	20	300	
24-M12-150	○		M12	24	24	150	
24-M12-200	○		M12	24	24	200	
24-M12-250	○		M12	24	24	250	
24-M12-300	○		M12	24	24	300	
25-M12-150	○		M12	25	25	150	
25-M12-200	○		M12	25	25	200	
25-M12-250	○		M12	25	25	250	
25-M12-300	○		M12	25	25	300	
32-M16-150	○		M16	32	32	150	
32-M16-200	○		M16	32	32	200	
32-M16-250	○		M16	32	32	250	
32-M16-300	○		M16	32	32	300	
32-M16-350	○		M16	32	32	350	
32-M16-400	○		M16	32	32	400	

* 刀片需单独订购。Blades to be ordered separately.

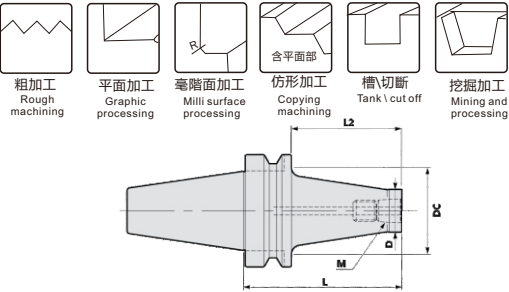
●标准库存Standard inventory ○订单生产The order production

产品特性/Product features

- 1.提高抗震强度，加工尺寸精密，工件表面光洁度高，
- 2.适合悬伸工件加工。
- 3.刀片切削均匀提高刀片寿命，减少加工过程中因为周跳导致的振纹。
- 4.搭配可换式螺纹头，重复装夹精度高，适合开粗和精铣。
- 5.刀杆可以对应不同型号刀头，与刀柄多种组合，即使刀具部分损坏也可立即更换，更经济。

1. Improve seismic strength, precision processing size, high surface finish of the workpiece,
2. Suitable for overhanging workpiece processing.
3. The uniform cutting of the blade improves the service life of the blade and reduces the vibration marks caused by the cycle jump in the processing process.
4. Matched with replaceable thread head, repeat clamping precision is high, suitable for rough and fine milling.
5. The tool holder can correspond to different types of tool head, and a variety of combinations with the handle, even if the tool part damage can be replaced immediately, more economical.

可转位锁牙式铣刀柄
Indexable Locking Modular Cutter Milling Holder



型号 Model	库存 Stock		尺寸 Size (mm)					
	R	L	M	D	DC	L	L1	L2
BT30-M6-50L	○		6	12	17	50	/	30
BT30-M6- 100L	○		6	12	17	100	/	80
BT30-M8- 45L	○		8	15	17	45	/	25
BT30-M8- -50L	○		8	15	17	50	/	30
BT30-M8-100L	○		8	15	17	100	/	80
BT30-M10-45L	○		10	19	21	45	/	25
BT30-M10-50L	○		10	19	21	50	/	30
BT30-M10-100L	○		10	19	21	100	/	80
BT30-M12-60L	○		12	24	25	60	/	40
BT30-M12-100L	○		12	24	26	100	/	80
BT30-M16-45L	○		16	30	33	45	/	30
BT30-M16-60L	○		16	30	33	60	/	40
BT30-M16-100L	○		16	30	32	100	/	80
BT40-M8- 70L	○		8	15	17	70	/	45
BT40-M8- 100L	○		8	15	17	100	/	75
BT40-M8- 150L	○		8	15	22	150	50	125
BT40-M8- -200L	○		8	15	22	200	70	175
BT40-M10-70L	○		10	19	20	70	/	45
BT40-M10-100L	○		10	19	25	100	/	75
BT40-M10-150L	○		10	19	25	150	/	125
BT40-M10-200L	○		10	19	31	200	70	175
BT40-M12-70L	○		12	24	26	70	/	45
BT40-M12-100L	○		12	24	32	100	/	75
BT40-M12-150L	○		12	24	37	150	50	125
BT40-M12- -200L	○		12	24	68	200	/	175
BT40-M16-70L	○		16	30	32	70	/	45
BT40-M16-100L	○		16	30	36	100	30	75
BT40-M16-150L	○		16	30	41	150	/	125
BT40-M16-200L	○		16	30	46	200	70	175

* 刀片需单独订购。Blades to be ordered separately.

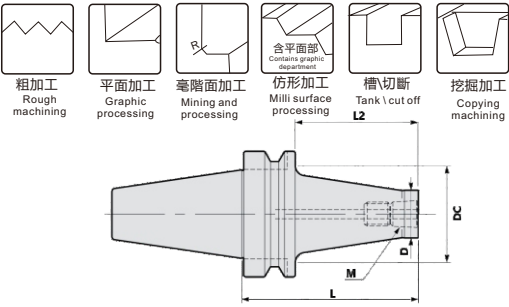
●标准库存Standard inventory ○订单生产The order production

- 1.模块化组合，刀头与刀柄螺纹连接，沉头结合
- 2.刀柄直接连接刀头，无需筒夹，降低多次装夹精度公差
- 3.刀片切削均匀提高刀片寿命，减少加工过程中因为周跳导致的振纹
- 4.可换式刀头，重复装夹精度高，适合开粗和精铣
- 5.刀头可以对应不同型号刀片，与刀柄多种组合，即使刀具部分损坏也可立即更换，更经济

产品特性/Product features

1. Modular combination, threaded connection of tool head and handle, countersunk head
2. The tool holder is directly connected with the tool head, without collet, reducing the precision tolerance of multiple clamping
3. The blade cutting evenly improves the blade poison life and reduces the vibration marks caused by cycle jump in the processing process
4. Changeable cutter head, high repeatable clamping accuracy, suitable for rough and fine milling
5. Knife head can correspond to different types of blade, and a variety of combinations with the handle, even if the tool is damaged, it can be replaced immediately, more economical

可转位锁牙式铣刀柄
Indexable Locking Modular Cutter Milling Holder



型号 Model	库存 Stock		尺寸 Size (mm)					
	R	L	M	D	DC	L	L1	L2
BT50-M8-100L	○		8	16	32	100	/	65
BT50-M8-150L	○		8	16	32	150	/	115
BT50-M8-200L	○		8	16	32	200	/	165
BT50-M8-250L	○		8	16	37	250	/	215
BT50-M8-300L	○		8	16	37	300	/	265
BT50-M10-100L	○		10	20	37	100	/	65
BT50-M10-150L	○		10	20	37	150	/	115
BT50-M10-200L	○		10	20	37	200	/	165
BT50-M10-250L	○		10	20	37	250	/	215
BT50-M10-300L	○		10	20	37	300	85	265
BT50-M12-100L	○		12	24	40	100	/	65
BT50-M12-150L	○		12	24	40	150	/	115
BT50-M12-200L	○		12	24	40	200	/	165.
BT50-M12-250L	○		12	24	50	250	/	215
BT50-M12-300L	○		12	24	50	300	105	265
BT50-M16-100L	○		16	29	50	100	/	65
BT50-M16-150L	○		16	29	50	150	/	115
BT50-M16-200L	○		16	29	50	200	65	165
BT50-M16-250L	○		16	29	55	250	85	215
BT50-M16-300L			16	29	55	300	105	265

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

- 1.模块化组合，刀头与刀柄螺纹连接，沉头结合
- 2.刀柄直接连接刀头，无需筒夹，降低多次装夹精度公差
- 3.刀片切削均匀提高刀片寿命，减少加工过程中因为周跳导致的振纹
- 4.可换式刀头，重复装夹精度高，适合开粗和精铣
- 5.刀头可以对应不同型号刀片，与刀柄多种组合，即使刀具部分损坏也可立即更换，更经济

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一 钻削

Drilling

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钻尖编码系统 I01
Dilling Head Ordering Code System

QD 可换式快钻钻尖系列 I02-I10
QD Exchangeable Dilling Head Series

QD 可换式快钻刀体系列 I11-I14
QD Exchangeable Drilling Toolholder series

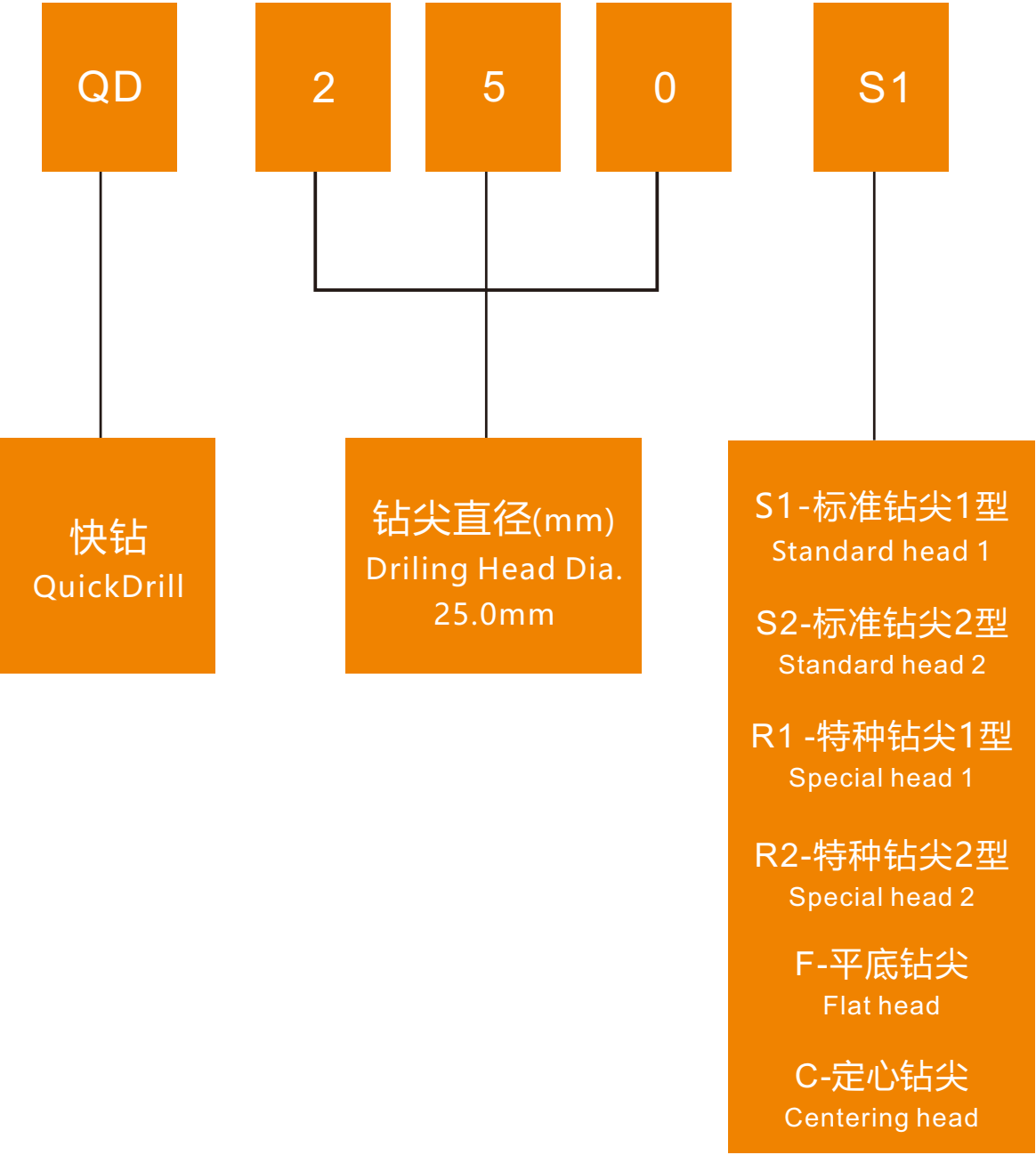
QD 可换式快钻整体式复合刀体系列 I15-I19
QD Exchangeable solid Drill Toglholder series

可转位铲钻系列 I21-I28
Indexable Spade Drilling series

可转位刀片高速钻U钻系列 I29-I42
Indexable Insert High Speed drill Series

钻削
Drilling

自锁式可换式快钻钻尖编码系统
Locking Exchangeable Drilling Head Ordering System



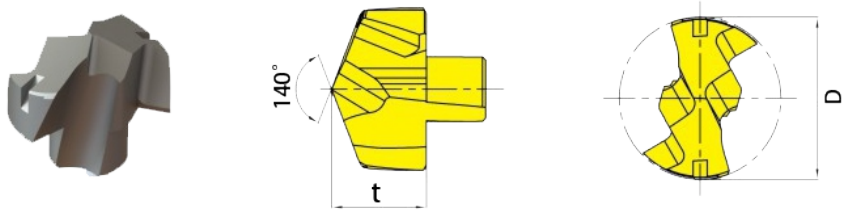
QD...S1标准钻头S1型
QD... S1 Standard Drilling Head S1

型号 Model	库存 Stock	尺寸 Dimensions(mm) D t	刀体 Tool holders
QD-080-S1	○	8.0 5.4	QD080/089-12-...D-...
QD-081-S1	○	8.1 5.4	
QD-082-S1	○	8.2 5.4	
QD-083-S1	○	8.3 5.4	
QD-084-S1	○	8.4 5.4	
QD-085-S1	○	8.5 5.4	
QD-086-S1	○	8.6 5.4	
QD-087-S1	○	8.7 5.4	
QD-088-S1	○	8.8 5.4	
QD-089-S1	○	8.9 5.4	
QD-090-S1	○	9.0 5.8	QD090/099-12-...D-...
QD-091-S1	○	9.1 5.8	
QD-092-S1	○	9.2 5.8	
QD-093-S1	○	9.3 5.8	
QD-094-S1	○	9.4 5.8	
QD-095-S1	○	9.5 5.8	
QD-096-S1	○	9.6 5.8	
QD-097-S1	○	9.7 5.8	
QD-098-S1	○	9.8 5.8	
QD-099-S1	○	9.9 5.8	
QD-100-S1	○	10.0 6.2	QD100/109-16-...D-...
QD-101-S1	○	10.1 6.2	
QD-102-S1	○	10.2 6.2	
QD-103-S1	○	10.3 6.2	
QD-104-S1	○	10.4 6.2	
QD-105-S1	○	10.5 6.2	
QD-106-S1	○	10.6 6.2	
QD-107-S1	○	10.7 6.2	
QD-108-S1	○	10.8 6.2	
QD-109-S1	○	10.9 6.2	
QD-110-S1	○	11.0 6.6	QD110/119-16-...D-...
QD-111-S1	○	11.1 6.6	
QD-112-S1	○	11.2 6.6	
QD-113-S1	○	11.3 6.6	
QD-114-S1	○	11.4 6.6	
QD-115-S1	○	11.5 6.6	
QD-116-S1	○	11.6 6.6	
QD-117-S1	○	11.7 6.6	
QD-118-S1	○	11.8 6.6	
QD-119-S1	○	11.9 6.6	
QD-120-S1	○	12.0 7.0	QD120/129-16-...D-...
QD-121-S1	○	12.1 7.0	
QD-122-S1	○	12.2 7.0	
QD-123-S1	○	12.3 7.0	
QD-124-S1	○	12.4 7.0	
QD-125-S1	○	12.5 7.0	
QD-126-S1	○	12.6 7.0	
QD-127-S1	○	12.7 7.0	
QD-128-S1	○	12.8 7.0	
QD-129-S1	○	12.9 7.0	
QD-130-S1	○	13.0 7.6	QD130/139-16-...D-...
QD-131-S1	○	13.1 7.6	
QD-132-S1	○	13.2 7.6	
QD-133-S1	○	13.3 7.6	
QD-134-S1	○	13.4 7.6	
QD-135-S1	○	13.5 7.6	
QD-136-S1	○	13.6 7.6	
QD-137-S1	○	13.7 7.6	
QD-138-S1	○	13.8 7.6	
QD-139-S1	○	13.9 7.6	
QD-140-S1	○	14.0 8.1	QD140/149-12-...D-...
QD-141-S1	○	14.1 8.1	
QD-142-S1	○	14.2 8.1	
QD-143-S1	○	14.3 8.1	
QD-144-S1	○	14.4 8.1	
QD-145-S1	○	14.5 8.1	
QD-146-S1	○	14.6 8.1	
QD-147-S1	○	14.7 8.1	
QD-148-S1	○	14.8 8.1	
QD-149-S1	○	14.9 8.1	
QD-150-S1	○	15.0 8.7	QD150/159-20-...D-...
QD-151-S1	○	15.1 8.7	
QD-152-S1	○	15.2 8.7	
QD-153-S1	○	15.3 8.7	
QD-154-S1	○	15.4 8.7	
QD-155-S1	○	15.5 8.7	
QD-156-S1	○	15.6 8.7	
QD-157-S1	○	15.7 8.7	
QD-158-S1	○	15.8 8.7	
QD-159-S1	○	15.9 8.7	
QD-160-S1	○	16.0 9.3	QD160/169-20-...D-...
QD-161-S1	○	16.1 9.3	
QD-162-S1	○	16.2 9.3	
QD-163-S1	○	16.3 9.3	
QD-164-S1	○	16.4 9.3	
QD-165-S1	○	16.5 9.3	
QD-166-S1	○	16.6 9.3	
QD-167-S1	○	16.7 9.3	
QD-168-S1	○	16.8 9.3	
QD-169-S1	○	16.9 9.3	
QD-170-S1	○	17.0 9.9	QD170/179-20-...D-...
QD-171-S1	○	17.1 9.9	
QD-172-S1	○	17.2 9.9	
QD-173-S1	○	17.3 9.9	
QD-174-S1	○	17.4 9.9	
QD-175-S1	○	17.5 9.9	
QD-176-S1	○	17.6 9.9	
QD-177-S1	○	17.7 9.9	
QD-178-S1	○	17.8 9.9	
QD-179-S1	○	17.9 9.9	

●标准库存Standard inventory ○订单生产Order production ●标准库存Standard inventory ○订单生产Order production

注：S1 钻头适用于中高碳钢、合金钢、球墨铸铁等钻孔(五倍径孔以下推荐使用)
Recommend S1 cutting head to be used for middle and high carbon steel, alloy steel,nodular cast iron(specially for less than 5D)

QD...S1标准钻头S1型
QD... S1 Standard Drilling Head S1

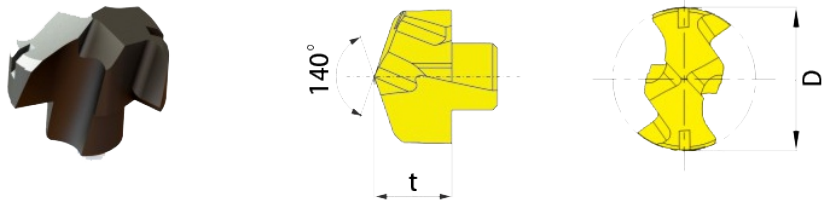


型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-180-S1	○	18.0	10.5	QD180/189-25-...D-...
QD-181-S1	○	18.1	10.5	
QD-182-S1	○	18.2	10.5	
QD-183-S1	○	18.3	10.5	
QD-184-S1	○	18.4	10.5	
QD-185-S1	○	18.5	10.5	
QD-186-S1	○	18.6	10.5	
QD-187-S1	○	18.7	10.5	
QD-188-S1	○	18.8	10.5	QD190/199-25-...D-...
QD-189-S1	○	18.9	10.5	
QD-190-S1	○	19.0	11.0	
QD-191-S1	○	19.1	11.0	
QD-192-S1	○	19.2	11.0	
QD-193-S1	○	19.3	11.0	
QD-194-S1	○	19.4	11.0	
QD-195-S1	○	19.5	11.0	
QD-196-S1	○	19.6	11.0	QD200/209-25-...D-...
QD-197-S1	○	19.7	11.0	
QD-198-S1	○	19.8	11.0	
QD-199-S1	○	19.9	11.0	
QD-200-S1	○	20.0	11.6	
QD-201-S1	○	20.1	11.6	
QD-202-S1	○	20.2	11.6	
QD-203-S1	○	20.3	11.6	
QD-204-S1	○	20.4	11.6	QD210/219-25-...D-...
QD-205-S1	○	20.5	11.6	
QD-206-S1	○	20.6	11.6	
QD-207-S1	○	20.7	11.6	
QD-208-S1	○	20.8	11.6	
QD-209-S1	○	20.9	11.6	
QD-210-S1	○	21.0	12.1	
QD-211-S1	○	21.1	12.1	QD220/229-25-...D-...
QD-212-S1	○	21.2	12.1	
QD-213-S1	○	21.3	12.1	
QD-214-S1	○	21.4	12.1	
QD-215-S1	○	21.5	12.1	
QD-216-S1	○	21.6	12.1	
QD-217-S1	○	21.7	12.1	
QD-218-S1	○	21.8	12.1	
QD-219-S1	○	21.9	12.1	QD230/239-32-...D-...
QD-220-S1	○	22.0	12.7	
QD-221-S1	○	22.1	12.7	
QD-222-S1	○	22.2	12.7	
QD-223-S1	○	22.3	12.7	
QD-224-S1	○	22.4	12.7	
QD-225-S1	○	22.5	12.7	
QD-226-S1	○	22.6	12.7	
QD-227-S1	○	22.7	12.7	QD240/249-32-...D-...
QD-228-S1	○	22.8	12.7	
QD-229-S1	○	22.9	12.7	
QD-230-S1	○	23.0	13.3	
QD-231-S1	○	23.1	13.3	
QD-232-S1	○	23.2	13.3	
QD-233-S1	○	23.3	13.3	
QD-234-S1	○	23.4	13.3	QD250/260-32-...D-...
QD-235-S1	○	23.5	13.3	
QD-236-S1	○	23.6	13.3	
QD-237-S1	○	23.7	13.3	
QD-238-S1	○	23.8	13.3	
QD-239-S1	○	23.9	13.3	
QD-240-S1	○	24.0	13.9	
QD-241-S1	○	24.1	13.9	QD260/269-32-...D-...
QD-242-S1	○	24.2	13.9	
QD-243-S1	○	24.3	13.9	
QD-244-S1	○	24.4	13.9	
QD-245-S1	○	24.5	13.9	
QD-246-S1	○	24.6	13.9	
QD-247-S1	○	24.7	13.9	
QD-248-S1	○	24.8	13.9	QD270/279-32-...D-...
QD-249-S1	○	24.9	13.9	
QD-250-S1	○	25.0	14.5	
QD-251-S1	○	25.1	14.5	
QD-252-S1	○	25.2	14.5	
QD-253-S1	○	25.3	14.5	
QD-254-S1	○	25.4	14.5	
QD-255-S1	○	25.5	14.5	QD280/289-32-...D-...
QD-256-S1	○	25.6	14.5	
QD-257-S1	○	25.7	14.5	
QD-258-S1	○	25.8	14.5	
QD-259-S1	○	25.9	14.5	
QD-260-S1	○	26.0	14.5	

●标准库存Standard inventory ○订单生产Order production

注：S1钻头适用于中高碳钢、合金钢、球墨铸铁等钻孔(五倍径孔以下推荐使用)
Recommend S1 cutting head to be used for middle and high carbon steel, alloy steel, nodular cast iron(specially for less than 5D)

QD...S2标准钻头S2型
QD... S2 Standard Drilling Head S2

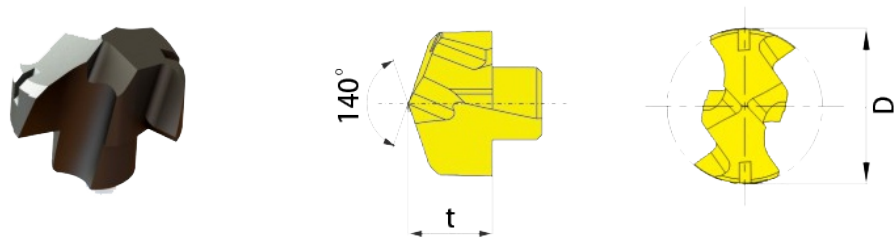


型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-080-S2	○	8.0	5.4	QD080/089-12-...D-...
QD-081-S2	○	8.1	5.4	
QD-082-S2	○	8.2	5.4	
QD-083-S2	○	8.3	5.4	
QD-084-S2	○	8.4	5.4	
QD-085-S2	○	8.5	5.4	
QD-086-S2	○	8.6	5.4	
QD-087-S2	○	8.7	5.4	QD090/099-12-...D-...
QD-088-S2	○	8.8	5.4	
QD-089-S2	○	8.9	5.4	
QD-090-S2	○	9.0	5.8	
QD-091-S2	○	9.1	5.8	
QD-092-S2	○	9.2	5.8	
QD-093-S2	○	9.3	5.8	
QD-094-S2	○	9.4	5.8	QD100/109-16-...D-...
QD-095-S2	○	9.5	5.8	
QD-096-S2	○	9.6	5.8	
QD-097-S2	○	9.7	5.8	
QD-098-S2	○	9.8	5.8	
QD-099-S2	○	9.9	5.8	
QD-100-S2	○	10.0	6.2	
QD-101-S2	○	10.1	6.2	QD110/119-16-...D-...
QD-102-S2	○	10.2	6.2	
QD-103-S2	○	10.3	6.2	
QD-104-S2	○	10.4	6.2	
QD-105-S2	○	10.5	6.2	
QD-106-S2	○	10.6	6.2	
QD-107-S2	○	10.7	6.2	
QD-108-S2	○	10.8	6.2	QD120/129-16-...D-...
QD-109-S2	○	10.9	6.2	
QD-110-S2	○	11.0	6.6	
QD-111-S2	○	11.1	6.6	
QD-112-S2	○	11.2	6.6	
QD-113-S2	○	11.3	6.6	
QD-114-S2	○	11.4	6.6	
QD-115-S2	○	11.5	6.6	QD130/139-16-...D-...
QD-116-S2	○	11.6	6.6	
QD-117-S2	○	11.7	6.6	
QD-118-S2	○	11.8	6.6	
QD-119-S2	○	11.9	6.6	
QD-120-S2	○	12.0	7.0	
QD-121-S2	○	12.1	7.0	
QD-122-S2	○	12.2	7.0	QD140/149-12-...D-...
QD-123-S2	○	12.3	7.0	
QD-124-S2	○	12.4	7.0	
QD-125-S2	○	12.5	7.0	
QD-126-S2	○	12.6	7.0	
QD-127-S2	○	12.7	7.0	
QD-128-S2	○	12.8	7.0	
QD-129-S2	○	12.9	7.0	QD150/159-20-...D-...
QD-130-S2	○	13.0	7.6	
QD-131-S2	○	13.1	7.6	
QD-132-S2	○	13.2	7.6	
QD-133-S2	○	13.3	7.6	
QD-134-S2	○	13.4	7.6	
QD-135-S2	○	13.5	7.6	
QD-136-S2	○	13.6	7.6	QD160/169-20-...D-...
QD-137-S2	○	13.7	7.6	
QD-138-S2	○	13.8	7.6	
QD-139-S2	○	13.9	7.6	
QD-140-S2	○	14.0	8.1	
QD-141-S2	○	14.1	8.1	
QD-142-S2	○	14.2	8.1	
QD-143-S2	○	14.3	8.1	QD170/179-20-...D-...
QD-144-S2	○	14.4	8.1	
QD-145-S2	○	14.5	8.1	
QD-146-S2	○	14.6	8.1	
QD-147-S2	○	14.7	8.1	
QD-148-S2	○	14.8	8.1	
QD-149-S2	○	14.9	8.1	
QD-150-S2	○	15.0	8.7	QD180/189-25-...D-...
QD-151-S2	○	15.1	8.7	
QD-152-S2	○	15.2	8.7	
QD-153-S2	○	15.3	8.7	
QD-154-S2	○	15.4	8.7	
QD-155-S2	○	15.5	8.7	
QD-156-S2	○	15.6	8.7	
QD-157-S2	○	15.7	8.7	QD190/199-25-...D-...
QD-158-S2	○	15.8	8.7	
QD-159-S2	○	15.9	8.7	
QD-160-S2	○	16.0	9.3	
QD-161-S2	○	16.1	9.3	
QD-162-S2	○	16.2	9.3	
QD-163-S2	○	16.3	9.3	
QD-164-S2	○	16.4	9.3	QD200/209-25-...D-...
QD-165-S2	○	16.5	9.3	
QD-166-S2	○	16.6	9.3	
QD-167-S2	○	16.7	9.3	
QD-168-S2	○	16.8	9.3	
QD-169-S2	○	16.9	9.3	
QD-170-S2	○	17.0	9.9	
QD-171-S2	○	17.1	9.9	QD210/219-25-...D-...
QD-172-S2	○	17.2	9.9	
QD-173-S2	○	17.3	9.9	
QD-174-S2	○	17.4	9.9	
QD-175-S2	○	17.5	9.9	
QD-176-S2	○	17.6	9.9	
QD-177-S2	○	17.7	9.9	
QD-178-S2	○	17.8	9.9	QD220/229-25-...D-...
QD-179-S2	○	17.9	9.9	

●标准库存Standard inventory ○订单生产Order production

注：S2钻头适用于灰口铸铁、球墨铸铁等钻孔。
Recommend S2 cutting head to be used for grey iron cost, nodular cast iron

QD...S2标准钻头S2型
QD... S2 Standard Drilling Head S2



型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-180-S2	○	18.0	10.5	QD180/189-25-...D-...
QD-181-S2	○	18.1	10.5	
QD-182-S2	○	18.2	10.5	
QD-183-S2	○	18.3	10.5	
QD-184-S2	○	18.4	10.5	
QD-185-S2	○	18.5	10.5	
QD-186-S2	○	18.6	10.5	
QD-187-S2	○	18.7	10.5	
QD-188-S2	○	18.8	10.5	
QD-189-S2	○	18.9	10.5	
QD-190-S2	○	19.0	11.0	QD190/199-25-...D-...
QD-191-S2	○	19.1	11.0	
QD-192-S2	○	19.2	11.0	
QD-193-S2	○	19.3	11.0	
QD-194-S2	○	19.4	11.0	
QD-195-S2	○	19.5	11.0	
QD-196-S2	○	19.6	11.0	
QD-197-S2	○	19.7	11.0	
QD-198-S2	○	19.8	11.0	
QD-199-S2	○	19.9	11.0	
QD-200-S2	○	20.0	11.6	QD200/209-25-...D-...
QD-201-S2	○	20.1	11.6	
QD-202-S2	○	20.2	11.6	
QD-203-S2	○	20.3	11.6	
QD-204-S2	○	20.4	11.6	
QD-205-S2	○	20.5	11.6	
QD-206-S2	○	20.6	11.6	
QD-207-S2	○	20.7	11.6	
QD-208-S2	○	20.8	11.6	
QD-209-S2	○	20.9	11.6	
QD-210-S2	○	21.0	12.1	QD210/219-25-...D-...
QD-211-S2	○	21.1	12.1	
QD-212-S2	○	21.2	12.1	
QD-213-S2	○	21.3	12.1	
QD-214-S2	○	21.4	12.1	
QD-215-S2	○	21.5	12.1	
QD-216-S2	○	21.6	12.1	
QD-217-S2	○	21.7	12.1	
QD-218-S2	○	21.8	12.1	
QD-219-S2	○	21.9	12.1	

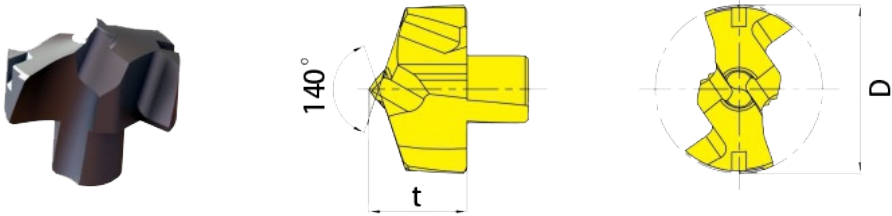
●标准库存Standard inventory ○订单生产Order production

型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-220-S2	○	22.0	12.7	QD220/229-25-...D-...
QD-221-S2	○	22.1	12.7	
QD-222-S2	○	22.2	12.7	
QD-223-S2	○	22.3	12.7	
QD-224-S2	○	22.4	12.7	
QD-225-S2	○	22.5	12.7	
QD-226-S2	○	22.6	12.7	
QD-227-S2	○	22.7	12.7	
QD-228-S2	○	22.8	12.7	
QD-229-S2	○	22.9	12.7	
QD-230-S2	○	23.0	13.3	QD230/239-32-...D-...
QD-231-S2	○	23.1	13.3	
QD-232-S2	○	23.2	13.3	
QD-233-S2	○	23.3	13.3	
QD-234-S2	○	23.4	13.3	
QD-235-S2	○	23.5	13.3	
QD-236-S2	○	23.6	13.3	
QD-237-S2	○	23.7	13.3	
QD-238-S2	○	23.8	13.3	
QD-239-S2	○	23.9	13.3	
QD-240-S2	○	24.0	13.9	QD240/249-32-...D-...
QD-241-S2	○	24.1	13.9	
QD-242-S2	○	24.2	13.9	
QD-243-S2	○	24.3	13.9	
QD-244-S2	○	24.4	13.9	
QD-245-S2	○	24.5	13.9	
QD-246-S2	○	24.6	13.9	
QD-247-S2	○	24.7	13.9	
QD-248-S2	○	24.8	13.9	
QD-249-S2	○	24.9	13.9	
QD-250-S2	○	25.0	14.5	QD250/260-32-...D-...
QD-251-S2	○	25.1	14.5	
QD-252-S2	○	25.2	14.5	
QD-253-S2	○	25.3	14.5	
QD-254-S2	○	25.4	14.5	
QD-255-S2	○	25.5	14.5	
QD-256-S2	○	25.6	14.5	
QD-257-S2	○	25.7	14.5	
QD-258-S2	○	25.8	14.5	
QD-259-S2	○	25.9	14.5	
QD-260-S2	○	26.0	14.5	

●标准库存Standard inventory ○订单生产Order production

注：S2钻头适用于灰口铸铁、球墨铸铁等钻孔。
Recommend S2 cutting head to be used for grey iron cost, nodular cast iron

QD...R1特种钻头R1型
QD... R1 Special Drilling Head R1



型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-080-R1	○	8.0	5.4	QD080/089-12-...D-...
QD-081-R1	○	8.1	5.4	
QD-082-R1	○	8.2	5.4	
QD-083-R1	○	8.3	5.4	
QD-084-R1	○	8.4	5.4	
QD-085-R1	○	8.5	5.4	
QD-086-R1	○	8.6	5.4	
QD-087-R1	○	8.7	5.4	
QD-088-R1	○	8.8	5.4	
QD-089-R1	○	8.9	5.4	
QD-090-R1	○	9.0	5.8	QD090/099-12-...D-...
QD-091-R1	○	9.1	5.8	
QD-092-R1	○	9.2	5.8	
QD-093-R1	○	9.3	5.8	
QD-094-R1	○	9.4	5.8	
QD-095-R1	○	9.5	5.8	
QD-096-R1	○	9.6	5.8	
QD-097-R1	○	9.7	5.8	
QD-098-R1	○	9.8	5.8	
QD-099-R1	○	9.9	5.8	
QD-100-R1	○	10.0	6.2	QD100/109-16-...D-...
QD-101-R1	○	10.1	6.2	
QD-102-R1	○	10.2	6.2	
QD-103-R1	○	10.3	6.2	
QD-104-R1	○	10.4	6.2	
QD-105-R1	○	10.5	6.2	
QD-106-R1	○	10.6	6.2	
QD-107-R1	○	10.7	6.2	
QD-108-R1	○	10.8	6.2	
QD-109-R1	○	10.9	6.2	
QD-110-R1	○	11.0	6.6	QD110/119-16-...D-...
QD-111-R1	○	11.1	6.6	
QD-112-R1	○	11.2	6.6	
QD-113-R1	○	11.3	6.6	
QD-114-R1	○	11.4	6.6	
QD-115-R1	○	11.5	6.6	
QD-116-R1	○	11.6	6.6	
QD-117-R1	○	11.7	6.6	
QD-118-R1	○	11.8	6.6	
QD-119-R1	○	11.9	6.6	
QD-120-R1	○	12.0	7.0	QD120/129-16-...D-...
QD-121-R1	○	12.1	7.0	
QD-122-R1	○	12.2	7.0	
QD-123-R1	○	12.3	7.0	
QD-124-R1	○	12.4	7.0	
QD-125-R1	○	12.5	7.0	
QD-126-R1	○	12.6	7.0	
QD-127-R1	○	12.7	7.0	
QD-128-R1	○	12.8	7.0	
QD-129-R1	○	12.9	7.0	

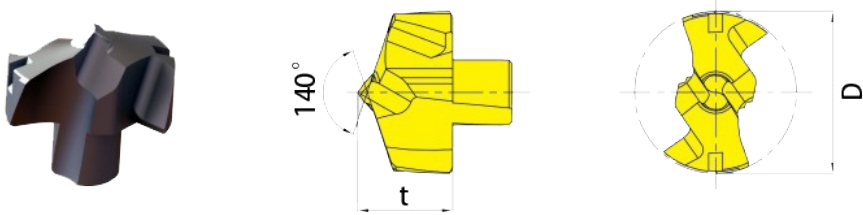
●标准库存Standard inventory ○订单生产Order production

型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-130-R1	○	13.0	7.6	QD130/139-16-...D-...
QD-131-R1	○	13.1	7.6	
QD-132-R1	○	13.2	7.6	
QD-133-R1	○	13.3	7.6	
QD-134-R1	○	13.4	7.6	
QD-135-R1	○	13.5	7.6	
QD-136-R1	○	13.6	7.6	
QD-137-R1	○	13.7	7.6	
QD-138-R1	○	13.8	7.6	
QD-139-R1	○	13.9	7.6	
QD-140-R1	○	14.0	8.1	QD140/149-12-...D-...
QD-141-R1	○	14.1	8.1	
QD-142-R1	○	14.2	8.1	
QD-143-R1	○	14.3	8.1	
QD-144-R1	○	14.4	8.1	
QD-145-R1	○	14.5	8.1	
QD-146-R1	○	14.6	8.1	
QD-147-R1	○	14.7	8.1	
QD-148-R1	○	14.8	8.1	
QD-149-R1	○	14.9	8.1	
QD-150-R1	○	15.0	8.7	QD150/159-20-...D-...
QD-151-R1	○	15.1	8.7	
QD-152-R1	○	15.2	8.7	
QD-153-R1	○	15.3	8.7	
QD-154-R1	○	15.4	8.7	
QD-155-R1	○	15.5	8.7	
QD-156-R1	○	15.6	8.7	
QD-157-R1	○	15.7	8.7	
QD-158-R1	○	15.8	8.7	
QD-159-R1	○	15.9	8.7	
QD-160-R1	○	16.0	9.3	QD160/169-20-...D-...
QD-161-R1	○	16.1	9.3	
QD-162-R1	○	16.2	9.3	
QD-163-R1	○	16.3	9.3	
QD-164-R1	○	16.4	9.3	
QD-165-R1	○	16.5	9.3	
QD-166-R1	○	16.6	9.3	
QD-167-R1	○	16.7	9.3	
QD-168-R1	○	16.8	9.3	
QD-169-R1	○	16.9	9.3	
QD-170-R1	○	17.0	9.9	QD170/179-20-...D-...
QD-171-R1	○	17.1	9.9	
QD-172-R1	○	17.2	9.9	
QD-173-R1	○	17.3	9.9	
QD-174-R1	○	17.4	9.9	
QD-175-R1	○	17.5	9.9	
QD-176-R1	○	17.6	9.9	
QD-177-R1	○	17.7	9.9	
QD-178-R1	○	17.8	9.9	
QD-179-R1	○	17.9	9.9	

●标准库存Standard inventory ○订单生产Order production

注：R1钻头具有定心功能，轴向钻削力较小，5D以上钻孔更具优势，尖适用于中高碳钢、合金钢等钻孔
R1 cutting head can drill with self-centering and less drill force and it's more advantages can be relected with drilling middle & high carbon ally steel ets (espccially for more than 5D)

QD...R1特种钻尖R1型
QD... R1 Special Drilling Head R1



型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-180-R1	○	18.0	10.5	QD180/189-25-...D-...
QD-181-R1	○	18.1	10.5	
QD-182-R1	○	18.2	10.5	
QD-183-R1	○	18.3	10.5	
QD-184-R1	○	18.4	10.5	
QD-185-R1	○	18.5	10.5	
QD-186-R1	○	18.6	10.5	
QD-187-R1	○	18.7	10.5	
QD-188-R1	○	18.8	10.5	
QD-189-R1	○	18.9	10.5	
QD-190-R1	○	19.0	11.0	QD190/199-25-...D-...
QD-191-R1	○	19.1	11.0	
QD-192-R1	○	19.2	11.0	
QD-193-R1	○	19.3	11.0	
QD-194-R1	○	19.4	11.0	
QD-195-R1	○	19.5	11.0	
QD-196-R1	○	19.6	11.0	
QD-197-R1	○	19.7	11.0	
QD-198-R1	○	19.8	11.0	
QD-199-R1	○	19.9	11.0	
QD-200-R1	○	20.0	11.6	QD200/209-25-...D-...
QD-201-R1	○	20.1	11.6	
QD-202-R1	○	20.2	11.6	
QD-203-R1	○	20.3	11.6	
QD-204-R1	○	20.4	11.6	
QD-205-R1	○	20.5	11.6	
QD-206-R1	○	20.6	11.6	
QD-207-R1	○	20.7	11.6	
QD-208-R1	○	20.8	11.6	
QD-209-R1	○	20.9	11.6	
QD-210-R1	○	21.0	12.1	QD210/219-25-...D-...
QD-211-R1	○	21.1	12.1	
QD-212-R1	○	21.2	12.1	
QD-213-R1	○	21.3	12.1	
QD-214-R1	○	21.4	12.1	
QD-215-R1	○	21.5	12.1	
QD-216-R1	○	21.6	12.1	
QD-217-R1	○	21.7	12.1	
QD-218-R1	○	21.8	12.1	
QD-219-R1	○	21.9	12.1	

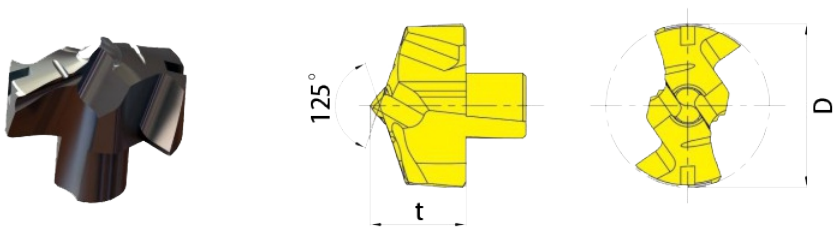
●标准库存Standard inventory ○订单生产Order production

型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-220-R1	○	22.0	12.7	QD220/229-25-...D-...
QD-221-R1	○	22.1	12.7	
QD-222-R1	○	22.2	12.7	
QD-223-R1	○	22.3	12.7	
QD-224-R1	○	22.4	12.7	
QD-225-R1	○	22.5	12.7	
QD-226-R1	○	22.6	12.7	
QD-227-R1	○	22.7	12.7	
QD-228-R1	○	22.8	12.7	
QD-229-R1	○	22.9	12.7	
QD-230-R1	○	23.0	13.3	QD230/239-32-...D-...
QD-231-R1	○	23.1	13.3	
QD-232-R1	○	23.2	13.3	
QD-233-R1	○	23.3	13.3	
QD-234-R1	○	23.4	13.3	
QD-235-R1	○	23.5	13.3	
QD-236-R1	○	23.6	13.3	
QD-237-R1	○	23.7	13.3	
QD-238-R1	○	23.8	13.3	
QD-239-R1	○	23.9	13.3	
QD-240-R1	○	24.0	13.9	QD240/249-32-...D-...
QD-241-R1	○	24.1	13.9	
QD-242-R1	○	24.2	13.9	
QD-243-R1	○	24.3	13.9	
QD-244-R1	○	24.4	13.9	
QD-245-R1	○	24.5	13.9	
QD-246-R1	○	24.6	13.9	
QD-247-R1	○	24.7	13.9	
QD-248-R1	○	24.8	13.9	
QD-249-R1	○	24.9	13.9	
QD-250-R1	○	25.0	14.5	QD250/260-32-...D-...
QD-251-R1	○	25.1	14.5	
QD-252-R1	○	25.2	14.5	
QD-253-R1	○	25.3	14.5	
QD-254-R1	○	25.4	14.5	
QD-255-R1	○	25.5	14.5	
QD-256-R1	○	25.6	14.5	
QD-257-R1	○	25.7	14.5	
QD-258-R1	○	25.8	14.5	
QD-259-R1	○	25.9	14.5	
QD-260-R1	○	26.0	14.5	

●标准库存Standard inventory ○订单生产Order production

注：R1钻尖具有定心功能，轴向钻削力较小，5D以上钻孔更具优势，尖适用于中高碳钢、合金钢等钻孔
R1 cutting head can drill with self-centering and less drill force and it's more advantages can be reflected with drilling middle & high carbon ally steel ets (espacialy for more than 5D)

QD...R2特种钻尖R2型
QD... R2 Special Drilling Head R2



型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-080-R2	○	8.0	5.4	QD080/089-12-...D-...
QD-081-R2	○	8.1	5.4	
QD-082-R2	○	8.2	5.4	
QD-083-R2	○	8.3	5.4	
QD-084-R2	○	8.4	5.4	
QD-085-R2	○	8.5	5.4	
QD-086-R2	○	8.6	5.4	
QD-087-R2	○	8.7	5.4	
QD-088-R2	○	8.8	5.4	
QD-089-R2	○	8.9	5.4	
QD-090-R2	○	9.0	5.8	QD090/099-12-...D-...
QD-091-R2	○	9.1	5.8	
QD-092-R2	○	9.2	5.8	
QD-093-R2	○	9.3	5.8	
QD-094-R2	○	9.4	5.8	
QD-095-R2	○	9.5	5.8	
QD-096-R2	○	9.6	5.8	
QD-097-R2	○	9.7	5.8	
QD-098-R2	○	9.8	5.8	
QD-099-R2	○	9.9	5.8	
QD-100-R2	○	10.0	6.2	QD100/109-16-...D-...
QD-101-R2	○	10.1	6.2	
QD-102-R2	○	10.2	6.2	
QD-103-R2	○	10.3	6.2	
QD-104-R2	○	10.4	6.2	
QD-105-R2	○	10.5	6.2	
QD-106-R2	○	10.6	6.2	
QD-107-R2	○	10.7	6.2	
QD-108-R2	○	10.8	6.2	
QD-109-R2	○	10.9	6.2	
QD-110-R2	○	11.0	6.6	QD110/119-16-...D-...
QD-111-R2	○	11.1	6.6	
QD-112-R2	○	11.2	6.6	
QD-113-R2	○	11.3	6.6	
QD-114-R2	○	11.4	6.6	
QD-115-R2	○	11.5	6.6	
QD-116-R2	○	11.6	6.6	
QD-117-R2	○	11.7	6.6	
QD-118-R2	○	11.8	6.6	
QD-119-R2	○	11.9	6.6	
QD-120-R2	○	12.0	7.0	QD120/129-16-...D-...
QD-121-R2	○	12.1	7.0	
QD-122-R2	○	12.2	7.0	
QD-123-R2	○	12.3	7.0	
QD-124-R2	○	12.4	7.0	
QD-125-R2	○	12.5	7.0	
QD-126-R2	○	12.6	7.0	
QD-127-R2	○	12.7	7.0	
QD-128-R2	○	12.8	7.0	
QD-129-R2	○	12.9	7.0	

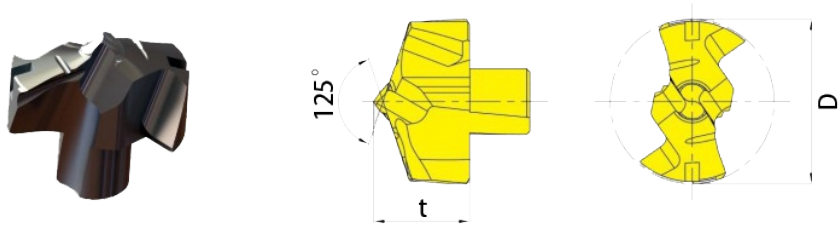
●标准库存Standard inventory ○订单生产Order production

型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-130-R2	○	13.0	7.6	QD130/139-16-...D-...
QD-131-R2	○	13.1	7.6	
QD-132-R2	○	13.2	7.6	
QD-133-R2	○	13.3	7.6	
QD-134-R2	○	13.4	7.6	
QD-135-R2	○	13.5	7.6	
QD-136-R2	○	13.6	7.6	
QD-137-R2	○	13.7	7.6	
QD-138-R2	○	13.8	7.6	
QD-139-R2	○	13.9	7.6	
QD-140-R2	○	14.0	8.1	QD140/149-12-...D-...
QD-141-R2	○	14.1	8.1	
QD-142-R2	○	14.2	8.1	
QD-143-R2	○	14.3	8.1	
QD-144-R2	○	14.4	8.1	
QD-145-R2	○	14.5	8.1	
QD-146-R2	○	14.6	8.1	
QD-147-R2	○	14.7	8.1	
QD-148-R2	○	14.8	8.1	
QD-149-R2	○	14.9	8.1	
QD-150-R2	○	15.0	8.7	QD150/159-20-...D-...
QD-151-R2	○	15.1	8.7	
QD-152-R2	○	15.2	8.7	
QD-153-R2	○	15.3	8.7	
QD-154-R2	○	15.4	8.7	
QD-155-R2	○	15.5	8.7	
QD-156-R2	○	15.6	8.7	
QD-157-R2	○	15.7	8.7	
QD-158-R2	○	15.8	8.7	
QD-159-R2	○	15.9	8.7	
QD-160-R2	○	16.0	9.3	QD160/169-20-...D-...
QD-161-R2	○	16.1	9.3	
QD-162-R2	○	16.2	9.3	
QD-163-R2	○	16.3	9.3	
QD-164-R2	○	16.4	9.3	
QD-165-R2	○	16.5	9.3	
QD-166-R2	○	16.6	9.3	
QD-167-R2	○	16.7	9.3	
QD-168-R2	○	16.8	9.3	
QD-169-R2	○	16.9	9.3	
QD-170-R2	○	17.0	9.9	QD170/179-20-...D-...
QD-171-R2	○	17.1	9.9	
QD-172-R2	○	17.2	9.9	
QD-173-R2	○	17.3	9.9	
QD-174-R2	○	17.4	9.9	
QD-175-R2	○	17.5	9.9	
QD-176-R2	○	17.6	9.9	
QD-177-R2	○	17.7	9.9	
QD-178-R2	○	17.8	9.9	
QD-179-R2	○	17.9	9.9	

●标准库存Standard inventory ○订单生产Order production

注：R2钻尖具有定心功能，轴向钻削力较小，适用于不锈钢、钛合金、镍基合金、锰钢等、以及较软不易断屑的材料钻孔
R2 Cutting head can drill with self-centering and less drill force, it can be used for stainless steel ,titanium , nickelbase alloys, Mn steel etc.and other materials not to be broken easily .

QD...R1特种钻尖R1型
QD... R1 Special Drilling Head R1



型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-180-R2	○	18.0	10.5	QD180/189-25...D-..
QD-181-R2	○	18.1	10.5	
QD-182-R2	○	18.2	10.5	
QD-183-R2	○	18.3	10.5	
QD-184-R2	○	18.4	10.5	
QD-185-R2	○	18.5	10.5	
QD-186-R2	○	18.6	10.5	
QD-187-R2	○	18.7	10.5	
QD-188-R2	○	18.8	10.5	
QD-189-R2	○	18.9	10.5	
QD-190-R2	○	19.0	11.0	QD190/199-25...D-..
QD-191-R2	○	19.1	11.0	
QD-192-R2	○	19.2	11.0	
QD-193-R2	○	19.3	11.0	
QD-194-R2	○	19.4	11.0	
QD-195-R2	○	19.5	11.0	
QD-196-R2	○	19.6	11.0	
QD-197-R2	○	19.7	11.0	
QD-198-R2	○	19.8	11.0	
QD-199-R2	○	19.9	11.0	
QD-200-R2	○	20.0	11.6	QD200/209-25...D-..
QD-201-R2	○	20.1	11.6	
QD-202-R2	○	20.2	11.6	
QD-203-R2	○	20.3	11.6	
QD-204-R2	○	20.4	11.6	
QD-205-R2	○	20.5	11.6	
QD-206-R2	○	20.6	11.6	
QD-207-R2	○	20.7	11.6	
QD-208-R2	○	20.8	11.6	
QD-209-R2	○	20.9	11.6	
QD-210-R2	○	21.0	12.1	QD210/219-25...D-..
QD-211-R2	○	21.1	12.1	
QD-212-R2	○	21.2	12.1	
QD-213-R2	○	21.3	12.1	
QD-214-R2	○	21.4	12.1	
QD-215-R2	○	21.5	12.1	
QD-216-R2	○	21.6	12.1	
QD-217-R2	○	21.7	12.1	
QD-218-R2	○	21.8	12.1	
QD-219-R2	○	21.9	12.1	

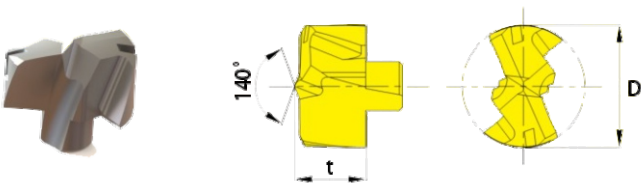
●标准库存Standard inventory ○订单生产Order production

型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-220-R2	○	22.0	12.7	QD220/229-25...D-..
QD-221-R2	○	22.1	12.7	
QD-222-R2	○	22.2	12.7	
QD-223-R2	○	22.3	12.7	
QD-224-R2	○	22.4	12.7	
QD-225-R2	○	22.5	12.7	
QD-226-R2	○	22.6	12.7	
QD-227-R2	○	22.7	12.7	
QD-228-R2	○	22.8	12.7	
QD-229-R2	○	22.9	12.7	
QD-230-R2	○	23.0	13.3	QD230/239-32...D-..
QD-231-R2	○	23.1	13.3	
QD-232-R2	○	23.2	13.3	
QD-233-R2	○	23.3	13.3	
QD-234-R2	○	23.4	13.3	
QD-235-R2	○	23.5	13.3	
QD-236-R2	○	23.6	13.3	
QD-237-R2	○	23.7	13.3	
QD-238-R2	○	23.8	13.3	
QD-239-R2	○	23.9	13.3	
QD-240-R2	○	24.0	13.9	QD240/249-32...D-..
QD-241-R2	○	24.1	13.9	
QD-242-R2	○	24.2	13.9	
QD-243-R2	○	24.3	13.9	
QD-244-R2	○	24.4	13.9	
QD-245-R2	○	24.5	13.9	
QD-246-R2	○	24.6	13.9	
QD-247-R2	○	24.7	13.9	
QD-248-R2	○	24.8	13.9	
QD-249-R2	○	24.9	13.9	
QD-250-R2	○	25.0	14.5	QD250/260-32...D-..
QD-251-R2	○	25.1	14.5	
QD-252-R2	○	25.2	14.5	
QD-253-R2	○	25.3	14.5	
QD-254-R2	○	25.4	14.5	
QD-255-R2	○	25.5	14.5	
QD-256-R2	○	25.6	14.5	
QD-257-R2	○	25.7	14.5	
QD-258-R2	○	25.8	14.5	
QD-259-R2	○	25.9	14.5	
QD-260-R2	○	26.0	14.5	

●标准库存Standard inventory ○订单生产Order production

注：R2钻尖具有定心功能，轴向钻削力较小，适用于不锈钢、钛合金、镍基合金、锰钢等、以及较软不易断屑的材料钻孔
R2 Cutting head can drill with self-centering and less drill force, it can be used for stainless steel ,titanium , nickelbase alloys, Mn steel etc.and other materials not to be broken easily .

QD...F 平底钻尖F型
QD...F Flat Drilling Head F

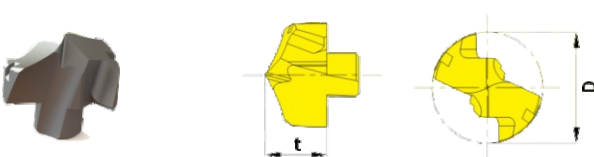


型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-080-F	○	8.0	4.0	QD080-089-12...D-..
QD-085-F	○	8.5	4.0	
QD-090-F	○	9.0	4.2	QD090-099-12...D-..
QD-095-F	○	9.5	4.2	
QD-100-F	○	10.0	4.4	QD100-109-16...D-..
QD-105-F	○	10.5	4.4	
QD-110-F	○	11.0	4.5	QD110-119-16...D-..
QD-115-F	○	11.5	4.5	
QD-120-F	○	12.0	4.8	QD120-129-16...D-..
QD-125-F	○	12.5	4.8	
QD-130-F	○	13.0	5.1	QD130-139-16...D-..
QD-135-F	○	13.5	5.1	
QD-140-F	○	14.0	5.5	QD140-149-16...D-..
QD-145-F	○	14.5	5.5	
QD-150-F	○	15.0	5.9	QD150-159-20...D-..
QD-155-F	○	15.5	5.9	
QD-160-F	○	16.0	6.3	QD160-169-20...D-..
QD-165-F	○	16.5	6.3	
QD-170-F	○	17.0	6.6	QD170-179-20...D-..
QD-175-F	○	17.5	6.6	
QD-180-F	○	18.0	6.9	QD180-189-25...D-..
QD-185-F	○	18.5	6.9	
QD-190-F	○	19.0	7.2	QD190-199-25...D-..
QD-195-F	○	19.5	7.2	
QD-200-F	○	20.0	8.2	QD200-209-25...D-..
QD-205-F	○	20.5	8.2	
QD-210-F	○	21.0	8.6	QD210-219-25...D-..
QD-215-F	○	21.5	8.6	
QD-220-F	○	22.0	8.9	QD220-229-25...D-..
QD-225-F	○	22.5	8.9	
QD-230-F	○	23.0	9.3	QD230-239-32...D-..
QD-235-F	○	23.5	9.3	
QD-240-F	○	24.0	9.7	QD240-249-32...D-..
QD-245-F	○	24.5	9.7	
QD-250-F	○	25.0	10.1	QD250-260-32...D-..
QD-255-F	○	25.5	10.1	
QD-260-F	○	26.0	10.1	

●标准库存Standard inventory ○订单生产Order production

注：F平底钻尖;具有需要铈平的普通钢材盲孔加工，不推荐用于难加工材料直接钻孔
F flat cutting head can be used for drilling blind flat holes of common material holes ,but isn't recommended in drilling difficult-to-machine materials

QD...C 定心钻尖C型
QD...C Centering Drilling Head C



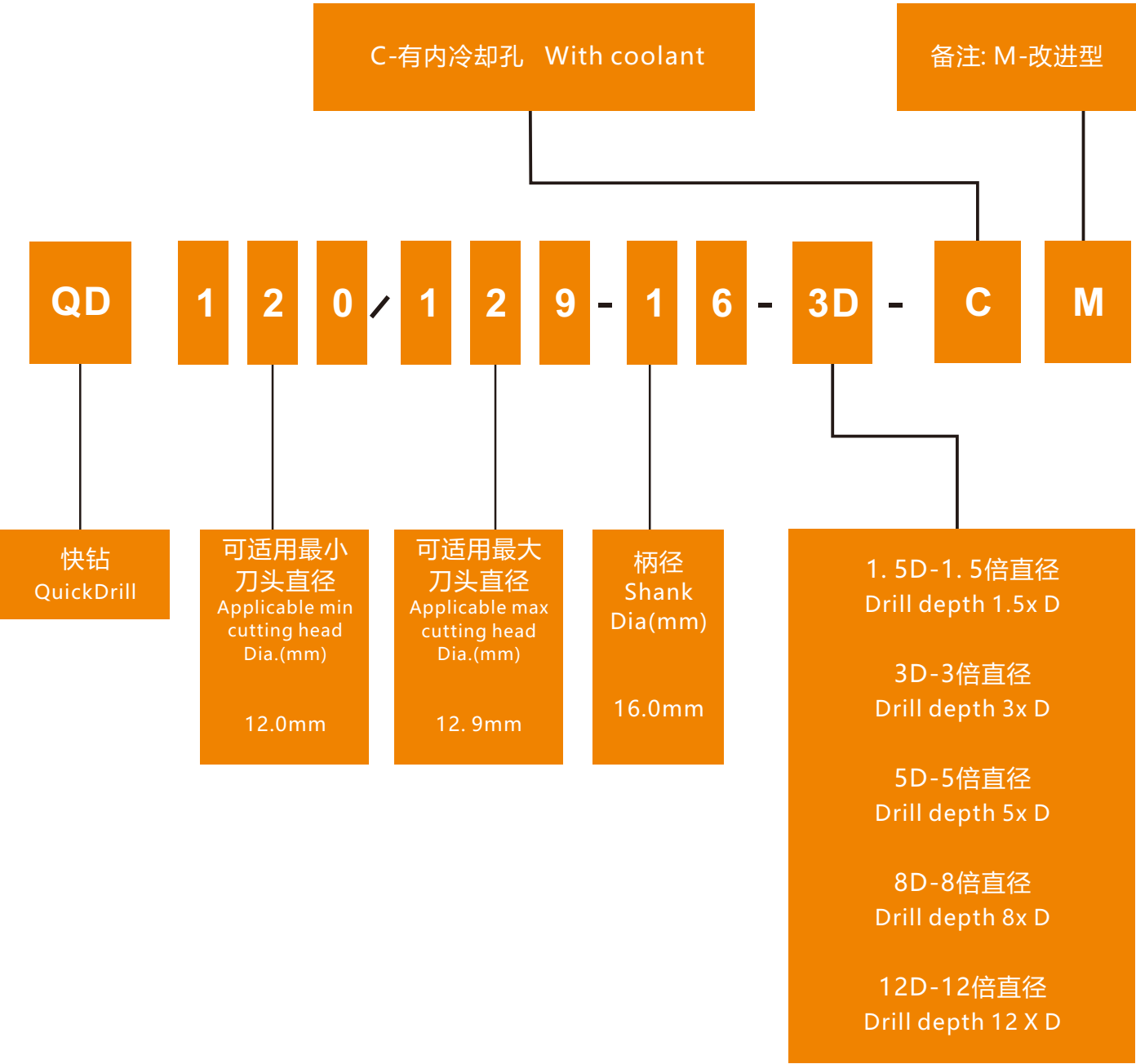
型号 Model	库存 Stock	尺寸 Dimensions(mm)		刀体 Tool holders
		D	t	
QD-080-C	○	8.0	5.4	QD080-089-12...D-..
QD-085-C	○	8.5	5.4	
QD-090-C	○	9.0	5.8	QD090-099-12...D-..
QD-095-C	○	9.5	5.8	
QD-100-C	○	10.0	6.2	QD100-109-16...D-..
QD-105-C	○	10.5	6.2	
QD-110-C	○	11.0	6.6	QD110-119-16...D-..
QD-115-C	○	11.5	6.6	
QD-120-C	○	12.0	7.0	QD120-129-16...D-..
QD-125-C	○	12.5	7.0	
QD-130-C	○	13.0	7.6	QD130-139-16...D-..
QD-135-C	○	13.5	7.6	
QD-140-C	○	14.0	8.2	QD140-149-16...D-..
QD-145-C	○	14.5	8.2	
QD-150-C	○	15.0	8.7	QD150-159-20...D-..
QD-155-C	○	15.5	8.7	
QD-160-C	○	16.0	9.3	QD160-169-20...D-..
QD-165-C	○	16.5	9.3	
QD-170-C	○	17.0	9.9	QD170-179-20...D-..
QD-175-C	○	17.5	9.9	
QD-180-C	○	18.0	10.5	QD180-189-25...D-..
QD-185-C	○	18.5	10.5	
QD-190-C	○	19.0	11.0	QD190-199-25...D-..
QD-195-C	○	19.5	11.0	
QD-200-C	○	20.0	11.6	QD200-209-25...D-..
QD-205-C	○	20.5	11.6	
QD-210-C	○	21.0	12.2	QD210-219-25...D-..
QD-215-C	○	21.5	12.2	
QD-220-C	○	22.0	12.8	QD220-229-25...D-..
QD-225-C	○	22.5	12.8	
QD-230-C	○	23.0	13.3	QD230-239-32...D-..
QD-235-C	○	23.5	13.3	
QD-240-C	○	24.0	13.9	QD240-249-32...D-..
QD-245-C	○	24.5	13.9	
QD-250-C	○	25.0	14.5	QD250-260-32...D-..
QD-255-C	○	25.5	14.5	
QD-260-C	○	26.0	14.5	

●标准库存Standard inventory ○订单生产Order production

注：C定心钻尖;具有良好的定心功能的定心钻尖，适用于普通钢材的直接钻孔，不推荐用于难加工材料的钻孔
C self-centering cutting head can be used with excellent centering performance in drilling common metal materials but isn't recommended for drilling difficult-to-machine materials

自锁式可换式快钻刀体编码系统

Locking Exchangeable Drilling Toolholder Ordering Code system



QD...1.5D-C 快钻刀体

QD...1.5D-C Drilling Toolholder

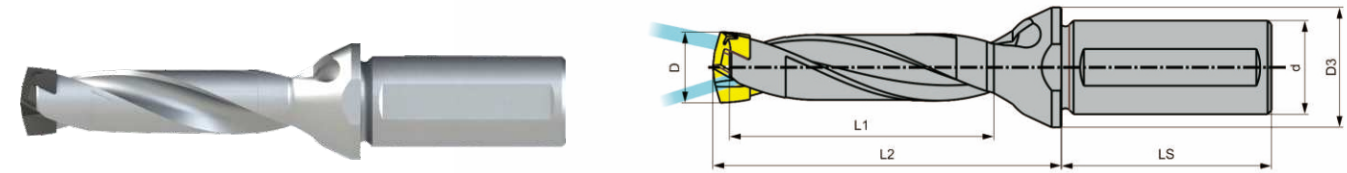


型号 Model	库存 Stock	刀头直径范围 Applicable cutting head Dia.(mm)		d	D3	尺寸 Dimensions(mm)			锁紧钥匙 Wrench
						L1	Ls	D	
QD080/089-12-1.5D-CM	○	8.0~8.9		12	16	16	45	7.8	8-11.9
QD090/099-12-1.5D-CM	○	9.0~9.9		12	16	18	45	8.8	
QD100/109-16-1.5D-CM	○	10.0~10.9		16	20	20	48	9.8	
QD110/119-16-1.5D-CM	○	11.0~11.9		16	20	22	48	10.8	12-16.9
QD120/129-16-1.5D-CM	○	12.0~12.9		16	20	24	48	11.8	
QD130/139-16-1.5D-CM	○	13.0~13.9		16	20	25	48	12.8	
QD140/149-16-1.5D-CM	○	14.0~14.9		16	20	27	48	13.8	17-20.9
QD150/159-20-1.5D-CM	○	15.0~15.9		20	25	29	50	14.8	
QD160/169-20-1.5D-CM	○	16.0~16.9		20	25	30	50	15.8	
QD170/179-20-1.5D-CM	○	17.0~17.9		20	25	32	50	16.8	21-26
QD180/189-25-1.5D-CM	○	18.0~18.9		25	32	34	56	17.8	
QD190/199-25-1.5D-CM	○	19.0~19.9		25	32	36	56	18.8	
QD200/209-25-1.5D-CM	○	20.0~20.9		25	32	38	56	19.8	21-26
QD210/219-25-1.5D-CM	○	21.0~21.9		25	32	40	56	20.8	
QD220/229-25-1.5D-CM	○	22.0~22.9		25	32	42	56	21.8	
QD230/239-32-1.5D-CM	○	23.0~23.9		32	42	43	60	22.8	21-26
QD240/249-32-1.5D-CM	○	24.0~24.9		32	42	45	60	23.8	
QD250/260-32-1.5D-CM	○	25.0~26.0		32	42	47	60	24.8	

●标准库存Standard inventory ○订单生产Order production

QD...3D-C 快钻刀体

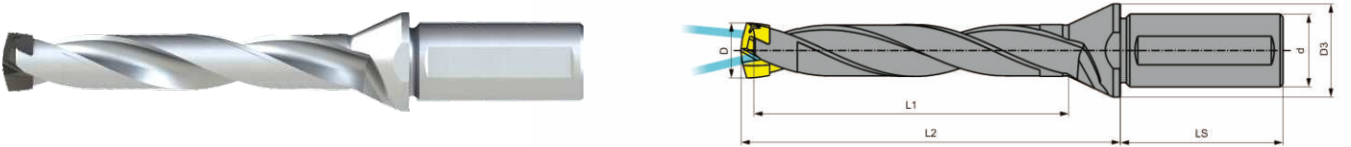
QD...3D-C Drilling Toolholder



型号 Model	库存 Stock	刀头直径范围 Applicable cutting head Dia.(mm)		d	D3	尺寸 Dimensions(mm)			锁紧钥匙 Wrench
						L1	Ls	D	
QD080/089-12-3D-CM	○	8.0~8.9		12	16	32	45	7.8	8-11.9
QD090/099-12-3D-CM	○	9.0~9.9		12	16	35	45	8.8	
QD100/109-16-3D-CM	○	10.0~10.9		16	20	39	48	9.8	
QD110/119-16-3D-CM	○	11.0~11.9		16	20	42	48	10.8	12-16.9
QD120/129-16-3D-CM	○	12.0~12.9		16	20	45	48	11.8	
QD130/139-16-3D-CM	○	13.0~13.9		16	20	49	48	12.8	
QD140/149-16-3D-CM	○	14.0~14.9		16	20	53	48	13.8	17-20.9
QD150/159-20-3D-CM	○	15.0~15.9		20	25	56	50	14.8	
QD160/169-20-3D-CM	○	16.0~16.9		20	25	60	50	15.8	
QD170/179-20-3D-CM	○	17.0~17.9		20	25	63	50	16.8	21-26
QD180/189-25-3D-CM	○	18.0~18.9		25	32	66	56	17.8	
QD190/199-25-3D-CM	○	19.0~19.9		25	32	70	56	18.8	
QD200/209-25-3D-CM	○	20.0~20.9		25	32	73	56	19.8	21-26
QD210/219-25-3D-CM	○	21.0~21.9		25	32	77	56	20.8	
QD220/229-25-3D-CM	○	22.0~22.9		25	32	80	56	21.8	
QD230/239-32-3D-CM	○	23.0~23.9		32	42	84	60	22.8	21-26
QD240/249-32-3D-CM	○	24.0~24.9		32	42	88	60	23.8	
QD250/260-32-3D-CM	○	25.0~26.0		32	42	91	60	24.8	

●标准库存Standard inventory ○订单生产Order production

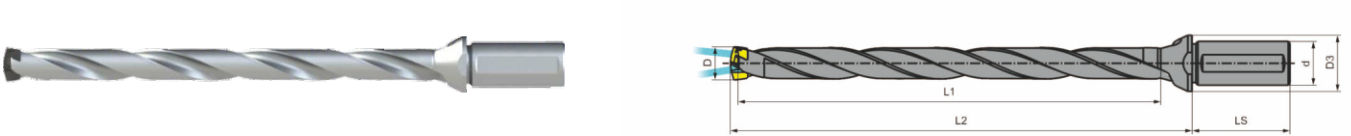
QD...5D-C 快钻刀体
QD...5D-C Drilling Toolholder



型号 Model	库存 Stock	刀头直径范围 Applicable cutting head Dia.(mm)		尺寸 Dimensions(mm)				锁紧钥匙 Wrench
				d	D3	L1	Ls	
QD080/089-12-5D-CM	○	8.0~8.9	12	16	50	45	7.8	8-11.9
QD090/099-12-5D-CM	○	9.0~9.9	12	16	55	45	8.8	
QD100/109-16-5D-CM	○	10.0~10.9	16	20	60	48	9.8	
QD110/119-16-5D-CM	○	11.0~11.9	16	20	66	48	10.8	
QD120/129-16-5D-CM	○	12.0~12.9	16	20	71	48	11.8	12-16.9
QD130/139-16-5D-CM	○	13.0~13.9	16	20	77	48	12.8	
QD140/149-16-5D-CM	○	14.0~14.9	16	20	82	48	13.8	
QD150/159-20-5D-CM	○	15.0~15.9	20	25	88	50	14.8	
QD160/169-20-5D-CM	○	16.0~16.9	20	25	93	50	15.8	17-20.9
QD170/179-20-5D-CM	○	17.0~17.9	20	25	99	50	16.8	
QD180/189-25-5D-CM	○	18.0~18.9	25	32	104	56	17.8	
QD190/199-25-5D-CM	○	19.0~19.9	25	32	110	56	18.8	
QD200/209-25-5D-CM	○	20.0~20.9	25	32	115	56	19.8	21-26
QD210/219-25-5D-CM	○	21.0~21.9	25	32	121	56	20.8	
QD220/229-25-5D-CM	○	22.0~22.9	25	32	126	56	21.8	
QD230/239-32-5D-CM	○	23.0~23.9	32	42	132	60	22.8	
QD240/249-32-5D-CM	○	24.0~24.9	32	42	137	60	23.8	
QD250/260-32-5D-CM	○	25.0~26.0	32	42	143	60	24.8	

●标准库存Standard inventory ○订单生产Order production

QD...12D-C 快钻刀体
QD...12D-C Drilling Toolholder



型号 Model	库存 Stock	刀头直径范围 Applicable cutting head Dia.(mm)		尺寸 Dimensions(mm)				锁紧钥匙 Wrench
				d	D3	L1	Ls	
QD120/129-16-12D-CM	○	12.0~12.9	16	20	162	48	11.6	12-16.9
QD130/139-16-12D-CM	○	13.0~13.9	16	20	175	48	12.6	
QD140/149-16-12D-CM	○	14.0~14.9	16	20	187	48	13.6	
QD150/159-20-12D-CM	○	15.0~15.9	20	20	200	50	14.6	
QD160/169-20-12D-CM	○	16.0~16.9	20	20	212	50	15.6	17-20.9
QD170/179-20-12D-CM	○	17.0~17.9	20	20	225	50	16.6	
QD180/189-25-12D-CM	○	18.0~18.9	25	32	237	56	17.6	
QD190/199-25-12D-CM	○	19.0~19.9	25	32	250	56	18.6	
QD200/209-25-12D-CM	○	20.0~20.9	25	32	262	56	19.6	21-26
QD210/219-25-12D-CM	○	21.0~21.9	25	32	275	56	20.6	
QD220/229-25-12D-CM	○	22.0~22.9	25	32	287	56	21.6	
QD230/239-32-12D-CM	○	23.0~23.9	32	42	300	56	22.6	
QD240/249-32-12D-CM	○	24.0~24.9	32	42	313	56	23.6	
QD250/260-32-12D-CM	○	25.0~26.0	32	42	325	56	24.6	

●标准库存Standard inventory ○订单生产Order production

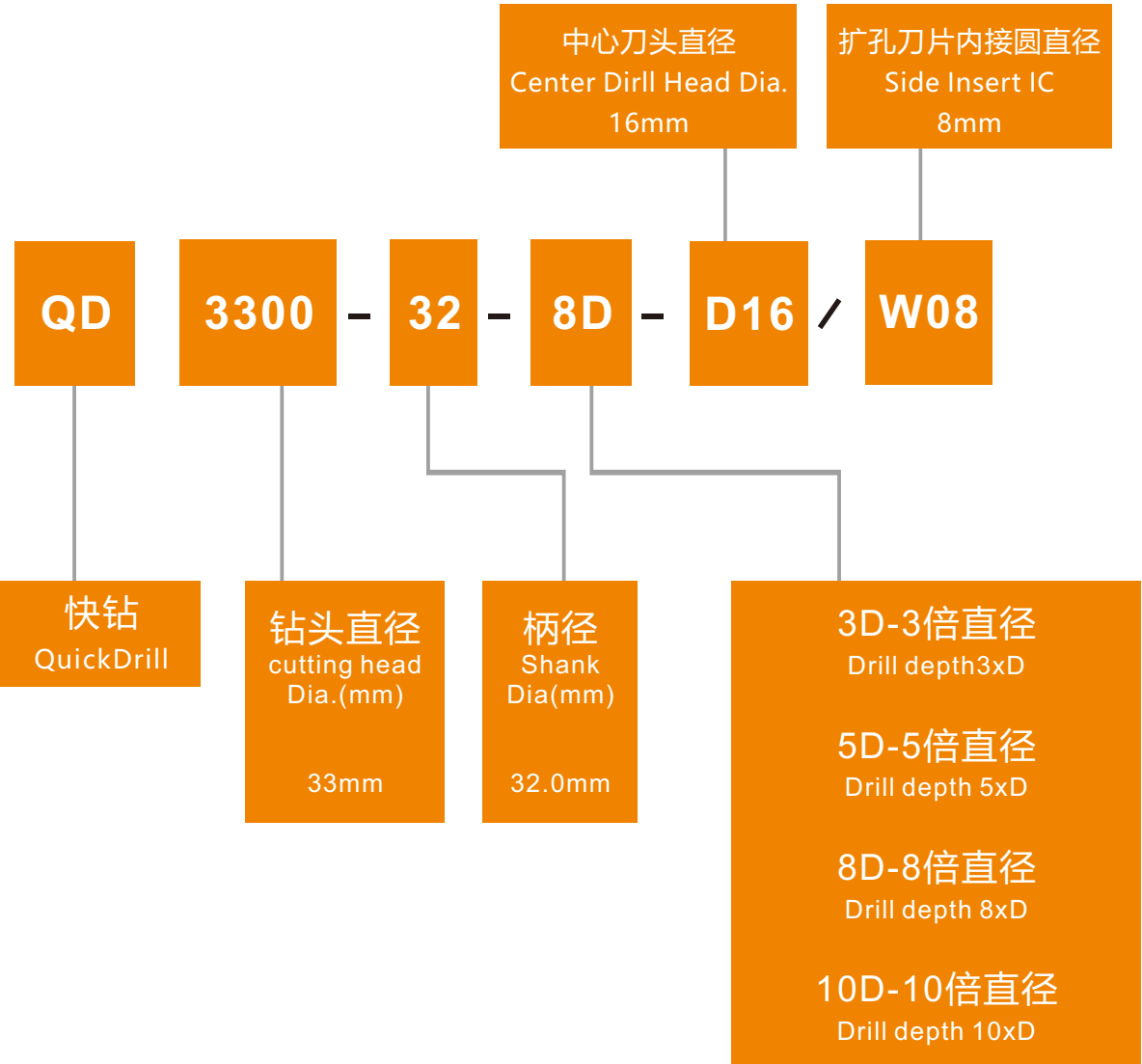
QD...8D-C 快钻刀体
QD...8D-C Drilling Toolholder



型号 Model	库存 Stock	刀头直径范围 Applicable cutting head Dia.(mm)		尺寸 Dimensions(mm)				锁紧钥匙 Wrench
				d	D3	L1	Ls	
QD080/089-12-8D-CM	○	8.0~8.9	12	16	76	45	7.8	8-11.9
QD090/099-12-8D-CM	○	9.0~9.9	12	16	85	45	8.8	
QD100/109-16-8D-CM	○	10.0~10.9	16	20	93	48	9.8	
QD110/119-16-8D-CM	○	11.0~11.9	16	20	102	48	10.8	
QD120/129-16-8D-CM	○	12.0~12.9	16	20	110	48	11.8	12-16.9
QD130/139-16-8D-CM	○	13.0~13.9	16	20	119	48	12.8	
QD140/149-16-8D-CM	○	14.0~14.9	16	20	127	48	13.8	
QD150/159-20-8D-CM	○	15.0~15.9	20	25	136	50	14.8	
QD160/169-20-8D-CM	○	16.0~16.9	20	25	144	50	15.8	17-20.9
QD170/179-20-8D-CM	○	17.0~17.9	20	25	153	50	16.8	
QD180/189-25-8D-CM	○	18.0~18.9	25	32	161	56	17.8	
QD190/199-25-8D-CM	○	19.0~19.9	25	32	170	56	18.8	
QD200/209-25-8D-CM	○	20.0~20.9	25	32	178	56	19.8	21-26
QD210/219-25-8D-CM	○	21.0~21.9	25	32	187	56	20.8	
QD220/229-25-8D-CM	○	22.0~22.9	25	32	195	56	21.8	
QD230/239-32-8D-CM	○	23.0~23.9	32	42	204	60	22.8	
QD240/249-32-8D-CM	○	24.0~24.9	32	42	212	60	23.8	
QD250/260-32-8D-CM	○	25.0~26.0	32	42	221	60	24.8	

●标准库存Standard inventory ○订单生产Order production

自锁式可换式快钻整体式复合刀体编码系统
Locking Exchangeable Solid Drill Toolholder Ordering Code System



QD...3D-C 快钻整体式复合刀体
QD...3D-C Solid Drilling Toolholder



型号 Model	库存 Stock	中心刀头 Center Drill head Dia	扩孔刀片x2 Side Insert x2	尺寸 Dimensions(mm)						D			
				d	L1	L2	Ls	mm	in				
QD2800-32-3D-D14/A04	○	QD-140-R1	AOMT040308	32	93	150	58	28	1.102	Key14-16	M2.5X8	T9	
QD2858-32-3D-D15/A04	○	QD-150-R1	AOMT040308	32	93	150	58	28.58	1.125				
QD2900-32-3D-D15/A04	○	QD-150-R1	AOMT040308	32	93	150	58	29	1.142				
QD2936-32-3D-D16/A04	○	QD-160-R1	AOMT040308	32	93	150	58	29.36	1.156				
QD3000-32-3D-D16/A04	○	QD-160-R1	AOMT040308	32	93	150	58	30	1.181	Key17-19	M3X10	T10	
QD3018-32-3D-D17/A04	○	QD-170-R1	AOMT040308	32	93	150	58	30.18	1.188				
QD3096-32-3D-D17/A04	○	QD-170-R1	AOMT040308	32	93	150	58	30.96	1.219				
QD3100-32-3D-D17/A04	○	QD-170-R1	AOMT040308	32	93	150	58	31	1.221				
QD3175-32-3D-D15/W08	○	QD-150-R1	WOMT080308	32	105	166	58	31.75	1.25	Key14-16	M4X12	T15	
QD3200-32-3D-D15/W08	○	QD-150-R1	WOMT080308	32	105	166	58	32	1.26				
QD3300-32-3D-D16/W08	○	QD-160-R1	WOMT080308	32	105	166	58	33	1.299				
QD3320-32-3D-D16/W08	○	QD-160-R1	WOMT080308	32	105	166	58	33.2	1.307				
QD3335-32-3D-D17/W08	○	QD-170-R1	WOMT080308	32	105	166	58	33.35	1.313	Key17-19			
QD3400-32-3D-D17/W08	○	QD-170-R1	WOMT080308	32	105	166	58	34	1.339				
QD3493-32-3D-D18/W08	○	QD-180-R1	WCMT080308	32	105	166	58	34.93	1.375				
QD3500-32-3D-D18/W08	○	QD-180-R1	WOMT080308	32	105	166	58	35	1.378				
QD3600-32-3D-D19/W08	○	QD-190-R1	WOMT080308	32	117	186	58	36	1.417	Key14-16			
QD3653-32-3D-D19/W08	○	QD-190-R1	WOMT080308	32	117	186	58	36.53	1.438				
QD3700-32-3D-D14/W10	○	QD-140-R1	WOMT100308	32	117	186	58	37	1.457				
QD3750-32-3D-D15/W10	○	QD-150-R1	WOMT100308	32	117	186	58	37.5	1.476				
QD3800-32-3D-D15/W10	○	QD-150-R1	WOMT100308	32	117	186	58	38	1.496	Key17-19			
QD3810-32-3D-D15/W10	○	QD-150-R1	WOMT100308	32	117	186	58	38.1	1.5				
QD3900-32-3D-D16/W10	○	QD-160-R1	WOMT100308	32	117	186	58	39	1.535				
QD3920-32-3D-D16/W10	○	QD-160-R1	WC MT100308	32	117	186	58	39.2	1.543				
QD3970-32-3D-D17/W10	○	QD-170-R1	WOMT100308	32	117	186	58	39.7	1.563	Key14-16			
QD4000-50-3D-D17/W10	○	QD-170-R1	WOMT100308	50	132	208	68	40	1.575				
QD4100-50-3D-D18/W10	○	QD-180-R1	WOMT100308	50	132	208	68	41	1.614				
QD4128-50-3D-D18/W10	○	QD-180-R1	WOMT100308	50	132	208	68	41.28	1.625				
QD4200-50-3D-D19/W10	○	QD-190-R1	WOMT100308	50	132	208	68	42	1.654	Key17-19			

●标准库存Standard inventory ○订单生产Order production

QD...5D-C 快钻整体式复合刀体
QD...5D-C Solid Drilling Toolholder



型号 Model	库存 Stock	中心刀头 C enter Dirll head Dia	扩孔刀片x2 Side Insert x2	尺寸 Dimensions(mm)						D			
				d	L1	L2	Ls	mm	in				
QD2800-32-5D-D14/A04	○	QD-140-R1	AOMT040308	32	155	212	58	28	1.102	Key14-16	M2.5X8	T9	
QD2858-32-5D-D15/A04	○	QD-150-R1	AOMT040308	32	155	212	58	28.58	1.125				
QD2900-32-5D-D15/A04	○	QD-150-R1	AOMT040308	32	155	212	58	29	1.142				
QD2936-32-5D-D16/A04	○	QD-160-R1	AOMT040308	32	155	212	58	29.36	1.156				
QD3000-32-5D-D16/A04	○	QD-160-R1	AOMT040308	32	155	212	58	30	1.181	Key17-19	M2.5X8	T9	
QD3018-32-5D-D17/A04	○	QD-170-R1	AOMT040308	32	155	212	58	30.18	1.188				
QD3096-32-5D-D17/A04	○	QD-170-R1	AOMT040308	32	155	212	58	30.96	1.219				
QD3100-32-5D-D17/A04	○	QD-170-R1	AOMT040308	32	155	212	58	31	1.221				
QD3175-32-5D-D15/W08	○	QD-150-R1	WOMT080308	32	175	236	58	31.75	1.25	Key14-16	M3X10	T10	
QD3200-32-5D-D15/W08	○	QD-150-R1	WOMT080308	32	175	236	58	32	1.26				
QD3300-32-5D-D16/W08	○	QD-160-R1	WOMT080308	32	175	236	58	33	1.299				
QD3320-32-5D-D16/W08	○	QD-160-R1	WOMT080308	32	175	236	58	33.2	1.307				
QD3335-32-5D-D17/W08	○	QD-170-R1	WOMT080308	32	175	236	58	33.35	1.313	Key17-19	M3X10	T10	
QD3400-32-5D-D17/W08	○	QD-170-R1	WOMT080308	32	175	236	58	34	1.339				
QD3493-32-5D-D18/W08	○	QD-180-R1	WCMT080308	32	175	236	58	34.93	1.375				
QD3500-32-5D-D18/W08	○	QD-180-R1	WOMT080308	32	175	236	58	35	1.378				
QD3600-32-5D-D19/W08	○	QD-190-R1	WOMT080308	32	195	264	58	36	1.417	Key14-16	M4X12	T15	
QD3653-32-5D-D19/W08	○	QD-190-R1	WOMT080308	32	195	264	58	36.53	1.438				
QD3700-32-5D-D14/W10	○	QD-140-R1	WOMT100308	32	195	264	58	37	1.457				
QD3750-32-5D-D15/W10	○	QD-150-R1	WOMT100308	32	195	264	58	37.5	1.476				
QD3800-32-5D-D15/W10	○	QD-150-R1	WOMT100308	32	195	264	58	38	1.496	Key17-19	M4X12	T15	
QD3810-32-5D-D15/W10	○	QD-150-R1	WOMT100308	32	195	264	58	38.1	1.5				
QD3900-32-5D-D16/W10	○	QD-160-R1	WOMT100308	32	195	264	58	39	1.535				
QD3920-32-5D-D16/W10	○	QD-160-R1	WC MT100308	32	195	264	58	39.2	1.543				
QD3970-32-5D-D17/W10	○	QD-170-R1	WOMT100308	32	195	264	58	39.7	1.563	Key17-19	M4X12	T15	
QD4000-50-5D-D17/W10	○	QD-170-R1	WOMT100308	50	220	296	68	40	1.575				
QD4100-50-5D-D18/W10	○	QD-180-R1	WOMT100308	50	220	296	68	41	1.614				
QD4128-50-5D-D18/W10	○	QD-180-R1	WOMT100308	50	220	296	68	41.28	1.625				
QD4200-50-5D-D19/W10	○	QD-190-R1	WOMT100308	50	220	296	68	42	1.654				

●标准库存Standard inventory ○订单生产Order production

QD...8D-C 快钻整体式复合刀体
QD...8D-C Solid Drilling Toolholder



型号 Model	库存 Stock	中心刀头 C enter Dirll head Dia	扩孔刀片x2 Side Insert x2	尺寸 Dimensions(mm)						D			
				d	L1	L2	Ls	mm	in				
QD2800-32-8D-D14/A04	○	QD-140-R1	AOMT040308	32	248	305	58	28	1.102	Key14-16	M2.5X8	T9	
QD2858-32-8D-D15/A04	○	QD-150-R1	AOMT040308	32	248	305	58	28.58	1.125				
QD2900-32-8D-D15/A04	○	QD-150-R1	AOMT040308	32	248	305	58	29	1.142				
QD2936-32-8D-D16/A04	○	QD-160-R1	AOMT040308	32	248	305	58	29.36	1.156				
QD3000-32-8D-D16/A04	○	QD-160-R1	AOMT040308	32	248	305	58	30	1.181	Key17-19	M2.5X8	T9	
QD3018-32-8D-D17/A04	○	QD-170-R1	AOMT040308	32	248	305	58	30.18	1.188				
QD3096-32-8D-D17/A04	○	QD-170-R1	AOMT040308	32	248	305	58	30.96	1.219				
QD3100-32-8D-D17/A04	○	QD-170-R1	AOMT040308	32	248	305	58	31	1.221				
QD3175-32-8D-D15/W08	○	QD-150-R1	WOMT080308	32	280	341	58	31.75	1.25	Key14-16	M3X10	T10	
QD3200-32-8D-D15/W08	○	QD-150-R1	WOMT080308	32	280	341	58	32	1.26				
QD3300-32-8D-D16/W08	○	QD-160-R1	WOMT080308	32	280	341	58	33	1.299				
QD3320-32-8D-D16/W08	○	QD-160-R1	WOMT080308	32	280	341	58	33.2	1.307				
QD3335-32-8D-D17/W08	○	QD-170-R1	WOMT080308	32	280	341	58	33.35	1.313	Key17-19	M3X10	T10	
QD3400-32-8D-D17/W08	○	QD-170-R1	WOMT080308	32	280	341	58	34	1.339				
QD3493-32-8D-D18/W08	○	QD-180-R1	WCMT080308	32	280	341	58	34.93	1.375				
QD3500-32-8D-D18/W08	○	QD-180-R1	WOMT080308	32	280	341	58	35	1.378				
QD3600-32-8D-D19/W08	○	QD-190-R1	WOMT080308	32	312	381	58	36	1.417	Key14-16	M4X12	T15	
QD3653-32-8D-D19/W08	○	QD-190-R1	WOMT080308	32	312	381	58	36.53	1.438				
QD3700-32-8D-D14/W10	○	QD-140-R1	WOMT100308	32	312	381	58	37	1.457				
QD3750-32-8D-D15/W10	○	QD-150-R1	WOMT100308	32	312	381	58	37.5	1.476				
QD3800-32-8D-D15/W10	○	QD-150-R1	WOMT100308	32	312	381	58	38	1.496	Key17-19	M4X12	T15	
QD3810-32-8D-D15/W10	○	QD-150-R1	WOMT100308	32	312	381	58	38.1	1.5				
QD3900-32-8D-D16/W10	○	QD-160-R1	WOMT100308	32	312	381	58	39	1.535				
QD3920-32-8D-D16/W10	○	QD-160-R1	WC MT100308	32	312	381	58	39.2	1.543				
QD3970-32-8D-D17/W10	○	QD-170-R1	WOMT100308	32	312	381	58	39.7	1.563	Key17-19	M4X12	T15	
QD4000-50-8D-D17/W10	○	QD-170-R1	WOMT100308	50	352	428	68	40	1.575				
QD4100-50-8D-D18/W10	○	QD-180-R1	WOMT100308	50	352	428	68	41	1.614				
QD4128-50-8D-D18/W10	○	QD-180-R1	WOMT100308	50	352	428	68	41.28	1.625				
QD4200-50-8D-D19/W10	○	QD-190-R1	WOMT100308	50	352	428	68	42	1.654				

●标准库存Standard inventory ○订单生产Order production

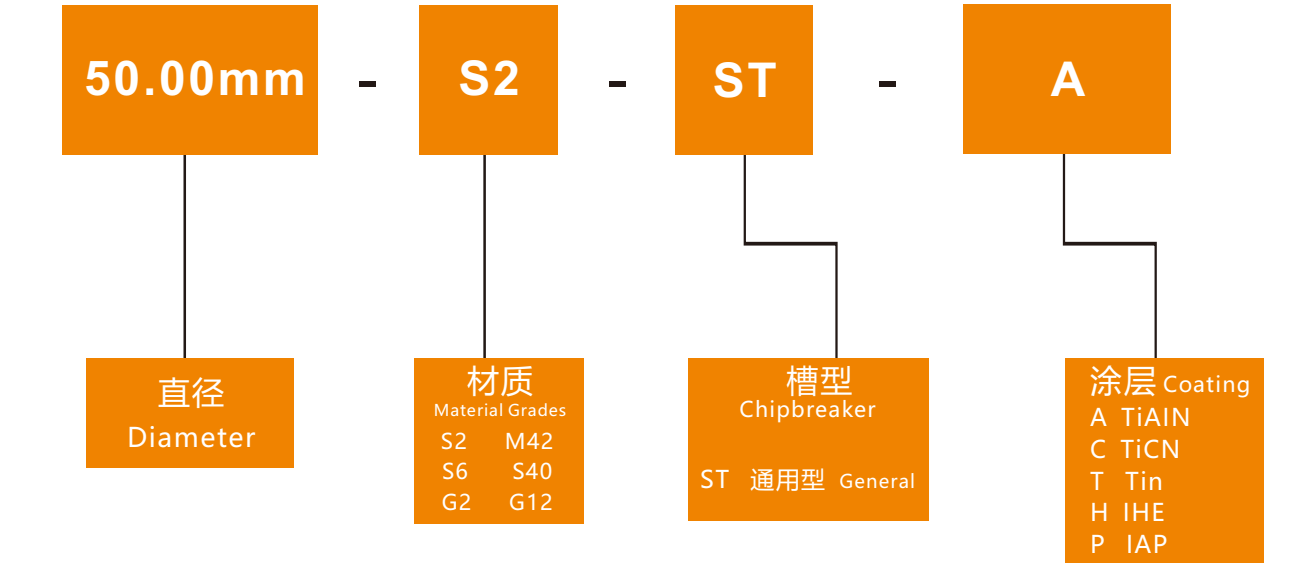
QD...10D-C 快钻整体式复合刀体
QD...10D-C Solid Drilling Toolholder



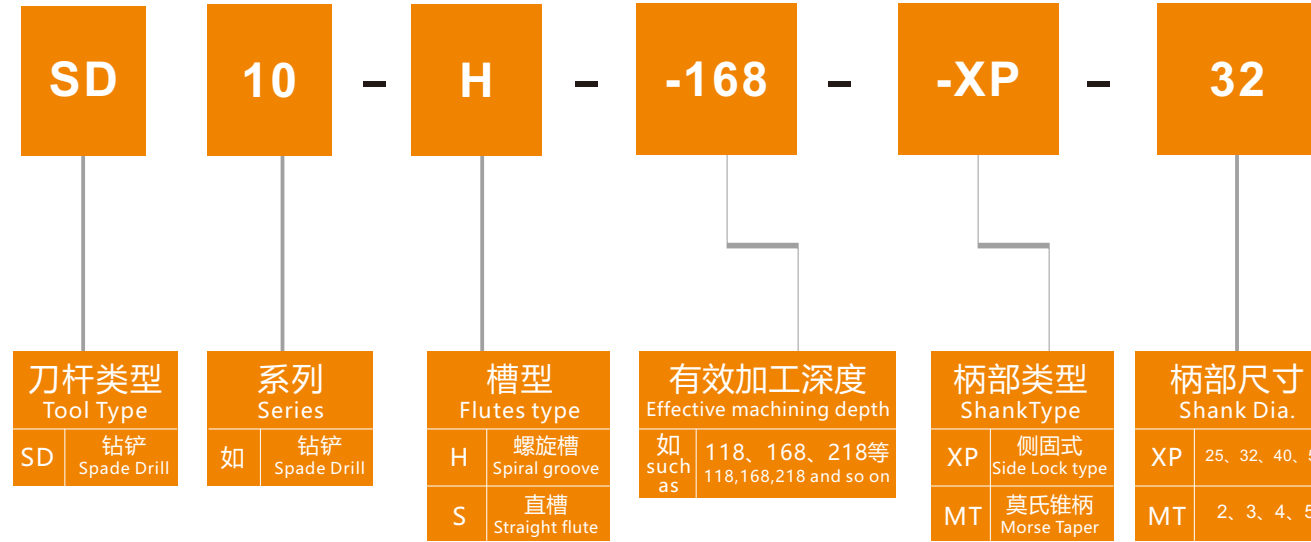
型号 Model	库存 Stock	中心刀头 Center Drill head Dia	扩孔刀片x2 Side Insert x2	尺寸 Dimensions(mm)						D			
				d	L1	L2	Ls	mm	in				
QD2800-32-10D-D14/A04	○	QD-140-R1	AOMT040308	32	310	367	58	28	1.102	Key14-16	M2.5X8	T9	
QD2858-32-10D-D15/A04	○	QD-150-R1	AOMT040308	32	310	367	58	28.58	1.125				
QD2900-32-10D-D15/A04	○	QD-150-R1	AOMT040308	32	310	367	58	29	1.142				
QD2936-32-10D-D16/A04	○	QD-160-R1	AOMT040308	32	310	367	58	29.36	1.156				
QD3000-32-10D-D16/A04	○	QD-160-R1	AOMT040308	32	310	367	58	30	1.181	Key17-19	M2.5X8	T9	
QD3018-32-10D-D17/A04	○	QD-170-R1	AOMT040308	32	310	367	58	30.18	1.188				
QD3096-32-10D-D17/A04	○	QD-170-R1	AOMT040308	32	310	367	58	30.96	1.219				
QD3100-32-10D-D17/A04	○	QD-170-R1	AOMT040308	32	310	367	58	31	1.221				
QD3175-32-10D-D15/W08	○	QD-150-R1	WOMT080308	32	350	411	58	31.75	1.25	Key14-16	M3X10	T10	
QD3200-32-10D-D15/W08	○	QD-150-R1	WOMT080308	32	350	411	58	32	1.26				
QD3300-32-10D-D16/W08	○	QD-160-R1	WOMT080308	32	350	411	58	33	1.299				
QD3320-32-10D-D16/W08	○	QD-160-R1	WOMT080308	32	350	411	58	33.2	1.307				
QD3335-32-10D-D17/W08	○	QD-170-R1	WOMT080308	32	350	411	58	33.35	1.313	Key17-19	M3X10	T10	
QD3400-32-10D-D17/W08	○	QD-170-R1	WOMT080308	32	350	411	58	34	1.339				
QD3493-32-10D-D18/W08	○	QD-180-R1	WCMT080308	32	350	411	58	34.93	1.375				
QD3500-32-10D-D18/W08	○	QD-180-R1	WOMT080308	32	350	411	58	35	1.378				
QD3600-32-10D-D19/W08	○	QD-190-R1	WOMT080308	32	390	459	58	36	1.417	Key14-16	M4X12	T15	
QD3653-32-10D-D19/W08	○	QD-190-R1	WOMT080308	32	390	459	58	36.53	1.438				
QD3700-32-10D-D14/W10	○	QD-140-R1	WOMT100308	32	390	459	58	37	1.457				
QD3750-32-10D-D15/W10	○	QD-150-R1	WOMT100308	32	390	459	58	37.5	1.476				
QD3800-32-10D-D15/W10	○	QD-150-R1	WOMT100308	32	390	459	58	38	1.496	Key17-19	M4X12	T15	
QD3810-32-10D-D15/W10	○	QD-150-R1	WOMT100308	32	390	459	58	38.1	1.5				
QD3900-32-10D-D16/W10	○	QD-160-R1	WOMT100308	32	390	459	58	39	1.535				
QD3920-32-10D-D16/W10	○	QD-160-R1	WC MT100308	32	390	459	58	39.2	1.543				
QD3970-32-10D-D17/W10	○	QD-170-R1	WOMT100308	32	390	459	58	39.7	1.563	Key17-19	M4X12	T15	
QD4000-50-10D-D17/W10	○	QD-170-R1	WOMT100308	50	440	516	68	40	1.575				
QD4100-50-10D-D18/W10	○	QD-180-R1	WOMT100308	50	440	516	68	41	1.614				
QD4128-50-10D-D18/W10	○	QD-180-R1	WOMT100308	50	440	516	68	41.28	1.625				
QD4200-50-10D-D19/W10	○	QD-190-R1	WOMT100308	50	440	516	68	42	1.654				

●标准库存Standard inventory ○订单生产Order production

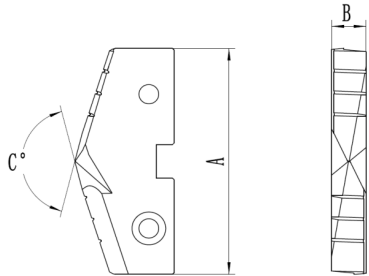
可转位铲钻刀片编码系统
Indexable Spade Drill inserts Ordering Code System



可转位铲钻刀体编码系统
Indexable Spade Drill Toolholder Ordering Code System



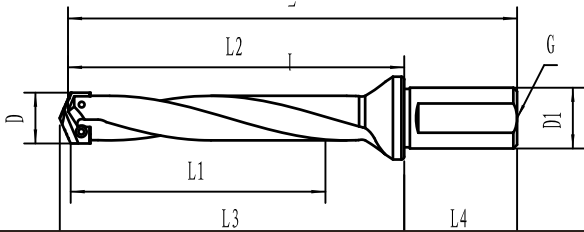
铲钻刀片
Spade Drill Inserts



			材质 Material Grades			库存 Stock
直径A Diameter	厚度B Thickness	顶角C Apex angle	含钴高速钢 M42HSS-C08	粉末高速钢 S40HSS-PM	硬质合金 G12CARBIDE	
9.50	2.38	132°	9.5S2STA	9.50S6STA	9.50G2STA	○
10.00			10.00S2STA	10.00S6STA	10.00G2STA	○
...			...类同上述	...类同上述	类同上述	○
12.00	3.18		12.00S2STA	12.00S6STA	12.00G2STA	○
12.50			12.50S2STA	12.50S6STA	12.50G2STA	○
13.00			13.00S2STA	13.00S6STA	13.00G2STA	○
13.50			13.50S2STA	13.50S6STA	13.50G2STA	○
...			...类同上述	...类同上述	...类同上述	○
17.00	3.97		17.00S2ST	17.00S6STA	17.00G2STA	○
17.50			17.50S2ST	17.50S6STA	17.50G2STA	○
18.00			18.00S2ST	18.00S6STA	18.00G2STA	○
18.50			18.50S2ST	18.50S6STA	18.50G2STA	○
...	4.76		...类同上述	...类同上述	...类同上述	○
23.50			23.50S2ST	23.50S6STA	23.50G2STA	○
24.00			24.00S2ST	24.00S6STA	24.00G2STA	○
24.50			24.50S2ST	24.50S6STA	24.50G2STA	○
25.00	6.35		25.00S2ST	25.00S6STA	25.00G2STA	○
...			...类同上述	...类同上述	...类同上述	○
34.50			34.50S2ST	34.50S6STA	34.50G2STA	○
35.00			35.00S2ST	35.00S6STA	35.00G2STA	○
35.50	7.94		35.50S2ST	35.50S6STA	35.50G2STA	○
36.00			36.00S2ST	36.00S6STA	36.00G2STA	○
...			...类同上述	...类同上述	...类同上述	○
46.00			46.00S2ST	46.00S6STA	46.00G2STA	○
47.00	11.11	47.00S2ST	47.00S6STA	47.00G2STA	○	
48.00		48.00S2ST	48.00S6STA	48.00G2STA	○	
49.00		49.00S2ST	49.00S6STA	49.00G2STA	○	
...		...类同上述	...类同上述	...类同上述	○	
64.00	11.11	64.00S2ST	64.00S6STA	64.00G2STA	○	
65.00		65.00S2ST	65.00S6STA	65.00G2STA	○	
66.00		66.00S2ST	66.00S6STA	66.00G2STA	○	
67.00		67.00S2ST	67.00S6STA	67.00G2STA	○	
...	11.11	...类同上述	...类同上述	...类同上述	○	
88.00		88.00S2ST	88.00S6STA	88.00G2STA	○	
89.00		89.00S2ST	89.00S6STA	89.00G2STA	○	
90.00		90.00S2ST	90.00S6STA	90.00G2STA	○	
91.00	11.11	91.00S2ST	91.00S6STA	91.00G2STA	○	
...		...类同上述	...类同上述	...类同上述	○	
113.00		113.00S2ST	113.00S6STA	113.00G2STA	○	
114.00		114.00S2ST	114.00S6STA	114.00G2STA	○	

●标准库存Standard inventory ◯订单生产Order production

可转位铲钻 侧固式
Indexable spade Drill side Lock type



YO系列(Φ9.5-Φ11.0)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SDY0S-19-XP16	○	19	47.6	50	95.6	16	48	1/16"	M2.0x5	T6
SDY0S-32-XP20	○	32	61.1	63.5	111.1	20	50	1/8"	M2.0x5	T6
SDY0H-60-XP20	○	60	89.7	1.92	139.7	20	50	1/8"	M2.0x5	T6
SDY0H-111-XP20	○	111	140.5	142.9	190.5	20	50	1/8"	M2.0x5	T6
SDY0S-222-XP20	○	222	251.7	254.1	301.7	20	50	1/8"	M2.0x5	T6
SDY0S-290-XP20	○	290	319.9	322.3	369.9	20	50	1/8"	M2.0x5	T6

●标准库存Standard inventory ◯订单生产Order production

ZO系列(Φ11-Φ12.9)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SDZ0S-19-XP 16	○	19	47.6	50	95.6	16	48	1/16"	M2.0x5	T6
SDZ0S-32-XP20	○	32	61.1	63.5	111.1	20	50	1/8"	M2.0x5	T6
SDZ0H-60-XP20	○	60	89.7	1.92	139.7	20	50	1/8"	M2.0x5	T6
SDZ0H-111-XP20	○	111	140.5	142.9	190.5	20	50	1/8"	M2.0x5	T6
SDZ0S-222-XP20	○	222	251.7	254.1	301.7	20	50	1/8"	M2.0x5	T6
SDZ0S-290-XP20	○	290	319.9	322.3	369.9	20	50	1/8"	M2.0x5	T6

●标准库存Standard inventory ◯订单生产Order production

00系列(Φ13-Φ17.5)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD00S-23-XP20	○	22	47.6	50.4	97.6	16	48	1/16	M2.5x6	T8
SD00S-35-XP20	○	35	63.5	66.3	113.5	20	50	1/8	M2.5x6	T8
SD00H-64-XP20	○	63	92.1	94.9	142.1	20	50	1/8	M2.5x6	T8
SD00H-114-XP20	○	114	142.9	145.7	192.9	20	50	1/8	M2.5x6	T8
SD00H-178-XP20	○	178	206.4	209.1	256.4	20	50	1/8	M2.5x6	T8
SD00S-240-XP20	○	240	268.6	271.3	318.6	20	50	1/8	M2.5x6	T8
SD00S-295-XP20	○	295	323.9	326.7	373.9	20	50	1/8	M2.5x6	T8
SD00S-387-XP20	○	397	416	418.8	466	20	50	1/8	M2.5x6	T8

●标准库存Standard inventory ◯订单生产Order production

05系列(Φ15.5-Φ17.5)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD05S-23-XP20	○	22	47.6	50.4	97.6	16	48	1/16	M2.5x6	T8
SD05S-35-XP20	○	35	63.5	66.3	113.5	20	50	1/8	M2.5x6	T8
SD05H-64-XP20	○	63	92.1	94.9	142.1	20	50	1/8	M2.5x6	T8
SD05H-114-XP20	○	114	142.9	145.7	192.9	20	50	1/8	M2.5x6	T8
SD05H-178-XP20	○	178	206.4	209.1	256.4	20	50	1/8	M2.5x6	T8
SD05S-240-XP20	○	240	268.6	271.3	318.6	20	50	1/8	M2.5x6	T8
SD05S-295-XP20	○	295	323.9	326.7	373.9	20	50	1/8	M2.5x6	T8
SD05S-387-XP20	○	397	416	418.8	466	20	50	1/8	M2.5x6	T8

●标准库存Standard inventory ◯订单生产Order production

10系列(Φ17.6-Φ24.4)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD10S-48-XP25	○	48	75.8	79.4	131.8	25	56	1/8	M3x8	T8
SD10S-67-XP25	○	67	107.2	110.7	163.1	25	56	1/8	M3x8	T8
SD10H-118-XP25	○	118	154.8	158.4	210.8	25	56	1/8	M3x8	T8
SD10H-168-XP25	○	168	205.6	209.2	261.6	25	56	1/8	M3x8	T8
SD10H-218-XP25	○	218	255.3	258.9	311.3	25	56	1/8	M3x8	T8
SD10H-270-XP25	○	270	307.2	310.8	363.2	25	56	1/8	M3x8	T8
SD10S-365-XP25	○	365	402.2	405.8	158.2	25	56	1/8	M3x8	T8
SD10S-457-XP25	○	457	494.5	498.1	550.5	25	56	1/8	M3x8	T8
SD10S-569-XP25	○	569	602.5	606.1	658.5	25	56	1/8	M3x8	T8

●标准库存Standard inventory ◯订单生产Order production

可转位铲钻 侧固式
Indexable spade Drill side Lock type

15系列(Φ22.0-Φ24.4)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD15S-57-XP25	○	48	75.8	79.4	131.8	25	56	1/8	M3x8	T8
SD15S-67-XP25	○	67	107.2	110.7	163.1	25	56	1/8	M3x8	T8
SD15H-118-XP25	○	118	154.8	158.4	210.8	25	56	1/8	M3x8	T8
SD15H-168-XP25	○	168	205.6	209.2	261.6	25	56	1/8	M3x8	T8
SD15H-218-XP25	○	218	255.3	258.9	311.3	25	56	1/8	M3x8	T8
SD15H-270-XP25	○	270	307.2	310.8	363.2	25	56	1/8	M3x8	T8
SD15S-365-XP25	○	365	402.2	405.8	158.2	25	56	1/8	M3x8	T8
SD15S-457-XP25	○	457	494.5	498.1	550.5	25	56	1/8	M3x8	T8
SD15S-569-XP25	○	569	602.5	606.1	658.5	25	56	1/8	M3x8	T8

●标准库存Standard inventory ○订单生产Order production

20系列(Φ24.5-Φ35)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD20S-57-XP32	○	57	88.5	92	148.5	32	60	1/4	M3.5x10	T15
SD20S-86-XP32	○	86	128.6	132.2	188.6	32	60	1/4	M3.5x10	T15
SD20H-137-XP32	○	137	179.4	183	239.4	32	60	1/4	M3.5x10	T15
SD20H-187-XP32	○	187	230.2	233.8	290.2	32	60	1/4	M3.5x10	T15
SD20H-237-XP32	○	237	279.9	283.5	339.9	32	60	1/4	M3.5x10	T15
SD20H-289-XP32	○	289	331.8	335.4	391.8	32	60	1/4	M3.5x10	T15
SD20H-400-XP32	○	400	442.8	446.4	502.8	32	60	1/4	M3.5x10	T15
SD20S-400-XP32	○	400	442.8	446.4	502.8	32	60	1/4	M3.5x10	T15
SD20S-511-XP32	○	511	554.1	557.7	614.1	32	60	1/4	M3.5x10	T15
SD20S-692-XP32	○	692	735.1	738.7	795.1	32	60	1/4	M3.5x10	T15

●标准库存Standard inventory ○订单生产Order production

25系列(Φ30.0-Φ35.0)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD25S-92-XP32	○	57	88.5	92	148.5	32	60	1/4	M3.5x10	T15
SD25S-86-XP32	○	86	128.6	132.2	188.6	32	60	1/4	M3.5x10	T15
SD25H-137-XP32	○	137	179.4	183	239.4	32	60	1/4	M3.5x10	T15
SD25H-187-XP32	○	187	230.2	233.8	290.2	32	60	1/4	M3.5x10	T15
SD25H-237-XP32	○	237	279.9	283.5	339.9	32	60	1/4	M3.5x10	T15
SD25H-289-XP32	○	289	331.8	335.4	391.8	32	60	1/4	M3.5x10	T15
SD25H-400-XP32	○	400	442.8	446.4	502.8	32	60	1/4	M3.5x10	T15
SD25S-400-XP32	○	400	442.8	446.4	502.8	32	60	1/4	M3.5x10	T15
SD25S-511-XP32	○	511	554.1	557.7	614.1	32	60	1/4	M3.5x10	T15
SD25S-692-XP32	○	692	735.1	738.7	795.1	32	60	1/4	M3.5x10	T15

●标准库存Standard inventory ○订单生产Order production

30系列(Φ35.1-Φ47.9)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD30S-76-XP40	○	76	125	129.8	195	40	70	1/4	M5x10	T20
SD30S-121-XP40	○	121	173	177.8	243	40	70	1/4	M5x10	T20
SD30H-165-XP40	○	165	217.5	222.3	287.5	40	70	1/4	M5x10	T20
SD30H-210-XP40	○	210	261.9	266.7	331.9	40	70	1/4	M5x10	T20
SD30H-260-XP40	○	260	312.3	317.1	382.3	40	70	1/4	M5x10	T20
SD30S-349-XP40	○	349	401.6	406.4	471.6	40	70	1/4	M5x10	T20
SD30H-349-XP40	○	349	401.6	406.4	471.6	40	70	1/4	M5x10	T20
SD30S-559-XP40	○	559	611.1	615.g	681.1	40	70	1/4	M5x10	T20
SD30S-787-XP40	○	787	839.7	844.5	909.7	40	70	1/4	M5x10	T20

●标准库存Standard inventory ○订单生产Order production

35系列(Φ42.0-Φ47.9)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD35S-76-XP40	○	76	125	129.8	195	40	70	1/4	M5x10	T20
SD35S-121-XP40	○	121	173	177.8	243	40	70	1/4	M5x10	T20
SD35H-165-XP40	○	165	217.5	222.3	287.5	40	70	1/4	M5x10	T20
SD35H-210-XP40	○	210	261.9	266.7	331.9	40	70	1/4	M5x10	T20
SD35H-260-XP40	○	260	312.3	317.1	382.3	40	70	1/4	M5x10	T20
SD35S-349-XP40	○	349	401.6	406.4	471.6	40	70	1/4	M5x10	T20
SD35H-349-XP40	○	349	401.6	406.4	471.6	40	70	1/4	M5x10	T20
SD35S-559-XP40	○	559	611.1	615.g	681.1	40	70	1/4	M5x10	T20
SD35S-787-XP40	○	787	839.7	844.5	909.7	40	70	1/4	M5x10	T20

●标准库存Standard inventory ○订单生产Order production

可转位铲钻 侧固式
Indexable spade Drill side Lock type

40系列(Φ48.0-Φ65.28)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD40S-130-XP40	○	130	179.4	184.2	249.4	40	70	1/4	M5x15	T20
SD40H-232-XP40	○	232	281	285.8	351	40	70	1/4	M5x15	T20
SD40S-350-XP40	○	350	399.2	404	469.2	40	70	1/4	M5x15	T20
SD40H-350-XP40	○	350	399.2	404	469.2	40	70	1/4	M5x15	T20
SD40S-422-XP40	○	422	471.5	476.3	541.5	40	70	1/4	M5x15	T20
SD40H-422-XP40	○	422	471.5	476.3	541.5	40	70	1/4	M5x15	T20
SD40S-525-XP40	○	525	574.2	579	644.2	40	70	1/4	M5x15	T20
SD40S-625-XP40	○	625	674.7	679.5	744.7	40	70	1/4	M5x15	T20
SD40S-879-XP40	○	879	928.7	933.5	998.7	40	70	1/4	M5x15	T20

●标准库存Standard inventory ○订单生产Order production

45系列(Φ56.0-Φ65.28)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD45S-130-XP40	○	130	179.4	184.2	249.4	40	70	1/4	M5x15	T20
SD45H-232-XP40	○	232	281	285.8	351	40	70	1/4	M5x15	T20
SD45S-350-XP40	○	350	399.2	404	469.2	40	70	1/4	M5x15	T20
SD45H-350-XP40	○	350	399.2	404	469.2	40	70	1/4	M5x15	T20
SD45H-422-XP40	○	422	471.5	476.3	541.5	40	70	1/4	M5x15	T20
SD45S-422-XP40	○	422	471.5	476.3	541.5	40	70	1/4	M5x15	T20
SD45S-525-XP40	○	525	574.2	579	644.2	40	70	1/4	M5x15	T20
SD45S-625-XP40	○	625	674.7	679.5	744.7	40	70	1/4	M5x15	T20
SD45S-879-XP40	○	879	928.7	933.5	998.7	40	70	1/4	M5x15	T20

●标准库存Standard inventory ○订单生产Order production

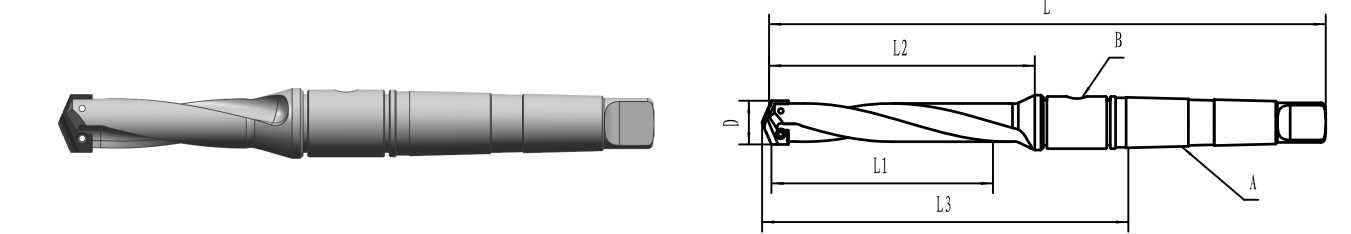
45系列(Φ56.0-Φ65.28)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD50S-171-XP50	○	171	235	240	315	50	80	1/2	M6x15	T25
SD50S-350-XP50	○	350	414	419	494	50	80	1/2	M6x15	T25
SD50S-660-XP50	○	660	724	729	804	50	80	1/2	M6x15	T25

●标准库存Standard inventory ○订单生产Order production

45系列(Φ56.0-Φ65.28)										
型号 Model	库存 Stock	L1	L2	L3	L	D1	L4	G	螺丝	扳手
SD70S-200-XP50	○	200	275	280	355	50	80	1/2	M6x15	T25
SD70S-400-XP50	○	400	475	480	555	50	80	1/2	M6x15	T25
SD70S-800-XP50	○	800	875	880	955	50	80	1/2	M6x15	T25

●标准库存Standard inventory ○订单生产Order production

可转位铲钻 莫氏锥柄
Indexable Spade Drill Morse Taper



YO系列(Φ9.5-Φ11.0)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SDY0S-32-MT2	○	32	51.5	88	160.3	MT2	1/16"	RK-MT2R	M2.0x5	T6
SDY0H-60-MT2	○	60	80.2	116.7	188.9	MT2	1/16"	RK-MT2R	M2.0x5	T6
SDY0H-111-MT2	○	111	130.9	167.4	239.7	MT2	1/16"	RK-MT2R	M2.0x5	T6

●标准库存Standard inventory ○订单生产Order production

ZO系列(Φ11-Φ12.9)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SDZ0S-32-MT2	○	32	51.5	88	160.3	MT2	1/16"	RK-MT2R	M2.0x5	T6
SDZ0H-60-MT2	○	60	80.2	116.7	188.9	MT2	1/16"	RK-MT2R	M2.0x5	T6
SDZ0H-111-MT2	○	111	130.9	167.4	239.7	MT2	1/16"	RK-MT2R	M2.0x5	T6

●标准库存Standard inventory ○订单生产Order production

00系列(Φ13-Φ17.5)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD00S-35-MT2	○	35	55.5	95.4	167.3	MT2	1/16	RK-MT2R	M2.5x6	T8
SD00H-63-MT2	○	63	84.1	124	195.9	MT2	1/16	RK-MT2R	M2.5x6	T8
SD00H-114-MT2	○	114	135	174.8	246.7	MT2	1/16	RK-MT2R	M2.5x6	T8
SD00H-178-MT2	○	178	198.5	238.3	310.2	MT2	1/16	RK-MT2R	M2.5x6	T8

●标准库存Standard inventory ○订单生产Order production

05系列(Φ15.5-Φ17.5)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD05S-35-MT2	○	35	55.5	95.4	167.3	MT2	1/16	RK-MT2R	M2.5x6	T8
SD05H-63-MT2	○	63	84.1	124	195.9	MT2	1/16	RK-MT2R	M2.5x6	T8
SD05H-114-MT2	○	114	135	174.8	246.7	MT2	1/16	RK-MT2R	M2.5x6	T8
SD05H-178-MT2	○	178	198.5	238.3	310.2	MT2	1/16	RK-MT2R	M2.5x6	T8

●标准库存Standard inventory ○订单生产Order production

10系列(Φ17.6-Φ24.4)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD10S-70-MT3	○	70	98.4	149	239	MT3	1/8	RK-MT3R	M3x8	T8
SD10H-121-MT3	○	121	149.2	199.8	289.8	MT3	1/8	RK-MT3R	M3x8	T8
SD10H-171-MT3	○	171	200	250.6	340.7	MT3	1/8	RK-MT3R	M3x8	T8
SD10H-222-MT3	○	222	250.5	301.1	391.2	MT3	1/8	RK-MT3R	M3x8	T8
SD10H-273-MT3	○	273	301.6	352.2	442.3	MT3	1/8	RK-MT3R	M3x8	T8

●标准库存Standard inventory ○订单生产Order production

15系列(Φ22.0-Φ24.4)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD15S-70-MT3	○	70	98.4	149	239	MT3	1/8	RK-MT3R	M3x8	T8
SD15H-121-MT3	○	121	149.2	199.8	289.8	MT3	1/8	RK-MT3R	M3x8	T8
SD15H-171-MT3	○	171	200	250.6	340.7	MT3	1/8	RK-MT3R	M3x8	T8
SD15H-222-MT3	○	222	250.5	301.1	391.2	MT3	1/8	RK-MT3R	M3x8	T8
SD15H-273-MT3	○	273	301.6	352.2	442.3	MT3	1/8	RK-MT3R	M3x8	T8

●标准库存Standard inventory ○订单生产Order production

可转位铲钻 莫氏锥柄
Indexable Spade Drill Morse Taper

20系列(Φ24.5-Φ35.0)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD20S-86-MT4	○	86	114.3	172.9	286.3	MT4	1/4	RK-MT4R	M3.5x10	T15
SD20H-137-MT4	○	137	165.1	223.7	337.1	MT4	1/4	RK-MT4R	M3.5x10	T15
SD20H-187-MT4	○	187	215.9	274.5	387.9	MT4	1/4	RK-MT4R	M3.5x10	T15
SD20H-237-MT4	○	237	265.6	324.2	437.6	MT4	1/4	RK-MT4R	M3.5x10	T15
SD20H-289-MT4	○	289	317.5	376.1	489.5	MT4	1/4	RK-MT4R	M3.5x10	T15
SD20S-400-MT4	○	400	428.5	487.1	600	MT4	1/4	RK-MT4R	M3.5x10	T15
SD20H-400-MT4	○	400	428.5	487.1	600	MT4	1/4	RK-MT4R	M3.5x10	T15

●标准库存Standard inventory ○订单生产Order production

25系列(Φ30.0-Φ35.0)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD25S-86-MT4	○	86	114.3	172.9	286.3	MT4	1/4	RK-MT4R	M3.5x10	T15
SD25H-137-MT4	○	137	165.1	223.7	337.1	MT4	1/4	RK-MT4R	M3.5x10	T15
SD25H-187-MT4	○	187	215.9	274.5	387.9	MT4	1/4	RK-MT4R	M3.5x10	T15
SD25H-237-MT4	○	237	265.6	324.2	437.6	MT4	1/4	RK-MT4R	M3.5x10	T15
SD25H-289-MT4	○	289	317.5	376.1	489.5	MT4	1/4	RK-MT4R	M3.5x10	T15
SD25S-400-MT4	○	400	428.5	487.1	600	MT4	1/4	RK-MT4R	M3.5x10	T15
SD25H-400-MT4	○	400	428.5	487.1	600	MT4	1/4	RK-MT4R	M3.5x10	T15

●标准库存Standard inventory ○订单生产Order production

30系列(Φ35.1-Φ47.9)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD30S-121-MT4	○	121	152.4	211.7	324.4	MT4	1/4	RK-MT4R	M5x10	T20
SD30H-165-MT4	○	165	196.9	256.2	368.9	MT4	1/4	RK-MT4R	M5x10	T20
SD30H-209-MT4	○	209	241.3	300.6	413.3	MT4	1/4	RK-MT4 R	M5x10	T20
SD30H-260-MT4	○	260	291.8	351.1	463.8	MT4	1/4	RK-MT4R	M5x10	T20
SD30H-349-MT4	○	349	381	440.3	553	MT4	1/4	RK-MT4R	M5x10	T20
SD30S-349-MT4	○	349	381	440.3	553	MT4	1/4	RK-MT4R	M5x10	T20
SD30S-559-MT4	○	559	590.6	649.9	762.5	MT4	1/4	RK-MT4R	M5x10	T20
SD30S-787-MT4	○	787	819.2	878.5	991.1	MT4	1/4	RK-MT4R	M5x10	T20

●标准库存Standard inventory ○订单生产Order production

35系列(Φ42.0-Φ47.9)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD35S-121-MT4	○	121	152.4	211.7	324.4	MT4	1/4	RK-MT4R	M5x10	T20
SD35H-165-MT4	○	165	196.9	256.2	368.9	MT4	1/4	RK-MT4R	M5x10	T20
SD35H-209-MT4	○	209	241.3	300.6	413.3	MT4	1/4	RK-MT4 R	M5x10	T20
SD35H-260-MT4	○	260	291.8	351.1	463.8	MT4	1/4	RK-MT4R	M5x10	T20
SD35H-349-MT4	○	349	381	440.3	553	MT4	1/4	RK-MT4R	M5x10	T20
SD35S-349-MT4	○	349	381	440.3	553	MT4	1/4	RK-MT4R	M5x10	T20
SD35S-559-MT4	○	559	590.6	649.9	762.5	MT4	1/4	RK-MT4R	M5x10	T20
SD35S-787-MT4	○	787	819.2	878.5	991.1	MT4	1/4	RK-MT4R	M5x10	T20

●标准库存Standard inventory ○订单生产Order production

40系列(Φ48.0-Φ65.28)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD40S-130-MT5	○	130	165.	225	369.4	MT5	1/4	RK-MT5R1	M5x15	T20
SD40H-232-MT5	○	232	266.7	326.6	471	MT5	1/4	RK-MT5R1	M5x15	T20
SD40S-350-MT5	○	350	384.9	444.8	589.2	MT5	1/4	RK-MT5R1	M5x15	T20
SD40H-350-MT5	○	350	384.9	444.8	589.2	MT5	1/4	RK-MT5R1	M5x15	T20
SD40H-422-MT5	○	422	457.2	517.1	661.5	MT5	1/4	RK-MT5R1	M5x15	T20
SD40S-422-MT5	○	422	457.2	517.1	661.5	MT5	1/4	RK-MT5R 1	M5x15	T20
SD40S-625-MT5	○	625	660.4	720.3	864.7	MT5	1/4	RK-MT5R1	M5x15	T20
SD40S-879-MT5	○	879	914.4	974.3	1118.7	MT5	1/4	RK-MT5R1	M5x15	T20

●标准库存Standard inventory ○订单生产Order production

可转位铲钻 莫氏锥柄
Indexable Spade Drill Morse Taper

45系列(Φ56.0-Φ65.28)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD45S-130-MT5	○	130	165	225	369.4	MT5	1/4	RK-MT5R1	M5x15	T20
SD45H-232-MT5	○	232	266.7	326.6	471	MT5	1/4	RK-MT5R1	M5x15	T20
SD45S-350-MT5	○	350	384.9	444.8	589.2	MT5	1/4	RK-MT5R1	M5x15	T20
SD45H-350-MT5	○	350	384.9	444.8	589.2	MT5	1/4	RK-MT5R1	M5x15	T20
SD45H-422-MT5	○	422	457.2	517.1	661.5	MT5	1/4	RK-MT5R1	M5x15	T20
SD45S-422-MT5	○	422	457.2	517.1	661.5	MT5	1/4	RK-MT5R 1	M5x15	T20
SD45S-625-MT5	○	625	660.4	720.3	864.7	MT5	1/4	RK-MT5R1	M5x15	T20
SD45S-879-MT5	○	879	914.4	974.3	1118.7	MT5	1/4	RK-MT5R1	M5x15	T20

●标准库存Standard inventory ○订单生产Order production

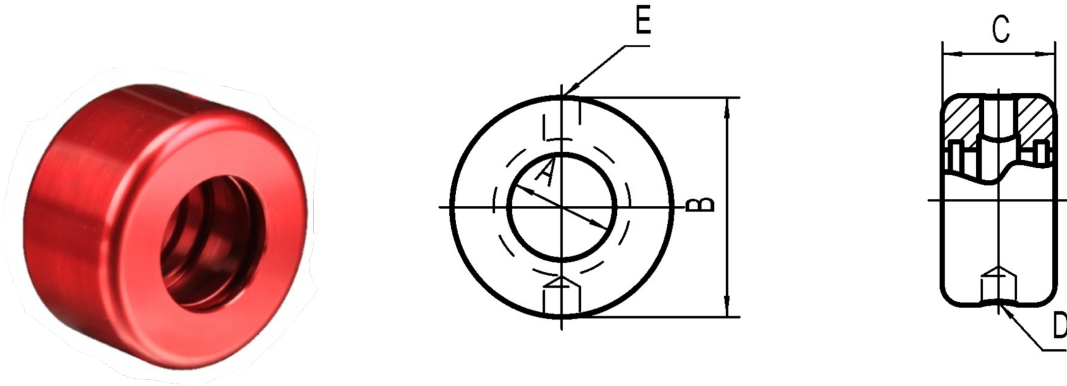
50系列(Φ65.3-Φ89.08)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD50S-171-MT5	○	171	215.9	287.3	430.2	MT5	1/2	RK-MT5R2	M6x15	T25
SD50H-273-MT5	○	273	317.5	388.9	531.8	MT5	1/2	RK-MT5R2	M6x15	T25
SD50S-464-MT5	○	464	508	579.4	722.3	MT5	1/2	RK-MT5R2	M6x15	T25
SD50S-660-MT5	○	660	704.8	776.2	919.1	MT5	1/2	RK-MT5R2	M6x15	T25
SD50S-889-MT5	○	889	933.4	1004.8	1147.7	MT5	1/2	RK-MT5R2	M6x15	T25

●标准库存Standard inventory ○订单生产Order production

70系列(Φ89.1-Φ114.48)										
型号 Model	库存 Stock	L1	L2	L3	L	A	B	外罩	螺丝	扳手
SD70S-171-MT5	○	171	225.4	296.8	439.7	MT5	1/2	RK-MT5R2	M6x15	T25
SD70H-273-MT5	○	273	327	398.5	541.3	MT5	1/2	RK-MT5R2	M6x15	T25
SD70S-556-MT5	○	556	609.6	681.1	823.9	MT5	1/2	RK-MT5R2	M6x15	T25
SD70S-685-MT5	○	685	739.7	811.2	954	MT5	1/2	RK-MT5R2	M6x15	T25
SD70S-939-MT5	○	939	993.7	1065.2	1208	MT5	1/2	RK-MT5R2	M6x15	T25

●标准库存Standard inventory ○订单生产Order production

铲钻冷却环
Spade Drill Cooling Ring



型号 Model	库存 Stock	内径(A) Inside diameter	外径(B) Outside diameter	厚度(C) Thickness	挡杆螺纹(D) Stopper rod thread	冷却嘴螺纹(D) Cooling nozzle thread
RK-MT2R	○	19.4	49	22.5	M8x1.25	1/8"
RK-MT3R	○	25.5	53	30	M8x1.25	1/8"
RK-MT4R	○	32.5	63	36	M10x1.5	1/4"
RK-MT5R1	○	48.5	76	36	M10x1.5	1/4"
RK-MT5R2	○	60.1	95.3	44.5	M10x1.5	1/2"

●标准库存Standard inventory ○订单生产Order production

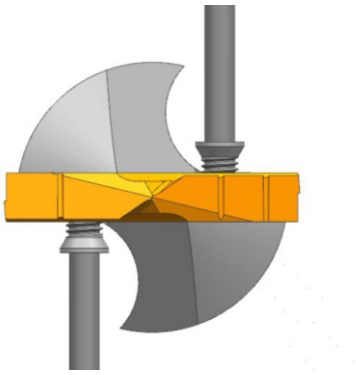
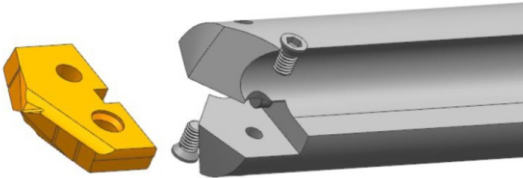
铲钻
Spade drill

铲钻刀片安装注意事项

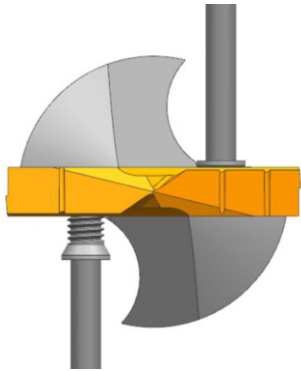
Precautions for installation of shovel drilling blade

- 气枪吹气等方式清理刀片槽
- 两边均匀拧紧螺丝锁紧刀片
- 安装时请勿碰到刀尖

Air gun blowing and other ways to clean blade groove
Evenly tighten screws on both sides to lock the blade
Do not touch the tip of the knife when installing



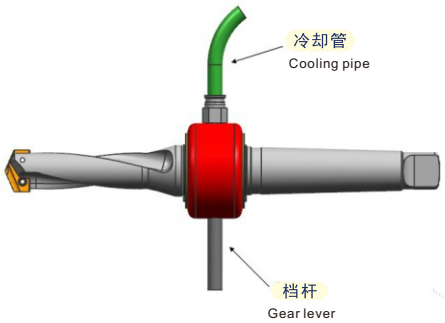
两边锁紧螺丝均与锁紧
Both sides locking screws are locked



请勿对单边先锁紧
Do not lock one side first

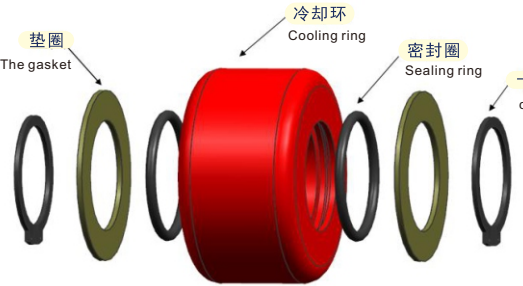
莫式锥柄冷却环安装示意图

Installation diagram of MOE taper shank cooling ring



冷却环环配件

Cooling ring accessories



JSFD 可转位2倍 WC 刀片高速钻
Indexable 2D WC Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JSFD-14020D	○	14.0	31	108	25	50	WC..030208	TSB-25065	TXL-8
JSFD-14520D	○	14.5	32	109	25	50			
JSFD-15020D	○	15.0	33	110	25	56			
JSFD-15520D	○	15.5	34	120	25	56			
JSFD-16020D	○	16.0	35	121	25	56			
JSFD-16520D	○	16.5	36	122	25	56			
JSFD-17020D	○	17.0	37	123	25	56			
JSFD-17520D	○	17.5	38	124	25	56			
JSFD-18020D	○	18.0	39	125	25	56			
JSFD-18520D	○	18.5	40	126	25	56			
JSFD-19020D	○	19.0	41	127	25	56	WC..040208	TSB-30070	TXL-15
JSFD-19520D	○	19.5	42	128	25	56			
JSFD-20020D	○	20.0	43	129	25	56			
JSFD-20520D	○	20.5	44	130	25	56			
JSFD-21020D	○	21.0	45	131	25	56			
JSFD-21520D	○	21.5	46	132	25	60			
JSFD-22020D	○	22.0	47	133	25	60			
JSFD-22520D	○	22.5	48	143	25	60			
JSFD-23020D	○	23.0	49	144	25	60			
JSFD-23520D	○	23.5	50	145	25	60			
JSFD-24020D	○	24.0	51	146	25	60	WC..050308	TSB-30070	TXL-15
JSFD-24520D	○	24.5	52	147	25	60			
JSFD-25020D	○	25.0	53	148	32	60			
JSFD-25520D	○	25.5	54	149	32	60			
JSFD-26020D	○	26.0	55	150	32	60			

●标准库存Standard inventory ○订单生产Order production

JSFD 可转位2倍 WC 刀片高速钻
Indexable 2D WC Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JSFD-26520D	○	26.5	56	151	32	60	WC..050308	TSB-30070	TXL-15
JSFD-27020D	○	27.0	57	152	32	60			
JSFD-27520D	○	27.5	58	153	32	60			
JSFD-28020D	○	28.0	59	154	32	60			
JSFD-28520D	○	28.5	60	155	32	60			
JSFD-29020D	○	29.0	61	156	32	60			
JSFD-29520D	○	29.5	64	159	32	60			
JSFD-30020D	○	30.0	65	160	32	60			
JSFD-31020D	○	31.0	67	152	32	60			
JSFD-32020D	○	32.0	69	164	32	60	WC..06T308	TSB-35080	TXL-15
JSFD-33020D	○	33.0	71	166	32	60			
JSFD-34020D	○	34.0	73	168	32	70			
JSFD-35020D	○	35.0	75	170	32	70			
JSFD-36020D	○	36.0	77	172	32	70			
JSFD-37020D	○	37.0	79	189	32	70			
JSFD-38020D	○	38.0	81	191	32	70			
JSFD-39020D	○	39.0	83	193	32	70			
JSFD-40020D	○	40.0	85	195	32	70			
JSFD-41020D	○	41.0	87	197	32	70	WC..080412	TSB-40010	TXL-15
JSFD-42020D	○	42.0	89	199	32	70			
JSFD-43020D	○	43.0	91	201	40	70			
JSFD-44020D	○	44.0	93	203	40	70			
JSFD-45020D	○	45.0	95	205	40	70			
JSFD-46020D	○	46.0	97	207	40	70			
JSFD-47020D	○	47.0	99	209	40	70			
JSFD-48020D	○	48.0	101	211	40	70			
JSFD-49020D	○	49.0	103	213	40	70			
JSFD-50020D	○	50.0	105	215	40	70	WC..06T308 (刀杆配4个刀片) The drill matches with 4pcs inserts.	TSB-35080	TXL-15
JSFD-51020D	○	51.0	106	216	40	70			
JSFD-52020D	○	52.0	108	218	40	70			
JSFD-53020D	○	53.0	110	220	40	70			
JSFD-54020D	○	54.0	112	222	40	70			
JSFD-55020D	○	55.0	114	224	40	70			
JSFD-56020D	○	56.0	116	226	40	70			
JSFD-57020D	○	57.0	118	228	40	70			
JSFD-58020D	○	58.0	120	300	40	70			
JSFD-59020D	○	59.0	122	333	40	70			
JSFD-60020D	○	60.0	124	334	40	70			

●标准库存Standard inventory ○订单生产Order production

JSFD 可转位3倍 WC 刀片高速钻
Indexable 3D WC Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JSFD-14030D	○	14.0	45	122	25	50	WC..030208	TSB-25065	TXL-8
JSFD-14530D	○	14.5	47	124	25	50			
JSFD-15030D	○	15.0	48	125	25	50			
JSFD-15530D	○	15.5	50	136	25	56			
JSFD-16030D	○	16.0	51	137	25	56			
JSFD-16530D	○	16.5	53	139	25	56			
JSFD-17030D	○	17.0	54	140	25	56			
JSFD-17530D	○	17.5	56	142	25	56			
JSFD-18030D	○	18.0	57	143	25	56			
JSFD-18520D	○	18.5	59	145	25	56			
JSFD-19030D	○	19.0	60	146	25	56	WC..040208	TSB-30070	TXL-15
JSFD-19530D	○	19.5	62	148	25	56			
JSFD-20030D	○	20.0	63	149	25	56			
JSFD-20530D	○	20.5	65	151	25	56			
JSFD-21030D	○	21.0	66	152	25	56			
JSFD-21530D	○	21.5	68	154	25	56			
JSFD-22030D	○	22.0	69	155	25	60			
JSFD-22530D	○	22.5	71	166	25	60			
JSFD-23030D	○	23.0	72	167	25	60			
JSFD-23530D	○	23.5	74	169	25	60			WC..050308
JSFD-24030D	○	24.0	75	170	25	60			
JSFD-24530D	○	24.5	77	172	25	60			
JSFD-25030D	○	25.0	78	173	32	60			
JSFD-25530D	○	25.5	80	175	32	60	WC..050308	TSB-30070	TXL-15
JSFD-26030D	○	26.0	81	176	32	60			

●标准库存Standard inventory ○订单生产Order production

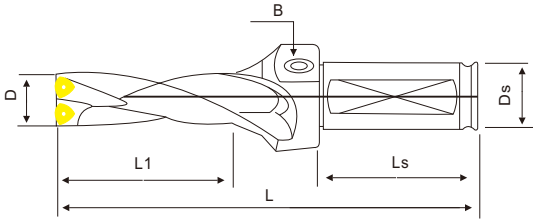
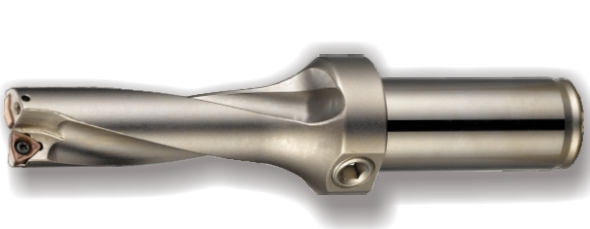
JSFD 可转位3倍 WC 刀片高速钻
Indexable 3D WC Insert High Speed Drill



型号 Model	库存 Stock						INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JSFD-26530D	○	26.5	83	178	32	60	WC..050308	TSB-30070	TXL-15
JSFD-27030D	○	27.0	84	179	32	60			
JSFD-27530D	○	27.5	86	181	32	60			
JSFD-28030D	○	28.0	87	182	32	60			
JSFD-28530D	○	28.5	89	184	32	60			
JSFD-29030D	○	29.0	90	185	32	60			
JSFD-29530D	○	29.5	94	189	32	60			
JSFD-30030D	○	30.0	95	190	32	60			
JSFD-31030D	○	31.0	98	193	32	60			
JSFD-32030D	○	32.0	101	196	32	60	WC..06T308	TSB-35080	
JSFD-33030D	○	33.0	104	199	32	60			
JSFD-34030D	○	34.0	107	202	32	70			
JSFD-35030D	○	35.0	110	205	32	70			
JSFD-36030D	○	36.0	113	208	32	70			
JSFD-37030D	○	37.0	116	226	32	70			
JSFD-38030D	○	38.0	119	229	32	70			
JSFD-39030D	○	39.0	122	232	32	70			
JSFD-40030D	○	40.0	125	235	32	70			
JSFD-41030D	○	41.0	128	238	32	70	WC..080412	TSB-40010	TXL-15
JSFD-42030D	○	42.0	131	240	32	70			
JSFD-43030D	○	43.0	134	244	40	70			
JSFD-44030D	○	44.0	137	247	40	70			
JSFD-45030D	○	45.0	140	250	40	70			
JSFD-46030D	○	46.0	143	253	40	70			
JSFD-47030D	○	47.0	146	256	40	70			
JSFD-48030D	○	48.0	149	259	40	70			
JSFD-49030D	○	49.0	152	262	40	70			
JSFD-50030D	○	50.0	155	265	40	70	WC..06T308 (刀杆配4个刀片) The drill matches with 4pcs inserts.	TSB-35080	
JSFD-51030D	○	51.0	156	266	40	70			
JSFD-52030D	○	52.0	159	269	40	70			
JSFD-53030D	○	53.0	162	272	40	70			
JSFD-54030D	○	54.0	165	275	40	70			
JSFD-55030D	○	55.0	168	278	40	70			
JSFD-56030D	○	56.0	171	281	40	70			
JSFD-57030D	○	57.0	174	284	40	70			
JSFD-58030D	○	58.0	177	288	40	70			
JSFD-59030D	○	59.0	180	290	40	70			
JSFD-60030D	○	60.0	182	292	40	70			

●标准库存Standard inventory ○订单生产Order production

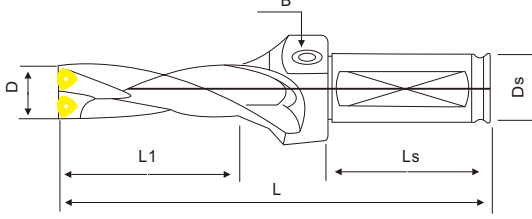
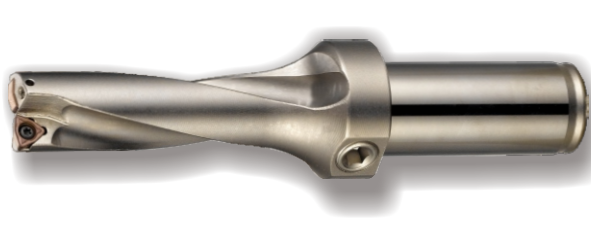
JSFD 可转位4倍 WC 刀片高速钻
Indexable 4D WC Insert High Speed Drill



型号 Model	库存 Stock	D	L1	L	Ds	Ls	INSERT	SCREW	DRIVER
JSFD-14040D	○	14.0	59	136	25	50	WC..030208	TSB-30070	TXL-8
JSFD-14540D	○	14.5	61	138	25	50			
JSFD-15040D	○	15.0	63	140	25	50			
JSFD-15540D	○	15.5	65	151	25	56			
JSFD-16040D	○	16.0	67	153	25	56			
JSFD-16540D	○	16.5	69	155	25	56			
JSFD-17040D	○	17.0	71	157	25	56			
JSFD-17540D	○	17.5	73	159	25	56			
JSFD-18040D	○	18.0	75	161	25	56			
JSFD-18540D	○	18.5	77	163	25	56			
JSFD-19040D	○	19.0	79	165	25	56	WC..040208	TSB-25065	TXL-15
JSFD-19540D	○	19.5	81	167	25	56			
JSFD-20040D	○	20.0	83	169	25	56			
JSFD-20540D	○	20.5	85	171	25	56			
JSFD-21040D	○	21.0	87	173	25	56			
JSFD-21540D	○	21.5	89	175	25	56			
JSFD-22040D	○	22.0	91	177	25	60			
JSFD-22540D	○	22.5	93	188	25	60			
JSFD-23040D	○	23.0	95	190	25	60			
JSFD-23540D	○	23.5	97	190	25	60			
JSFD-24040D	○	24.0	99	194	25	60	WC..050308	TSB-30070	TXL-15
JSFD-24540D	○	24.5	101	196	25	60			
JSFD-25040D	○	25.0	103	198	32	60			
JSFD-25540D	○	25.5	105	200	32	60			
JSFD-26040D	○	26.0	107	202	32	60			

●标准库存Standard inventory ○订单生产Order production

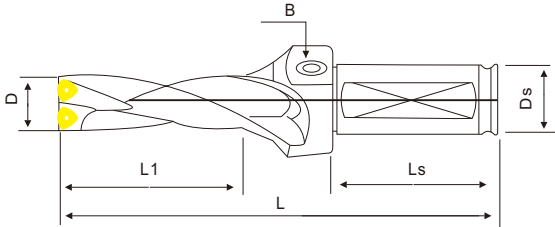
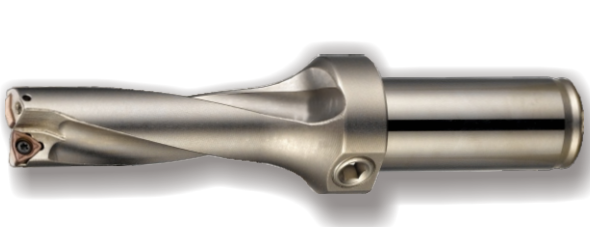
JSFD 可转位4倍 WC 刀片高速钻
Indexable 4D WC Insert High Speed Drill



型号 Model	库存 Stock								
		D	L1	L	Ds	Ls	INSERT	SCREW	DRIVER
JSFD-26540D	○	26.5	109	204	32	60	WC..050308	TSB-30070	TXL-15
JSFD-27040D	○	27.0	111	206	32	60			
JSFD-27540D	○	27.5	113	208	32	60			
JSFD-28040D	○	28.0	115	210	32	60			
JSFD-28540D	○	28.5	117	212	32	60			
JSFD-29040D	○	29.0	119	214	32	60			
JSFD-29540D	○	29.5	123	218	32	60			
JSFD-30040D	○	30.0	125	220	32	60			
JSFD-31040D	○	31.0	129	224	32	60			
JSFD-32040D	○	32.0	133	228	32	60	WC..06T308	TSB-35080	
JSFD-33040D	○	33.0	137	232	32	60			
JSFD-34040D	○	34.0	141	236	32	70			
JSFD-35040D	○	35.0	145	240	32	70			
JSFD-36040D	○	36.0	149	244	32	70			
JSFD-37040D	○	37.0	153	263	32	70			
JSFD-38040D	○	38.0	157	267	32	70			
JSFD-39040D	○	39.0	161	271	32	70			
JSFD-40040D	○	40.0	165	275	32	70			
JSFD-41040D	○	41.0	169	279	32	70	WC..080412	TSB-40010	TXL-15
JSFD-42040D	○	42.0	173	283	32	70			
JSFD-43040D	○	43.0	177	287	40	70			
JSFD-44040D	○	44.0	181	291	40	70			
JSFD-45040D	○	45.0	185	295	40	70			
JSFD-46040D	○	46.0	189	299	40	70			
JSFD-47040D	○	47.0	193	303	40	70			
JSFD-48040D	○	48.0	197	307	40	70			
JSFD-49040D	○	49.0	201	311	40	70			
JSFD-50040D	○	50.0	205	315	40	70	WC..06T308 (刀杆配4个刀片) The drill matches with 4pcs inserts.	TSB-35080	
JSFD-51040D	○	51.0	206	316	40	70			
JSFD-52040D	○	52.0	208	318	40	70			
JSFD-53040D	○	53.0	210	320	40	70			
JSFD-54040D	○	54.0	212	322	40	70			
JSFD-55040D	○	55.0	214	324	40	70			
JSFD-56040D	○	56.0	216	326	40	70			
JSFD-57040D	○	57.0	218	328	40	70			
JSFD-58040D	○	58.0	220	330	40	70			
JSFD-59040D	○	59.0	222	333	40	70			
JSFD-60040D	○	60.0	224	334	40	70			

●标准库存Standard inventory ○订单生产Order production

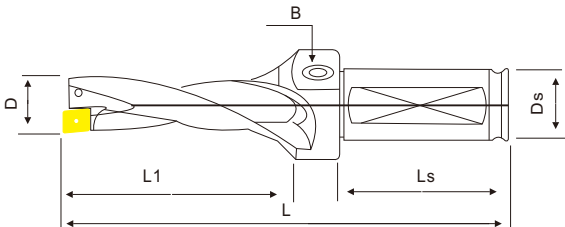
JSFD 可转位5倍 WC 刀片高速钻
Indexable 5D WC Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	PILOT DRILL
		D	L1	L	Ds	Ls			
JSFD-25050D	○	25.5	125	250	32	70	WC..050308	TSB-30070	TXL-15
JSFD-26050D	○	26.5	130	250	32	70			
JSFD-27050D	○	27.5	135	250	32	70			
JSFD-28050D	○	28.5	140	250	32	70			
JSFD-29050D	○	29.5	145	250	32	70			
JSFD-30050D	○	30.5	150	250	32	70			
JSFD-31050D	○	31.5	155	275	32	70	WC..06T308	TSB-35080	TXL-15
JSFD-32050D	○	32.5	160	275	32	70			
JSFD-33050D	○	33.5	165	275	32	70			
JSFD-34050D	○	34.5	170	275	32	70			
JSFD-35050D	○	35.5	175	275	32	70			
JSFD-36050D	○	36.5	180	300	32	70			
JSFD-37050D	○	37.5	185	300	32	70			
JSFD-38050D	○	38.5	190	300	32	70			
JSFD-39050D	○	39.5	195	300	32	70			
JSFD-40050D	○	40.5	200	300	32	70			
JSFD-41050D	○	41.5	205	345	32	80			
JSFD-42050D	○	42.5	210	345	32	80			
JSFD-43050D	○	43.5	215	345	40	80	WC..080412	TSB-40010	TXL-15
JSFD-44050D	○	44.5	220	345	40	80			
JSFD-45050D	○	45.5	225	345	40	80			
JSFD-46050D	○	46.5	230	370	40	80			
JSFD-47050D	○	47.5	235	370	40	80			
JSFD-48050D	○	48.5	240	370	40	80			
JSFD-49050D	○	49.5	245	370	40	80			
JSFD-50050D	○	50.5	250	370	40	80			
JSFD-51050D	○	51.5	255	395	40	80			
JSFD-52050D	○	52.5	260	395	40	80			
JSFD-53050D	○	53.5	265	395	40	80			
JSFD-54050D	○	54.5	270	395	40	80			
JSFD-55050D	○	55.5	275	395	40	80			
JSFD-56050D	○	56.5	280	420	40	80			
JSFD-57050D	○	57.5	285	420	40	80			
JSFD-58050D	○	58.5	290	420	40	80			
JSFD-59050D	○	59.5	295	420	40	80			
JSFD-60050D	○	60.5	300	420	40	80			

●标准库存Standard inventory ○订单生产Order production

JTR 可转位2倍 SP 刀片高速钻
Indexable 2D SP Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JTR-13020D	○	13.0	29	106	25	50	SPMG-050204	TSB-20050	TXL-6
JTR-13520D	○	13.5	30	107	25	50			
JTR-14020D	○	14.0	31	108	25	50			
JTR-14520D	○	14.5	32	109	25	50			
JTR-15020D	○	15.0	33	110	25	50			
JTR-15520D	○	15.5	34	120	25	56			
JTR-16020D	○	16.0	35	121	25	56	SPMG-060204	TSB-22050	TXL-6
JTR-16520D	○	16.5	36	122	25	56			
JTR-17020D	○	17.0	37	123	25	56			
JTR-17520D	○	17.5	38	124	25	56			
JTR-18020D	○	18.0	39	125	25	56			
JTR-18520D	○	18.5	40	126	25	56			
JTR-19020D	○	19.0	41	127	25	56			
JTR-19520D	○	19.5	42	128	25	56			
JTR-20020D	○	20.0	43	129	25	56			
JTR-20520D	○	20.5	44	130	25	56			
JTR-21020D	○	21.0	45	131	25	56			
JTR-21520D	○	21.5	46	132	25	56			
JTR-22020D	○	22.0	47	133	25	60	SPMG-07T308	TSB-25060	TXL-8
JTR-22520D	○	22.5	48	143	25	60			
JTR-23020D	○	23.0	49	144	25	60			
JTR-23520D	○	23.5	50	145	25	60			
JTR-24020D	○	24.0	51	146	25	60			
JTR-24520D	○	24.5	52	147	25	60			
JTR-25020D	○	25.0	53	148	32	60			
JTR-25520D	○	25.5	54	149	32	60			
JTR-26020D	○	26.0	55	150	32	60			

●标准库存Standard inventory ○订单生产Order production

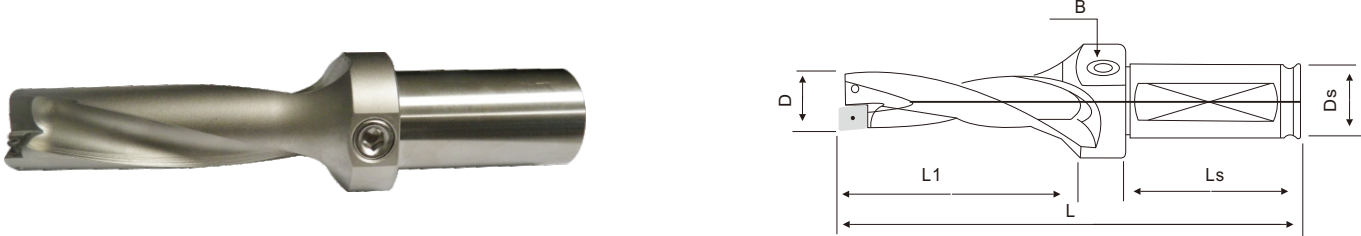
JTR 可转位2倍 SP 刀片高速钻
Indexable 2D SP Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JTR-26520D	○	26.5	56	151	32	60	SPMG-07T308	TSB-25060	TXL-8
JTR-27020D	○	27.0	57	152	32	60			
JTR-27520D	○	27.5	58	153	32	60			
JTR-28020D	○	28.0	59	154	32	60	SPMG-090408	TSB-35080	TXL-15
JTR-28520D	○	28.5	60	155	32	60			
JTR-29020D	○	29.0	61	156	32	60			
JTR-29520D	○	29.5	64	159	32	60			
JTR-30020D	○	30.0	65	160	32	60			
JTR-31020D	○	31.0	67	162	32	60			
JTR-32020D	○	32.0	69	164	32	60			
JTR-33020D	○	33.0	71	166	32	60			
JTR-34020D	○	34.0	73	168	32	70			
JTR-35020D	○	35.0	75	170	32	70			
JTR-36020D	○	36.0	77	172	32	70	SPMG-110408	TSB-40100	TXL-15
JTR-37020D	○	37.0	79	189	32	70			
JTR-38020D	○	38.0	81	191	32	70			
JTR-39020D	○	39.0	83	193	32	70			
JTR-40020D	○	40.0	85	195	32	70			
JTR-41020D	○	41.0	87	197	32	70	SPMG-140512	TSB-50100	TXL-20
JTR-42020D	○	42.0	89	199	32	70			
JTR-43020D	○	43.0	91	201	40	70			
JTR-44020D	○	44.0	93	203	40	70			
JTR-45020D	○	45.0	95	205	40	70			
JTR-46020D	○	46.0	97	207	40	70			
JTR-47020D	○	47.0	99	209	40	70			
JTR-48020D	○	48.0	101	211	40	70			
JTR-49020D	○	49.0	103	213	40	70			
JTR-50020D	○	50.0	105	215	40	70			
JTR-51020D	○	51.0	106	216	40	70	SPMG-090408 (刀杆配4个刀片) The drill matches with 4pcs inserts.	TSB-35080	TXL-15
JTR-52020D	○	52.0	108	218	40	70			
JTR-53020D	○	53.0	110	220	40	70			
JTR-54020D	○	54.0	112	222	40	70			
JTR-55020D	○	55.0	114	224	40	70			
JTR-56020D	○	56.0	116	226	40	70			
JTR-57020D	○	57.0	118	228	40	70			
JTR-58020D	○	58.0	120	300	40	70			
JTR-59020D	○	59.0	122	333	40	70			
JTR-60020D	○	60.0	124	334	40	70			

●标准库存Standard inventory ○订单生产Order production

JTR 可转位3倍 SP 刀片高速钻
Indexable 3D SP Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JTR-13030D	○	13.0	42	119	25	50	SPMG-050204	TSB-20050	TXL-6
JTR-13530D	○	13.5	44	121	25	50			
JTR-14030D	○	14.0	45	122	25	50			
JTR-14530D	○	14.5	47	124	25	50	SPMG-060204	TSB-22050	TXL-6
JTR-15030D	○	15.0	48	125	25	50			
JTR-15530D	○	15.5	50	136	25	56			
JTR-16030D	○	16.0	51	137	25	56			
JTR-16530D	○	16.5	53	139	25	56			
JTR-17030D	○	17.0	54	140	25	56			
JTR-17530D	○	17.5	56	142	25	56			
JTR-18030D	○	18.0	57	143	25	56			
JTR-18520D	○	18.5	59	145	25	56			
JTR-19030D	○	19.0	60	146	25	56			
JTR-19530D	○	19.5	62	148	25	56			
JTR-20030D	○	20.0	63	149	25	56			
JTR-20530D	○	20.5	65	151	25	56			
JTR-21030D	○	21.0	66	152	25	56			
JTR-21530D	○	21.5	68	154	25	56			
JTR-22030D	○	22.0	69	155	25	60	SPMG-07T308	TSB-25060	TXL-8
JTR-22530D	○	22.5	71	166	25	60			
JTR-23030D	○	23.0	72	167	25	60			
JTR-23530D	○	23.5	74	169	25	60			
JTR-24030D	○	24.0	75	170	25	60			
JTR-24530D	○	24.5	77	172	25	60			
JTR-25030D	○	25.0	78	173	32	60			
JTR-25530D	○	25.5	80	175	32	60			
JTR-26030D	○	26.0	81	176	32	60			

●标准库存Standard inventory ○订单生产Order production

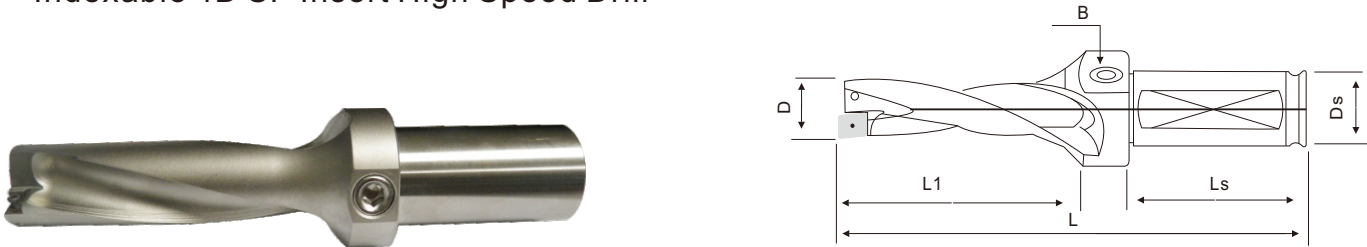
JTR 可转位3倍 SP 刀片高速钻
Indexable 3D SP Insert High Speed Drill



型号 Model	库存 Stock	D	L1	L	Ds	Ls	INSERT	SCREW	DRIVER
JTR-26530D	○	26.5	83	178	32	60	SPMG-07T308	TSB-25060	TXL-8
JTR-27030D	○	27.0	84	179	32	60	SPMG-090408	TSB-35080	TXL-15
JTR-27530D	○	27.5	86	181	32	60			
JTR-28030D	○	28.0	87	182	32	60			
JTR-28530D	○	28.5	89	184	32	60			
JTR-29030D	○	29.0	90	185	32	60			
JTR-29530D	○	29.5	94	189	32	60			
JTR-30030D	○	30.0	95	190	32	60			
JTR-31030D	○	31.0	98	193	32	60			
JTR-32030D	○	32.0	101	196	32	60			
JTR-33030D	○	33.0	104	199	32	60			
JTR-34030D	○	34.0	107	202	32	70	SPMG-110408	TSB-40100	TXL-15
JTR-35030D	○	35.0	110	205	32	70			
JTR-36030D	○	36.0	113	208	32	70			
JTR-37030D	○	37.0	116	226	32	70			
JTR-38030D	○	38.0	119	229	32	70			
JTR-39030D	○	39.0	122	232	32	70			
JTR-40030D	○	40.0	125	235	32	70	SPMG-140512	TSB-50100	TXL-20
JTR-41030D	○	41.0	128	238	32	70			
JTR-42030D	○	42.0	131	240	32	70			
JTR-43030D	○	43.0	134	244	40	70			
JTR-44030D	○	44.0	137	247	40	70			
JTR-45030D	○	45.0	140	250	40	70			
JTR-46030D	○	46.0	143	253	40	70			
JTR-47030D	○	47.0	146	256	40	70			
JTR-48030D	○	48.0	149	259	40	70			
JTR-49030D	○	49.0	152	262	40	70			
JTR-50030D	○	50.0	155	265	40	70	SPMG-090408 (刀片配4个刀片) The drill matches with 4pcs inserts.	TSB-35080	TXL-15
JTR-51030D	○	51.0	156	266	40	70			
JTR-52030D	○	52.0	159	269	40	70			
JTR-53030D	○	53.0	162	272	40	70			
JTR-54030D	○	54.0	165	275	40	70			
JTR-55030D	○	55.0	168	278	40	70			
JTR-56030D	○	56.0	171	281	40	70			
JTR-57030D	○	57.0	174	284	40	70			
JTR-58030D	○	58.0	177	288	40	70			
JTR-59030D	○	59.0	180	290	40	70			
JTR-60030D	○	60.0	182	292	40	70			

●标准库存Standard inventory ○订单生产Order production

JTR 可转位4倍 SP 刀片高速钻
Indexable 4D SP Insert High Speed Drill



型号 Model	库存 Stock	D	L1	L	Ds	Ls	INSERT	SCREW	DRIVER
JTR-13040D	○	13.0	55	132	25	50	SPMG-050204	TSB-20050	TXL-6
JTR-13540D	○	13.5	57	134	25	50			
JTR-14040D	○	14.0	59	136	25	50			
JTR-14540D	○	14.5	61	138	25	50			
JTR-15040D	○	15.0	63	140	25	50			
JTR-15540D	○	15.5	65	151	25	56			
JTR-16040D	○	16.0	67	153	25	56	SPMG-060204	TSB-22050	TXL-6
JTR-16540D	○	16.5	69	155	25	56			
JTR-17040D	○	17.0	71	157	25	56			
JTR-17540D	○	17.5	73	159	25	56			
JTR-18040D	○	18.0	75	161	25	56			
JTR-18540D	○	18.5	77	163	25	56			
JTR-19040D	○	19.0	79	165	25	56			
JTR-19540D	○	19.5	81	167	25	56			
JTR-20040D	○	20.0	83	169	25	56			
JTR-20540D	○	20.5	85	171	25	56			
JTR-21040D	○	21.0	87	173	25	56	SPMG-07T308	TSB-25060	TXL-8
JTR-21540D	○	21.5	89	175	25	56			
JTR-22040D	○	22.0	91	177	25	60			
JTR-22540D	○	22.5	93	188	25	60			
JTR-23040D	○	23.0	95	190	25	60			
JTR-23540D	○	23.5	97	190	25	60			
JTR-24040D	○	24.0	99	194	25	60			
JTR-24540D	○	24.5	101	196	25	60			
JTR-25040D	○	25.0	103	198	32	60			
JTR-25540D	○	25.5	105	200	32	60			
JTR-26040D	○	26.0	107	202	32	60			

●标准库存Standard inventory ○订单生产Order production

JTR 可转位4倍 SP 刀片高速钻
Indexable 4D SP Insert High Speed Drill



型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	DRIVER
		D	L1	L	Ds	Ls			
JTR-26540D	○	26.5	109	204	32	60	SPMG-07T308	TSB-25060	TXL-8
JTR-27040D	○	27.0	111	206	32	60			
JTR-27540D	○	27.5	113	208	32	60			
JTR-28040D	○	28.0	115	210	32	60	SPMG-090408	TSB-35080	TXL-15
JTR-28540D	○	28.5	117	212	32	60			
JTR-29040D	○	29.0	119	214	32	60			
JTR-29540D	○	29.5	123	218	32	60			
JTR-30040D	○	30.0	125	220	32	60			
JTR-31040D	○	31.0	129	224	32	60			
JTR-32040D	○	32.0	133	228	32	60			
JTR-33040D	○	33.0	137	232	32	60			
JTR-34040D	○	34.0	141	236	32	70			
JTR-35040D	○	35.0	145	240	32	70			
JTR-36040D	○	36.0	149	244	32	70	SPMG-110408	TSB-40100	TXL-15
JTR-37040D	○	37.0	153	263	32	70			
JTR-38040D	○	38.0	157	267	32	70			
JTR-39040D	○	39.0	161	271	32	70			
JTR-40040D	○	40.0	165	275	32	70			
JTR-41040D	○	41.0	169	279	32	70	SPMG-140512	TSB-50100	TXL-20
JTR-42040D	○	42.0	173	283	32	70			
JTR-43040D	○	43.0	177	287	40	70			
JTR-44040D	○	44.0	181	291	40	70			
JTR-45040D	○	45.0	185	295	40	70			
JTR-46040D	○	46.0	189	299	40	70			
JTR-47040D	○	47.0	193	303	40	70			
JTR-48040D	○	48.0	197	307	40	70			
JTR-49040D	○	49.0	201	311	40	70			
JTR-50040D	○	50.0	205	315	40	70			
JTR-51040D	○	51.0	206	316	40	70	SPMG-090408 (刀杆配4个刀片) The drill matches with 4pcs inserts.	TSB-35080	TXL-15
JTR-52040D	○	52.0	208	318	40	70			
JTR-53040D	○	53.0	210	320	40	70			
JTR-54040D	○	54.0	212	322	40	70			
JTR-55040D	○	55.0	214	324	40	70			
JTR-56040D	○	56.0	216	326	40	70			
JTR-57040D	○	57.0	218	328	40	70			
JTR-58040D	○	58.0	220	330	40	70			
JTR-59040D	○	59.0	222	333	40	70			
JTR-60040D	○	60.0	224	334	40	70			

●标准库存Standard inventory ○订单生产Order production

JTR 可转位5倍 SP 刀片高速钻
Indexable 5D SP Insert High Speed Drill

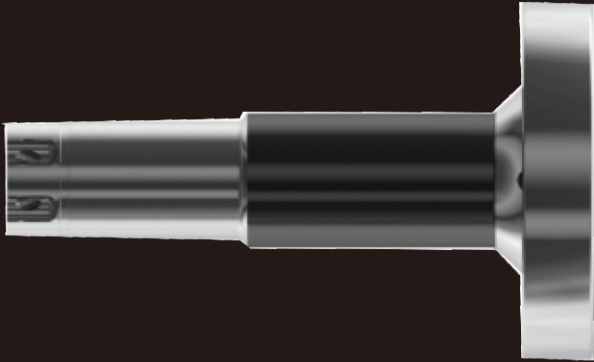
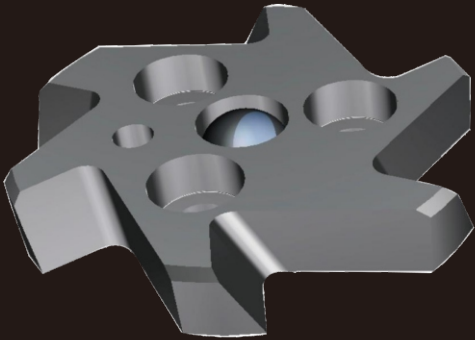


型号 Model	库存 Stock	尺寸 Dimensions(mm)					INSERT	SCREW	PILOT DRILL
		D	L1	L	Ds	Ls			
JTR-25050D	○	25.5	125	250	32	70	SP..07T308	TSB-25060	TXL-8
JTR-26050D	○	26.5	130	250	32	70			
JTR-27050D	○	27.5	135	250	32	70			
JTR-28050D	○	28.5	140	250	32	70	SP..090408	TSB-35080	TXL-15
JTR-29050D	○	29.5	145	250	32	70			
JTR-30050D	○	30.5	150	250	32	70			
JTR-31050D	○	31.5	155	275	32	70			
JTR-32050D	○	32.5	160	275	32	70			
JTR-33050D	○	33.5	165	275	32	70			
JTR-34050D	○	34.5	170	275	32	70			
JTR-35050D	○	35.5	175	275	32	70			
JTR-36050D	○	36.5	180	300	32	70			
JTR-37050D	○	37.5	185	300	32	70			
JTR-38050D	○	38.5	190	300	32	70	SP..110408	TSB-40100	TXL-15
JTR-39050D	○	39.5	195	300	32	70			
JTR-40050D	○	40.5	200	300	32	70			
JTR-41050D	○	41.5	205	345	32	80			
JTR-42050D	○	42.5	210	345	32	80			
JTR-43050D	○	43.5	215	345	40	80	SP..140512	TSB-50100	TXL-20
JTR-44050D	○	44.5	220	345	40	80			
JTR-45050D	○	45.5	225	345	40	80			
JTR-46050D	○	46.5	230	370	40	80			
JTR-47050D	○	47.5	235	370	40	80			
JTR-48050D	○	48.5	240	370	40	80			
JTR-49050D	○	49.5	245	370	40	80			
JTR-50050D	○	50.5	250	370	40	80			
JTR-51050D	○	51.5	255	395	40	80			
JTR-52050D	○	52.5	260	395	40	80			
JTR-53050D	○	53.5	265	395	40	80	SP..090408 (刀杆配4个刀片) The drill matches with 4pcs inserts.	TSB-35080	TXL-15
JTR-54050D	○	54.5	270	395	40	80			
JTR-55050D	○	55.5	275	395	40	80			
JTR-56050D	○	56.5	280	420	40	80			
JTR-57050D	○	57.5	285	420	40	80			
JTR-58050D	○	58.5	290	420	40	80			
JTR-59050D	○	59.5	295	420	40	80			
JTR-60050D	○	60.5	300	420	40	80			

●标准库存Standard inventory ○订单生产Order production

— 铰孔

Reaming



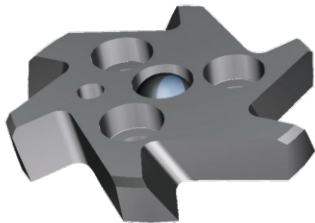
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铰刀刀头
Reamer Head



	刀头直径/mm Head diameter	库存 Stock	厚度/mm Thickness	刃数 Flutes	起订量/片 MOQ/PCS	订单号 Order number	材质 Material
常规系列 Common Series	D12≤D≤D15	○	6.5	6	10	15T1	金属陶瓷 Metal ceramic
	D15 <D≤D16	○	6.6	6	10	16T1	
	D16 <D≤D19	○	6.78	6	10	19T1	
	D19<D≤D23	○	8.33	6	10	23T1	
	D23 <D≤D28	○	8.33	6	10	28T1	
	D28 <D≤D33	○	8.33	8	5	33T1	
	D33 <D≤D38.5	○	10	8	5	38.5T1	
	D38.5<D≤D44.5	○	10	8	2	44.5T1	
	D44.5<D≤D51	○	10.3	8	2	51T1	
定制系列 CustomSeries	D51 <D≤D58	○	11.3	8	2	58T1	
	D58 <D≤D68	○	13.0	8	2	68T1	
	D68 <D≤D78	○	13.0	8	2	78T1	
	D78<D≤D89	○	15.5	8	2	89T1	
	D89 <D≤D100	○	15.5	10	2	100T1	
	D100<D≤D140		根据方案定制 Customized according to the plan				
定制系列 CustomSeries	D12≤D≤D15	○	6.5	6	10	15H3	硬质合金 carbide
	D15 <D≤D16	○	6.6	6	10	16H3	
	D16 <D≤D19	○	6.78	6	10	19H3	
	D19<D≤D23	○	8.33	6	10	23H3	
	D23 <D≤D28	○	8.33	6	10	28H3	
	D28 <D≤D33	○	8.33	8	5	33H3	
	D33 <D≤D38.5	○	10	8	5	38.5H3	
	D38.5<D≤D44.5	○	10	8	2	44.5H3	
	D44.5<D≤D51	○	10.3	8	2	51H3	
定制系列 CustomSeries	D51 <D≤D58	○	11.3	8	2	58H3	
	D58 <D≤D68	○	13.0	8	2	68H3	
	D68 <D≤D78		13.0	8	2	78H3	
	D78>D>D89		15.5	8	2	89H3	
	D89>D> D100		15.5	10	2	100H3	
	D100>D> D140		根据方案定制 Customized according to the plan				

●标准库存Standard inventory ○订单生产Order production

可换式刀头铰刀
Exchangeable Head Reamer

基础结构:
Infrastructure:

刀杆 刀头
Toolheader Reamer head

连接结构:
Connection structure:

高精度重复定位机构
High precision repeat positioning mechanism

高精度简单重复定位机构，操作简单、更换方便、保证刀具更换精度-致性

替代传统整体结构铰刀，降低成本

替代传统焊接式铰刀涂层难题、提高刀具寿命、降低成本

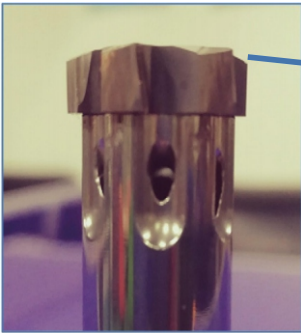
跳动不可调节，刀具精度由机床、现有工具系统保证

High-precision simple repeat positioning mechanism, simple operation, easy to replace, ensure the precision of tool replacement - compliance

Replace the traditional integral structure reamer, reduce the cost

Replace traditional welding reamer coating problem, improve tool life, reduce cost

The runout is not adjustable, the tool precision is guaranteed by the machine tool and the existing tool system



国家发明专利
高精度可重复定位机构
National invention patent
High precision repeatable positioning mechanism

应用范围:
Range of application

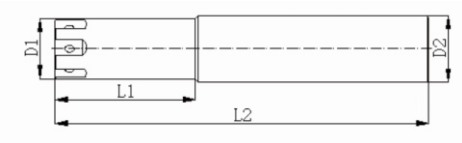
- 替代传统整体硬质合金、焊接铰刀，提高换刀精度、降低成本、提高刀具寿命。
- 替代镗刀工艺，提高效率、适应工业化规模生产。

Replace the traditional solid carbide, Welding reamer, improve tool changing accuracy, Reduce cost and improve tool life.
■ Replace boring cutter process, improve efficiency, Adapt to industrial scale production.



铰刀刀杆
Reamer Toolholder





刀头范围/mm Tool head range /mm	L1	L2	D1	D2	订货号 The order no.	库存 inventory
D15≤D≤D16	40	100	14	16	QBD9.0-16-L40-L100	○
	70	120	14	16	QBD9.0-16-L70-L120	○
	100	150	14	16	QBD9.0-16-L100-L150	○
D16≤D≤D19	54	100	15	20	QBD10.4(5)-20-L54-L100	○
	80	130	15	20	QBD10.4(5)-20-L80-L130	○
	120	170	15	20	QBD10.4(5)-20-L120-L170	○
D19≤D≤D23	54	120	18	20	QBD12-20-L54-L120	○
	95	150	18	20	QBD12-20-L95-L150	○
	150	200	18	20	QBD12-20-L150-L200	○
D23≤D≤D28	30	120	22	20	QBD15-20-L120	○
	30	150	22	20	QBD15-20-L150	○
	30	200	22	20	QBD15-20-L200	○
D28≤D≤D33	30	120	27	25	QBD17-25-L120	○
	30	150	27	25	QBD17-25-L150	○
	30	200	27	25	QBD17-25-L200	○
D33≤D≤D38.5	根据方案定制 Customized according to the plan					
D38.5≤D≤D44.5						
D44.5≤D≤D51						

●标准库存Standard inventory ○订单生产Order production

模块化刚性连接系统
Modular Rigid Connection System

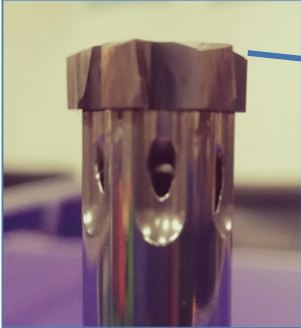
三大基础结构
Three major infrastructures

主柄、连接头、刀头
Main handle, connecting head, tool head

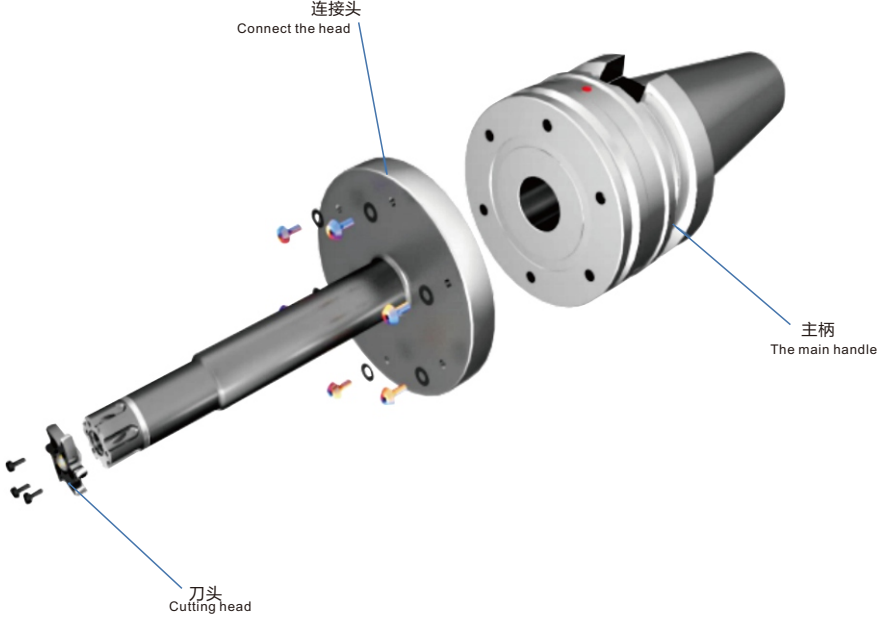
两大连接结构
Two connected structures

可调式刚性连接机构、高精度重复定位机构
Adjustable rigid connection mechanism,
High precision repeat positioning mechanism

- 高精度简单重复定位机构为智能制造、专业制造提供基础
- 操作简单、对客户要“0”基础要求，5分钟即可掌握调节、更换等使用
- High precision simple repeat positioning mechanism for intelligent manufacturing, professional manufacturing to provide the basis
- Simple operation, the customer to "0 "basic requirements, 5 minutes can master adjustment, replacement and other use



国家发明专利
高精度可重复定位机构
National invention patent
High precision repeatable positioning mechanism



连接头
Connect the head

主柄
The main handle

刀头
Cutting head

应用范围:
Range of application

- 适用直径、圆度、圆柱特殊要求孔类精加工。
- 系统可调节、精度高、稳定、调节简单，适应大规模、流水线、智能化生产。
- Suitable for diameter, roundness, cylindrical special requirements of hole finishing.
- The system can be adjusted, high precision, stable, easy to adjust, Adapt to large-scale, assembly line, intelligent production.

主柄
Main Handle

BT系列
BT series



尺寸 size	D1	L	订货编号 The order number	库存 inventory
BT30	50	52	QPA50-BT30	○
BT40	65	57	QPA65-BT40	○
BT50	65	60	QPA65-BT50	○
BT50	80	60	QPA80-BT50	○

●标准库存Standard inventory ○订单生产Order production

HSK系列
HSK series



尺寸 size	D1	L	订货编号 The order number	库存 inventory
HSK40A	50	52	QPA50-HSK40A	○
HSK50A	50	59	QPA50-HSK50A	○
HSK63A	65	59	QPA65-HSK65A	○
HSK80A	65	59	QPA65-HSK80A	○
HSK100A	80	62	QPA80-HSK100A	○

●标准库存Standard inventory ○订单生产Order production

直柄系列
Straight handle series



D1	D2	L1	L2	订货编号 The order number	库存 inventory
50	20	60	77	QPA50-20	○
50	25	60	77	QPA50-25	○
50	32	60	77	QPA50-32	○

●标准库存Standard inventory ○订单生产Order production

一体式连接头
Integral connection head

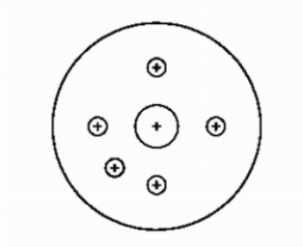
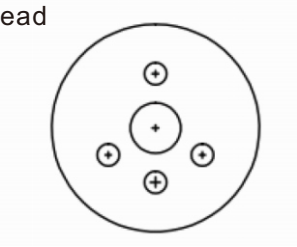


刀头范围/mm Tool head range /mm	D1	D2	D3	L1	L2	订货号 The order no.	库存 inventory
D15≤D≤D16	14	20	65	40	82	QPB9.0-65-L40-L100-15	○
D16≤D≤D19	15	20	65	48	82	QPB10.4-65-L48-L100-15	○
D19≤D≤D23	18	25	65	54	82	QPB12-65-L54-L100-18	○
D23≤D≤D28	22	22	65	-	82	QPB15-65-L82-L100-22	○
D28≤D≤D33	27	27	65	-	92	QPB17-65-L92-L110-27	○
D33≤D≤D38.5	32	32	65	-	95	QPB22-65-L95-L110-32	○
D38.5≤D≤D44.5	37	37	65	-	115	QPB24-65-L115-L130-37	○
D44.5≤D≤D51	43	40	65	30	115	QPB27-65-L115-L130-43	○
D51≤D≤D58	48	55	80	30	115	QPB34-80-L115-L130-48	○
D58≤D≤D68	55	55	80	30	115	QPB42-80-L115-L130-55	○
D68≤D≤D78	65	55	80	30	115	QPB52-80-L115-L130-65	○
D78≤D≤D89	76	55	80	30	115	QPB62-80-L115-L130-75	○
上述其余规格尺寸根据方案定制 The remaining specifications and dimensions mentioned above will be customized according to the plan							
D89≤D≤D100	根据方案定制 Customized according to the plan						
D100≤D≤D140	根据方案定制 Customized according to the plan						

●标准库存Standard inventory ○订单生产Order production

附件及工具
Accessories and tools

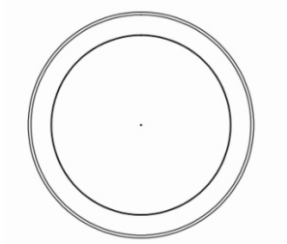
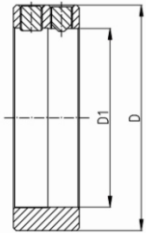
校验头
Check the head



配合刀头直径/mm Matched Head Diameter	订货号 The order no.	库存 inventory
D15≤D≤D16	QPDB16	○
D16 <D≤D19	QPDB19	○
D19 <D≤D23	QPDB23	○
D23 <D≤D28	QPDB28	○
D28 <D≤D33	QPDB33	○
D33 <D≤D38.5	QPDB38.5	○
D38.5 <D≤D44.5	QPDB44.5	○
D44.5 <D≤D51	QPDB51	○
D51 <D≤D58	QPDB58	○
D58 <D≤D68	QPDB68	○
D68 <D≤D78	QPDB78	○
D78 <D≤D89	QPDB89	○
D89 <D≤D100	QPDB100	○

●标准库存Standard inventory ○订单生产Order production

调节环
Adjustment Ring



调节环 Adjustable ring	D	D1	匹配主柄编码 Matches the primary handle code	配套扳手 Supporting the wrench	库存 inventory
QPE50	65	50	QPA50-20 QPA50-32Q QPA50-HSK40	QPA50-25 PA50-BT30 QPA50-HSK50	○
QPE65	82	65	QPA65-BT40 QPA65-HSK63	QPA65-BT50 QPA65-HSK80	○
QPE80	100	80	QPA80-BT50 QPA80-HSK100	L型 (type) 4x140	○

●标准库存Standard inventory ○订单生产Order production

扳手
Wrench



扳手型号 Spanner type	批头型号 Batch of head type	对应的螺丝 Corresponding screw	对应扭力值 Corresponds to the torque value	库存 inventory
1/4 0.4~2.6N.m	T6	M2.0x8	0.65-0.7N.m	○
	T8	M2.5x8	1.25-1.3N.m	○
	T10	M3.0x10	2.1-2.2N.m	○

●标准库存Standard inventory ○订单生产Order production

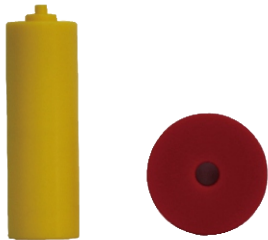
螺丝
Screws



配合刀头直径/mm Matched Head Diameter	订货号 The order no.	订货号 The order no.	库存 inventory
D15≤D≤D16	M2.5x8	T8	○
D16 <D≤D19	M2.0x8	T6	○
D19 <D≤D23			○
D23 <D≤D28	M2.5x8	T8	○
D28 <D≤D33			○
D33 <D≤D38.5			○
D38.5 <D≤D44.5	M3.0x10	T10	○
D44.5<D≤D51			○
D51 <D≤D58			○
D58 <D≤D68			○
D68 <D≤D78	M4x10	4x70	○
D78<D≤D89			○
D89<D≤D100			○

●标准库存Standard inventory ○订单生产Order production

拆卸器
Puller

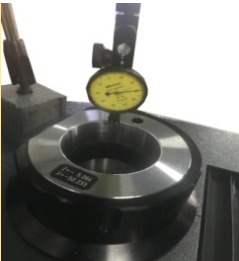


配合刀头直径/mm Matched Head Diameter	订货号 The order no.	订货号 The order no.	库存 inventory
D15≤D≤D16			○
D16 <D≤D19	D4x4D30x95		○
D19 <D≤D23			○
D23 <D≤D28			○
D28 <D≤D33			○
D33 <D≤D38.5			○
D38.5 <D≤D44.5			○
D44.5<D≤D51			○
D51 <D≤D58			○
D58 <D≤D68			○
D68 <D≤D78			○
D78 <D≤D89			○
D89 <D≤D100			○

●标准库存Standard inventory ○订单生产Order production

操作指南
Operation Guide

【1】清洁机床主轴锥孔后，如图用千分表打主轴内锥孔跳动，若内锥孔跳动≤0.02mm，则此系统方可弥补机床误差。



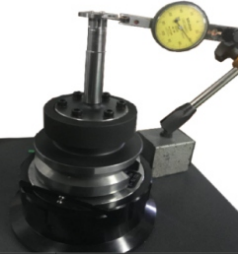
【6】清洁校验头端面及钢珠、锥孔，（清理完使用气枪吹一下效果更好并将钢珠用手压入校验头没有标刻面，使用压紧螺丝将校验头固定在连接头上渐进锁紧刀头螺丝。



【2】清洁主柄上端面及锥面后，将主柄安装在机床主轴。



【7】如图所示将千分表针头对准校验头中间位置，表针与校验头水平放置。



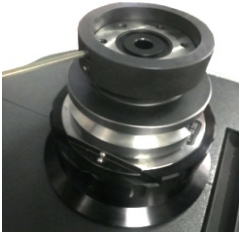
【3】如图所示将千分表打在主柄光面上，主柄取下旋转180°再安装主轴上，选择跳动最小的方向重新安装主柄。



【8】旋转主轴找到最高点,并将调节环的调节螺丝旋转到最高点同方向点使用内六角扳手进行调节，调节量为最大跳动的一半，重复此步骤，直至跳动<0.002mm。



【4】安装调节环，调整限位螺丝使旋转调节环相对顺畅即可。



【9】交叉紧固6个连接头压紧螺丝;再次确认系统跳动≤0.002mm。



【5】清洁连接头法兰面，如图安装六颗弹簧垫圈（凸面向上）和连接头压紧螺丝，弹簧垫圈微量变形为宜。



【10】拆卸校验头并安装刀头，渐进锁紧压紧螺丝，再次确认系统跳动≤0.003mm。



- 1.请严格按照以上操作步骤调节系统，若有未尽详细之处，务必遵守现场操作培训进行操作。
- 2.此系统所有配件皆经过特殊加工处理，切勿使用其它产品代替任一配件。
- 3.系统调节完毕后，取下调节环，确保所有螺丝处于上紧状态，方可进行加工。
- 4.当系统长期未使用时，所有的螺丝需重新拧紧，并检查系统跳动。
- 5.注意温差变化，导致系统热胀冷缩影响加工精度。

— 工具系统
Tool system



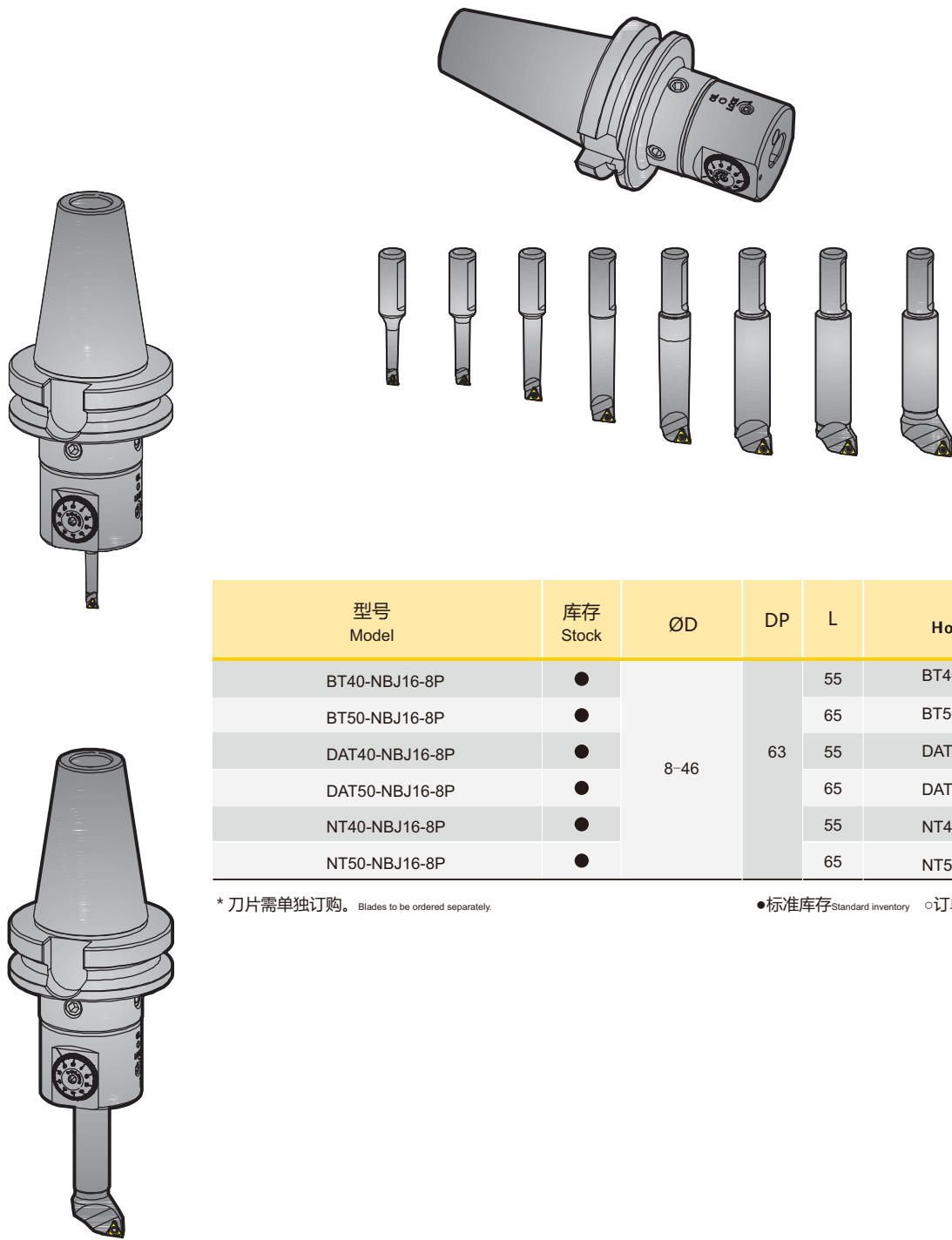
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NT 刀柄系列 K17
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DAT/JT刀柄系列 K18-K24
DAT/JT Mill chuck series
强力刀柄套装 K25-K26
Muti Lock Mill chuck SET
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Technical guide

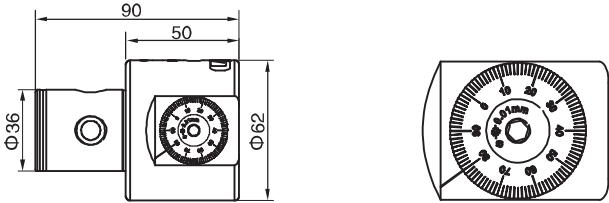
NBJ16 小径微调精镗头(套装)
NBJ16 fine tuning bore system(whole set)



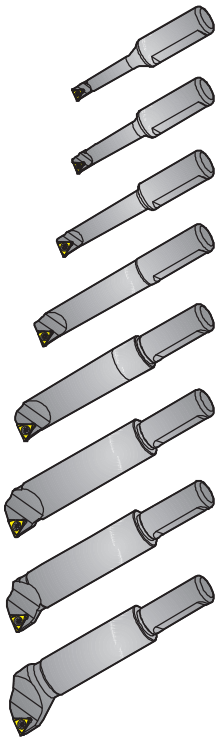
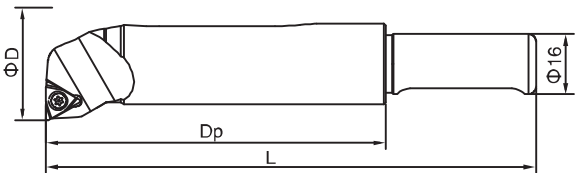
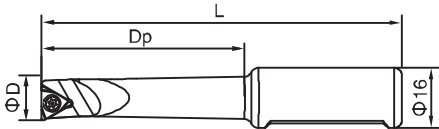
型号 Model	库存 Stock	ØD	DP	L	Holder code
BT40-NBJ16-8P	●	8-46	63	55	BT40-CK63-55
BT50-NBJ16-8P	●			65	BT50-CK63-65
DAT40-NBJ16-8P	●			55	DAT40-CK63-55
DAT50-NBJ16-8P	●			65	DAT50-CK63-65
NT40-NBJ16-8P	●			55	NT40-CK63-55
NT50-NBJ16-8P	●			65	NT50-CK63-65

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

NBJ16 小径微调精镗头(组件)
NBJ16 fine tuning bore system(subassembly)



Cat.No	Tuning precision	Stroke	Weight
NBJ16	Φ0.01mm/	6	1.2

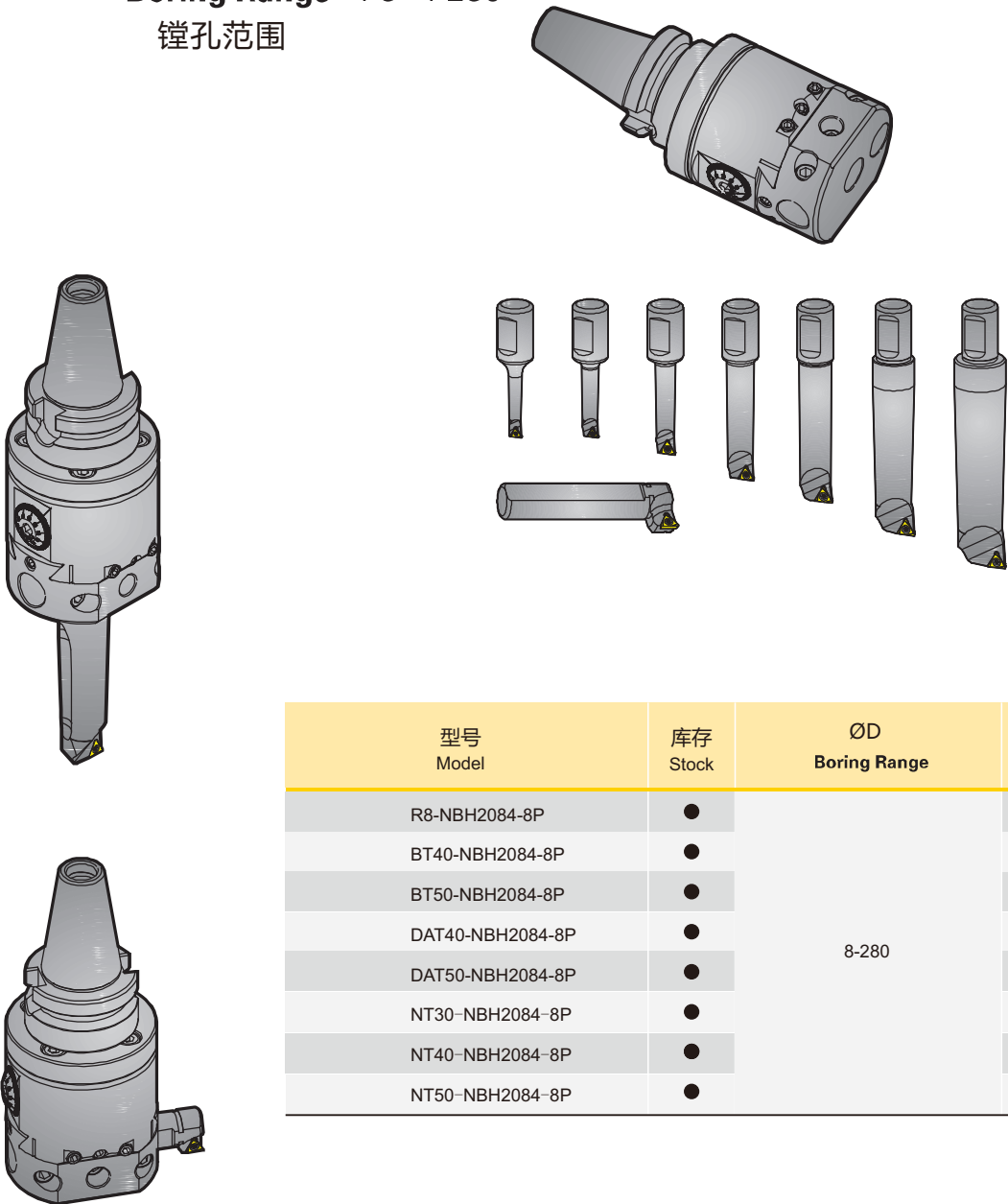


型号 Model	ΦD Boring Range	库存 Stock	(mm)		Applicable inserts	Clamp screw	Wrench	Weight
			Dp	L				
NBJ-1608-32	8-11	●	32	86	TBGT0601..L	A20050J	T6	0.077
NBJ-1610-40	10-13	●	40	86	TPGH0902..L	A25060G	T8	0.082
NBJ-1612-53	12-17	●	53	96				0.095
NBJ-1616-68	16-21	●	68	110				0.143
NBJ-1620-83	20-26	●	83	124	TPGH1103..L	A30070E	T8	0.203
NBJ-1625-90	25-31	●	90	131				0.275
NBJ-1630-90	30-41	●	90	131				0.275
NBJ-1640-90	40-51	●	90	131				0.286

* 刀片需单独订购。Blades to be ordered separately. ●标准库存Standard inventory ○订单生产The order production

NBH2084 微调精镗头(套装)
NBH2084 fine tuning bore system(whole set)

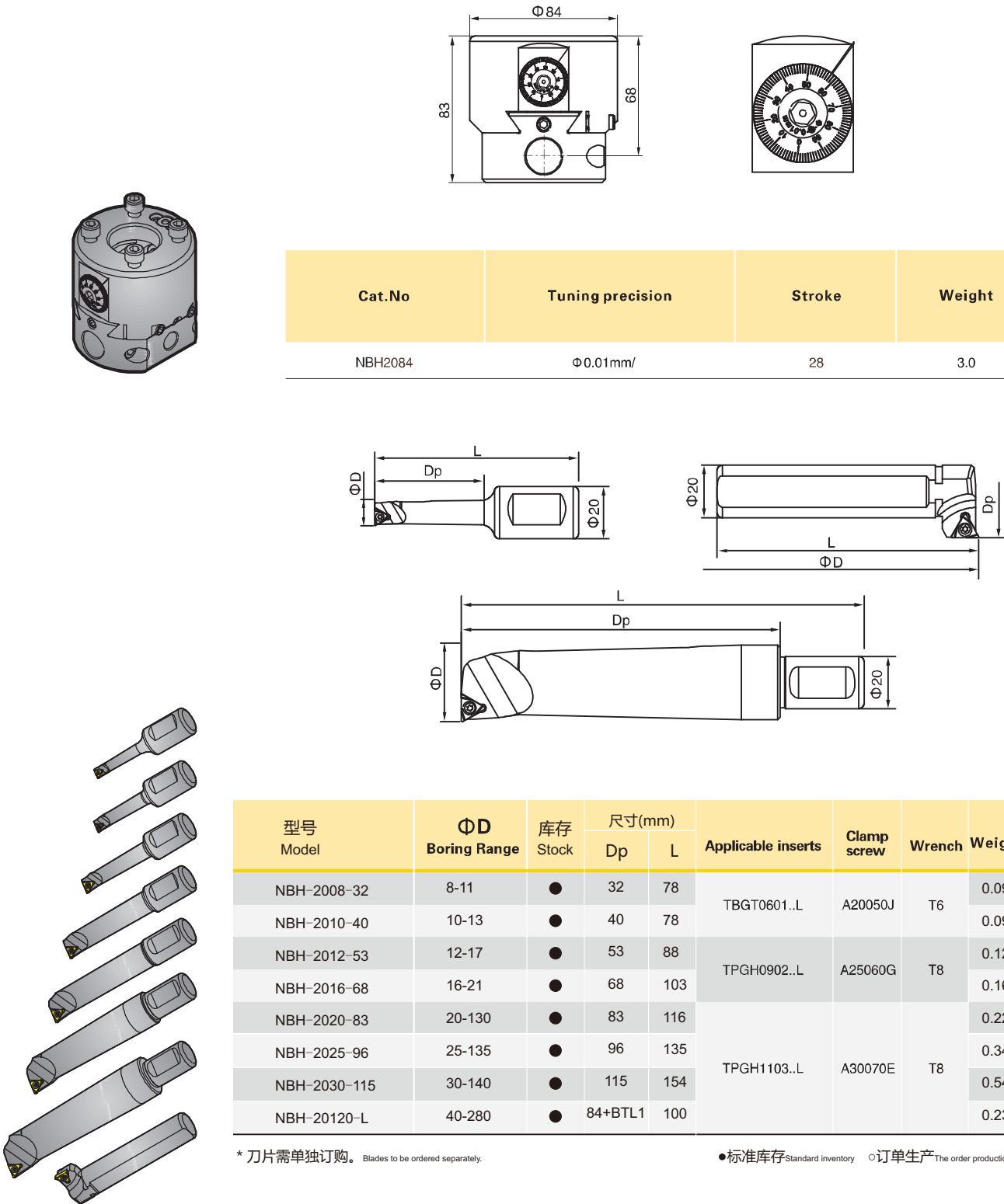
Boring Range $\Phi 8-\Phi 280$
镗孔范围



型号 Model	库存 Stock	ØD Boring Range	CHolder code
R8-NBH2084-8P	●	8-280	R8-NBH 7/16"-20UNF
BT40-NBH2084-8P	●		BT40-NBH-50-B
BT50-NBH2084-8P	●		BT50-NBH-55-B
DAT40-NBH2084-8P	●		DAT40-NBH
DAT50-NBH2084-8P	●		DAT50-NBH
NT30-NBH2084-8P	●		NT30-NBH-metric M12
NT40-NBH2084-8P	●		NT40-NBH-metric M16
NT50-NBH2084-8P	●		NT50-NBH-metric M24

●标准库存 Standard inventory

NBH2084 微调精镗头(组件)
NBH2084 fine tuning bore system(subassembly)

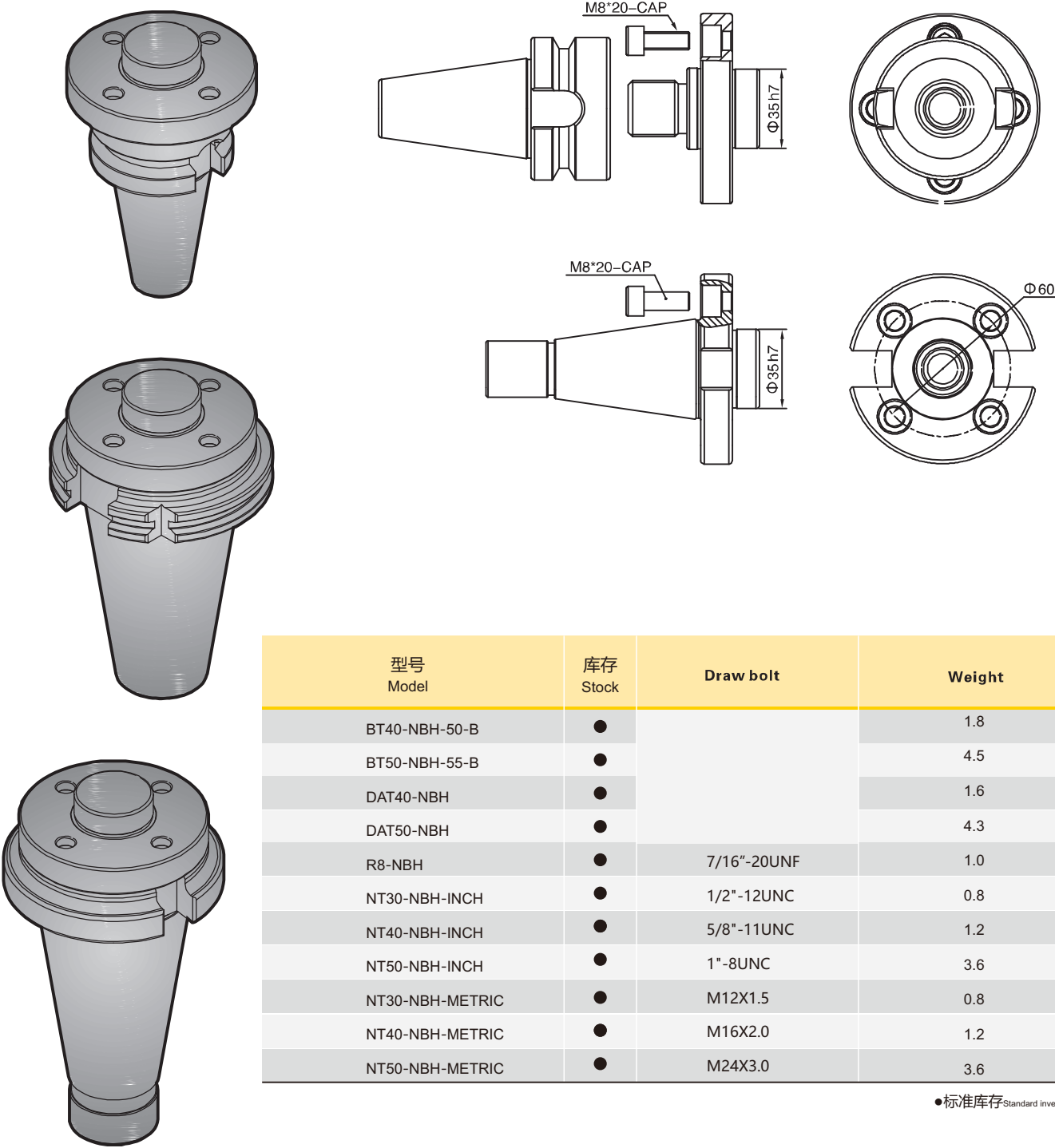


型号 Model	ØD Boring Range	库存 Stock	尺寸(mm)		Applicable inserts	Clamp screw	Wrench	Weight
			Dp	L				
NBH-2008-32	8-11	●	32	78	TBGT0601..L	A20050J	T6	0.09
NBH-2010-40	10-13	●	40	78	TPGH0902..L	A25060G	T8	0.09
NBH-2012-53	12-17	●	53	88				0.12
NBH-2016-68	16-21	●	68	103				0.16
NBH-2020-83	20-130	●	83	116	TPGH1103..L	A30070E	T8	0.22
NBH-2025-96	25-135	●	96	135				0.34
NBH-2030-115	30-140	●	115	154				0.54
NBH-20120-L	40-280	●	84+BTL1	100				0.23

* 刀片需单独订购。Blades to be ordered separately.

●标准库存 Standard inventory ○订单生产 The order production

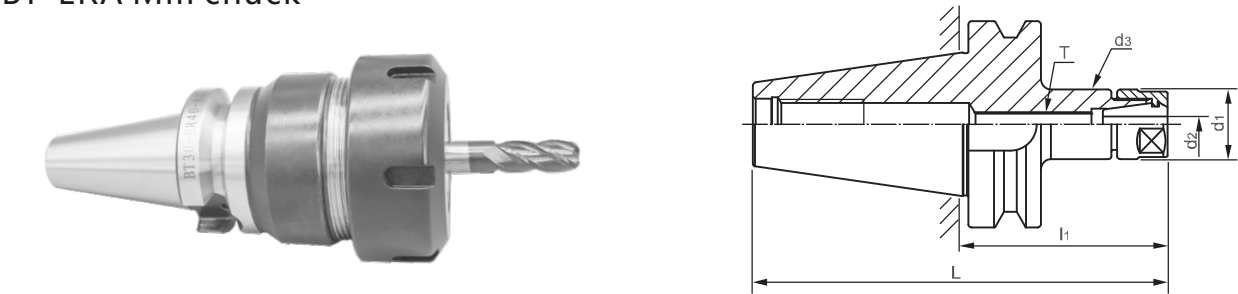
NBH2084 微调精镗头 (组件)
NBH2084 fine tuning bore system(subassembly)



型号 Model	库存 Stock	Draw bolt	Weight
BT40-NBH-50-B	●		1.8
BT50-NBH-55-B	●		4.5
DAT40-NBH	●		1.6
DAT50-NBH	●		4.3
R8-NBH	●	7/16"-20UNF	1.0
NT30-NBH-INCH	●	1/2"-12UNC	0.8
NT40-NBH-INCH	●	5/8"-11UNC	1.2
NT50-NBH-INCH	●	1"-8UNC	3.6
NT30-NBH-METRIC	●	M12X1.5	0.8
NT40-NBH-METRIC	●	M16X2.0	1.2
NT50-NBH-METRIC	●	M24X3.0	3.6

●标准库存Standard inventory

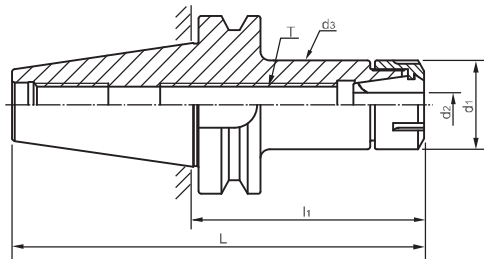
BT-ER 弹性筒夹刀柄
BT-ERA Mill chuck



型号 Model	库存 Stock	尺寸 Size (mm)						
		I1	L	d1	d2	Nut	d3	T
BT30-ER11A-60	●	60	108.4	19	0.5-7.0	ER11A	19	M6x1.0P
BT30-ER11A-100	●	100	148.4					
BT30-ER11A-150	●	150	198.4					
BT30-ER16A-60	●	60	108.4	28	0.5-10	ER16A	28	M10x1.5P
BT30-ER16A-100	●	100	148.4					
BT30-ER16A-150	●	150	198.4					
BT30-ER20A-60	●	60	108.4	34	0.5-13	ER20A	34	M12x1.75P
BT30-ER20A-100	●	100	148.4					
BT30-ER20A-150	●	150	198.4					
BT40-ER11A-70	●	70	135.8	19	0.5-7.0	ER11A	19	M6x1.0P
BT40-ER11A-100	●	100	165.8					
BT40-ER11A-150	●	150	215.8					
BT40-ER16A-70	●	70	135.8	28	0.5-10	ER16A	28	M10x1.5P
BT40-ER16A-100	●	100	165.8					
BT40-ER16A-150	●	150	215.8					
BT40-ER20A-70	●	70	135.8	34	0.5-13	ER20A	34	M12x1.75P
BT40-ER20A-100	●	100	170.8					
BT40-ER20A-150	●	150	215.8					
BT50-ER16A-70	●	70	171.8	28	0.5-10	ER16A	28	M10x1.5P
BT50-ER16A-100	●	100	201.8					
BT50-ER16A-150	●	150	251.8					
BT50-ER20A-70	●	70	171.8	34	0.5-13	ER20A	34	M12x1.75P
BT50-ER20A-100	●	100	201.8					
BT50-ER20A-150	●	150	251.8					

●标准库存Standard inventory

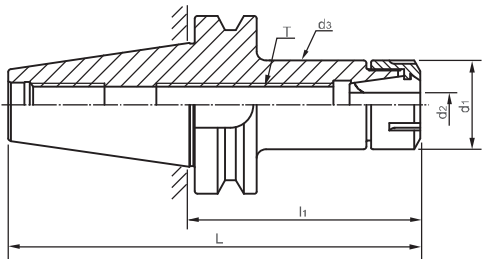
BT-ER 弹性筒夹刀柄
BT-ERM/UM Mill chuck



型号 Model	库存 Stock	尺寸 Size (mm)						
		l1	L	d1	d2	d3	Nut	T
BT30-ER11M-60	●	60	108.4	16	0.5-7.0	16	ER11M	M6x1.0P
BT30-ER11M-100	●	100	148.4					
BT30-ER11M-150	●	150	198.4					
BT30-ER16M-60	●	60	108.4	22	0.5-10	22	ER16M	M10x1.5P
BT30-ER16M-100	●	100	148.4					
BT30-ER16M-150	●	150	198.4					
BT30-ER20M-60	●	60	108.4	28	0.5-13	28	ER20M	M12x1.75P
BT30-ER20M-100	●	100	148.4					
BT30-ER20M-150	●	150	198.4					
BT30-ER25UM-60	●	60	108.4	42	0.5-16	42	ER25UM	M16x2.0P
BT30-ER25UM-100	●	100	148.4					
BT30-ER25UM-150	●	150	198.4					
BT30-ER32UM-60	●	60	108.4	50	2.0-20	50	ER32UM	
BT30-ER32UM-100	●	100	148.4					
BT30-ER32UM-150	●	150	198.4					
BT40-ER11M-70	●	70	135.4	16	0.5-7.0	16	ER11M	M6x1.0P
BT40-ER11M-100	●	100	165.4					
BT40-ER11M-150	●	150	215.4					
BT40-ER16M-70	●	70	135.4	22	0.5-10	22	ER16M	M10x1.5P
BT40-ER16M-100	●	100	165.4					
BT40-ER16M-150	●	150	215.4					
BT40-ER20M-70	●	70	135.4	28	0.5-13	28	ER20M	M12x1.75P
BT40-ER20M-100	●	100	165.4					
BT40-ER20M-150	●	150	215.4					

●标准库存Standard inventory

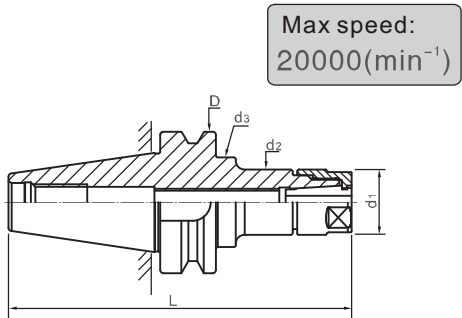
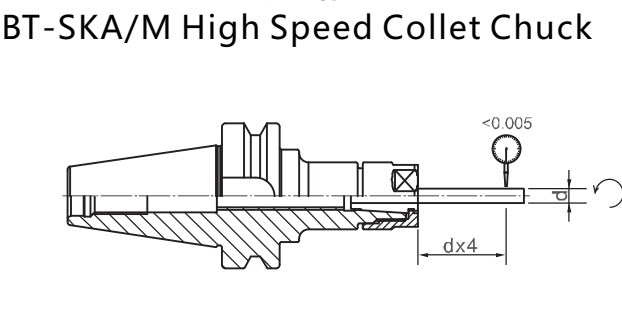
BT-ER 弹性筒夹刀柄
BT-ERM/UM Mill chuck



型号 Model	库存 Stock	尺寸 Size (mm)						
		l1	L	d1	d2	d3	Nut	T
BT40-ER25UM-70	●	70	135.4	42	0.5-16	42	ER25UM	M16x2.0P
BT40-ER25UM-100	●	100	165.4					
BT40-ER25UM-150	●	150	215.4					
BT40-ER32UM-70	●	70	135.4	50	2.0-20	50	ER32UM	
BT40-ER32UM-100	●	100	165.4					
BT40-ER32UM-150	●	150	215.4					
BT40-ER40UM-70	●	70	135.4	63	5.0-26	63	ER40UM	M20x2.0P
BT40-ER40UM-100	●	100	165.4					
BT40-ER40UM-150	●	150	215.4					
BT50-ER16M-80	●	80	181.8	28	0.5-10	28	ER16M	M10x1.5P
BT50-ER16M-100	●	100	201.8					
BT50-ER16M-150	●	150	251.8					
BT50-ER20M-80	●	80	181.8	34	0.5-13	34	ER20M	M12x1.75P
BT50-ER20M-100	●	100	201.8					
BT50-ER20M-150	●	150	251.8					
BT50-ER25UM-80	●	80	181.8	42	0.5-16	42	ER25UM	M16x2.0P
BT50-ER25UM-100	●	100	201.8					
BT50-ER25UM-150	●	150	251.8					
BT50-ER32UM-80	●	80	181.8	50	2.0-20	50	ER32UM	
BT50-ER32UM-100	●	100	201.8					
BT50-ER32UM-150	●	150	251.8					
BT50-ER40UM-80	●	80	181.8	63	5.0-26	63	ER40UM	M20x2.0P
BT50-ER40UM-100	●	100	201.8					
BT50-ER40UM-150	●	150	251.8					

●标准库存Standard inventory

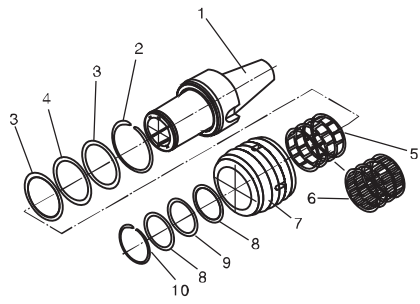
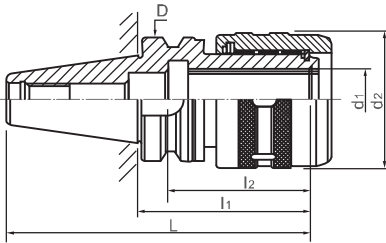
BT-SK 高速刀柄
BT-SKA/M High Speed Collet Chuck



型号 Model	库存 Stock	尺寸 Size (mm)						
		Nut	L	D	Champing range	d1	d2	d3
BT30-SK6A-60	●	SK6-A	108.4	46	0.7-6.0	19.5	20.5	20.5
BT30-SK6A-90	●	SK6-A	138.4		0.7-6.0	19.5	20.5	32
BT30-SK10A-60	●	SK10-A	108.4		1.75-10.0	27.5	29	29
BT30-SK10A-90	●	SK10-A	138.4		1.75-10.0	27.5	29	29
BT40-SK6A-60	●	SK6-A	125.4	63	0.7-6.0	19.5	20.5	20.5
BT40-SK6A-90	●	SK6-A	155.4		0.7-6.0	19.5	20.5	32
BT40-SK6A-120	●	SK6-A	185.4		0.7-6.0	19.5	20.5	32
BT40-SK10A-60	●	SK10-A	125.4		1.75-10.0	27.5	29	29
BT40-SK10A-90	●	SK10-A	155.4	100	1.75-10.0	27.5	29	40
BT40-SK10A-120	●	SK10-A	185.4		1.75-10.0	27.5	29	40
BT40-SK10A-150	●	SK10-A	215.4		1.75-10.0	27.5	29	40
BT50-SK10A-105	●	SK10-A	206.8		1.75-10.0	27.5	29	29
BT50-SK10A-135	●	SK10-A	236.8	46	1.75-10.0	27.5	29	32
BT50-SK10A-165	●	SK10-A	266.8		1.75-10.0	27.5	29	32
BT30-SK16M-90	●	SK16-M	138.4		2.75-16.0	40	41.9	41.9
BT30-SK16M-120	●	SK16-M	168.4		2.75-16.0	40	41.9	41.9
BT30-SK16M-150	●	SK16-M	198.4	63	2.75-16.0	40	41.9	41.9
BT30-SK25M-90	●	SK25-M	138.4		16.0-25.4	55	56.1	56.1
BT40-SK16M-65	●	SK16-M	130.4		2.75-16.0	40	41.9	41.9
BT40-SK16M-90	●	SK16-M	155.4		2.75-16.0	40	41.9	41.9
BT40-SK16M-120	●	SK16-M	185.4	100	2.75-16.0	40	41.9	41.9
BT40-SK16M-150	●	SK16-M	215.4		2.75-16.0	40	41.9	41.9
BT40-SK25M-90	●	SK25-M	155.4		16.0-25.4	55	56.1	56.1
BT40-SK25M-120	●	SK25-M	185.4		16.0-25.4	55	56.1	56.1
BT50-SK16M-105	●	SK16-M	206.8	63	2.75-16.0	40	41.9	41.9
BT50-SK16M-135	●	SK16-M	236.8		2.75-16.0	40	41.9	41.9
BT50-SK16M-165	●	SK16-M	266.8		2.75-16.0	40	41.9	50
BT50-SK16M-195	●	SK16-M	296.8		2.75-16.0	40	41.9	52
BT50-SK25M-105	●	SK25-M	206.8	100	16.0-25.4	55	56.1	56.1
BT50-SK25M-135	●	SK25-M	236.8		16.0-25.4	55	56.1	56.1
BT50-SK25M-165	●	SK25-M	266.8		16.0-25.4	55	56.1	56.1
BT50-SK25M-195	●	SK25-M	296.8		16.0-25.4	55	56.1	56.1

●标准库存Standard inventory

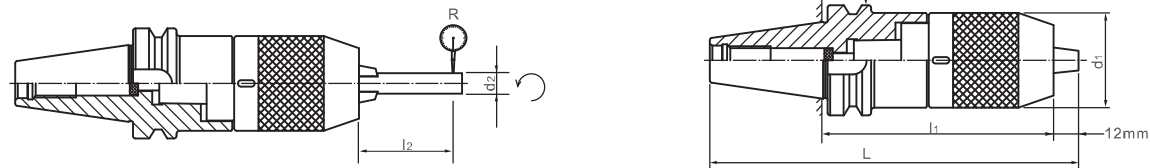
BT-C 高精度强力刀柄
BT-C Force milling chuck



型号 Model	L	库存 Stock	L1	L2	D	Collet	d2
BT30-C20-80	128.4	●	80	70	46	C20	55
BT40-C20-100	165.4	●	100	70	63	C20	55
BT40-C25-100	165.4	●	100	70	63	C25	55
BT40-C25-135	200.4	●	135	70	63	C25	55
BT40-C32-105	170.4	●	105	75	63	C32	73
BT40-C32-135	200.4	●	135	75	63	C32	73
BT50-C25-110	211.8	●	110	70	100	C25	55
BT50-C25-165	236.8	●	165	70	100	C25	55
BT50-C32-110	211.8	●	110	75	100	C32	73
BT50-C32-135	236.8	●	135	75	100	C32	73
BT50-C32-165	266.8	●	165	75	100	C32	73
BT50-C42-135	236.8	●	135	90	100	C42	90
BT50-C42-165	266.8	●	165	90	100	C42	90

●标准库存Standard inventory

BT-APU 一体式钻夹头刀柄
BT-APU Integrated keyless drill chuck



型号 Model	L	L1	库存 Stock	L2	D	d1	d2	Clamping range	R
BT30-APU8-80	140.4	80	●	55	46	37	8	0.5-8	R≤0.05
BT30-APU13-110	170.4	110	●	75		50	13	1-13	
BT30-APU16-115	175.4	115	●	80		57	16	1-16	
BT40-APU8-85	162.4	85	●	55	63	37	8	0.5-8	
BT40-APU13-110	187.4	110	●	75		50	13	1-13	
BT40-APU13-150	227.4	150	●	75		50	13	1-13	
BT40-APU16-110	187.4	110	●	80	100	57	16	1-16	
BT50-APU16-150	227.4	150	●	80		57	16	1-16	
BT50-APU8-90	203.8	90	●	55		37	8	0.5-8	
BT50-APU13-105	218.8	105	●	75		50	13	1-13	
BT50-APU13-130	243.8	130	●	75		50	13	1-13	
BT50-APU13-180	293.8	180	●	75		50	13	1-13	
BT50-APU16-105	218.8	105	●	80		57	16	1-16	
BT50-APU16-130	243.8	130	●	80		57	16	1-16	
BT50-APU16-180	293.8	180	●	80		57	16	1-16	

●标准库存 Standard inventory

BT-FMA 平面铣刀柄
BT-FMA Face mill arbor(English)

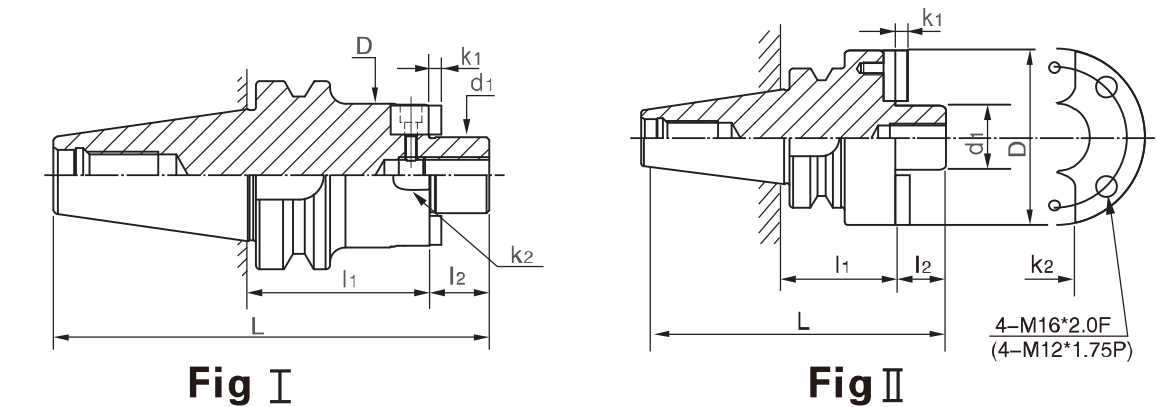


Fig	型号 Model	库存 Stock	尺寸 Size (mm)						
			L	L1	L2	D	d1	K1	K2
I	BT30-FMA25.4-45	●	113.4	45	20	48	25.4	4.52	9.525
I	BT30-FMA25.4-60	●	128.4	60	20	48	25.4	4.52	9.525
I	BT30-FMA31.75-45	●	115.4	45	22	78	31.75	6.7	12.70
I	BT40-FMA25.4-60	●	145.4	60	20	48	25.4	4.52	9.525
I	BT40-FMA25.4-100	●	185.4	100	20	48	25.4	4.52	9.525
I	BT40-FMA25.4-150	●	235.4	150	20	48	25.4	4.52	9.525
I	BT40-FMA25.4-200	●	285.4	200	20	48	25.4	4.52	9.525
I	BT40-FMA31.75-60	●	147.4	60	22	78	31.75	6.7	12.70
I	BT40-FMA31.75-100	●	187.4	100	22	78	31.75	6.7	12.70
I	BT40-FMA38.1-60	●	150.4	60	25	89	38.1	8.87	15.875
I	BT40-FMA38.1-100	●	190.4	100	25	89	38.1	8.87	15.875
I	BT40-FMA50.8-60	●	161.4	60	36	98	50.8	9.75	19.05
I	BT50-FMA25.4-60	●	181.8	60	20	48	25.4	4.52	9.525
I	BT50-FMA25.4-100	●	221.8	100	20	48	25.4	4.52	9.525
I	BT50-FMA25.4-150	●	271.8	150	20	48	25.4	4.52	9.525
I	BT50-FMA25.4-200	●	321.8	200	20	48	25.4	4.52	9.525
I	BT50-FMA31.75-60	●	183.8	60	22	78	31.75	6.7	12.70
I	BT50-FMA31.75-100	●	223.8	100	22	78	31.75	6.7	12.70
I	BT50-FMA38.1-60	●	186.8	60	25	89	38.1	8.87	15.875
I	BT50-FMA38.1-100	●	226.8	100	25	89	38.1	8.87	15.875
I	BT50-FMA50.8-60	●	197.8	60	36	98	50.8	9.75	19.05

●标准库存 Standard inventory

BT-FMB 平面铣刀柄
BT-FMB Face mill arbor(Metric)

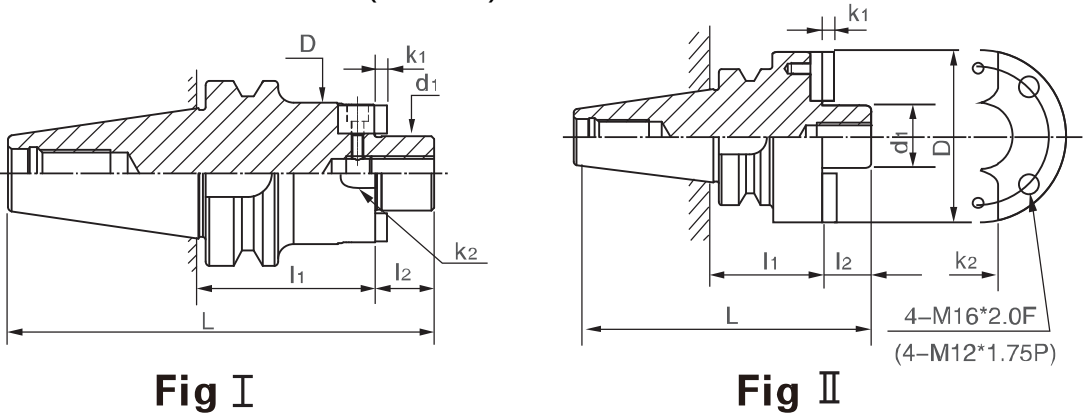


Fig	型号 Model	库存 Stock	尺寸 Size (mm)						
			L	I1	I2	D	d1	K1	K2
I	BT30-FMB22-45	●	111.4	45	18	48	22	4.8	10
I	BT30-FMB22-60	●	126.4	60	18	48	22	4.8	10
I	BT30-FMB27-45	●	113.4	45	20	60	27	5.8	12
I	BT30-FMB27-60	●	128.4	60	20	60	27	5.8	12
I	BT30-FMB32-45	●	115.4	45	22	78	32	6.8	14
I	BT30-FMB32-60	●	130.4	60	22	78	32	6.8	14
I	BT40-FMB22-60	●	143.4	60	18	48	22	4.8	10
I	BT40-FMB22-100	●	183.4	100	18	48	22	4.8	10
I	BT40-FMB22-150	●	233.4	150	18	48	22	4.8	10
I	BT40-FMB22-200	●	283.4	200	18	48	22	4.8	10
I	BT40-FMB22-250	●	333.4	250	18	48	22	4.8	10
I	BT40-FMB27-60	●	145.4	60	20	60	27	5.8	12
I	BT40-FMB27-100	●	185.4	100	20	60	27	5.8	12
I	BT40-FMB32-60	●	147.4	60	22	78	32	6.8	14
I	BT40-FMB32-100	●	185.4	100	22	78	32	6.8	14
I	BT40-FMB40-60	●	150.4	60	25	89	40	8.3	16
I	BT40-FMB40-100	●	190.4	100	25	89	40	8.3	16
I	BT50-FMB22-60	●	179.8	60	18	48	22	4.8	10
I	BT50-FMB22-100	●	219.8	100	18	48	22	4.8	10
I	BT50-FMB22-150	●	269.8	150	18	48	22	4.8	10
I	BT50-FMB22-200	●	319.8	200	18	48	22	4.8	10
I	BT50-FMB22-250	●	369.8	250	18	48	22	4.8	10
I	BT50-FMB22-300	●	419.8	300	18	48	22	4.8	10
I	BT50-FMB22-350	●	469.8	350	18	48	22	4.8	10
I	BT50-FMB22-400	●	519.8	400	18	48	22	4.8	10
I	BT50-FMB22-500	●	619.8	500	18	48	22	4.8	10
I	BT50-FMB27-45	●	166.8	45	20	60	27	5.8	12
I	BT50-FMB27-60	●	181.8	60	20	60	27	5.8	12
I	BT50-FMB27-100	●	221.8	100	20	60	27	5.8	12
I	BT50-FMB32-60	●	183.8	60	22	78	32	6.8	14
I	BT50-FMB32-100	●	223.8	100	22	78	32	6.8	14
I	BT50-FMB40-60	●	186.8	60	25	89	40	8.3	16

●标准库存 Standard inventory

BT-SLN 侧固式刀柄
BT-SLN Side lock holder

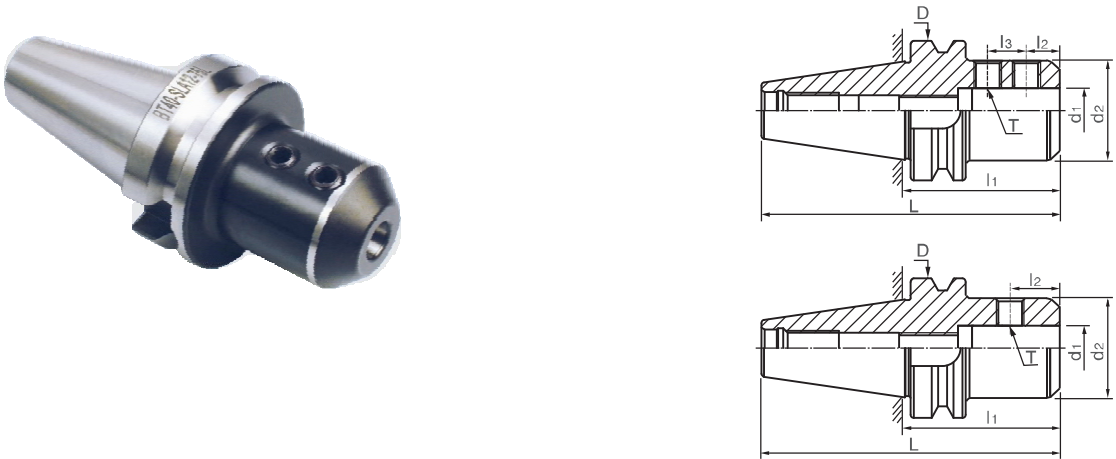


Fig	型号 Model	库存 Stock	尺寸 Size (mm)							T
			L	I1	I2	I3	D	d1	d2	
I	BT30-SLN6-75	●	123.4	75	12	-	46	6	25	M6×1.0P
I	BT30-SLN8-75	●	123.4	75	14	-	46	8	28	M8×1.25P
I	BT30-SLN10-75	●	123.4	75	15	-	46	10	35	M10×1.5P
I	BT30-SLN12-75	●	123.4	75	20	-	46	12	42	M12×1.75P
I	BT30-SLN16-75	●	123.4	75	22	-	46	16	48	M14×2.0P
I	BT30-SLN20-75	●	123.4	75	25	-	46	20	52	M16×2.0P
I	BT30-SLN25-90	●	138.4	90	24	25	46	25	65	M18×2.0P
I	BT40-SLN6-75	●	140.4	75	12	-	63	6	25	M6×1.0P
I	BT40-SLN8-75	●	140.4	75	14	-	63	8	28	M8×1.25P
I	BT40-SLN10-75	●	140.4	75	15	-	63	10	35	M10×1.5P
I	BT40-SLN12-75	●	140.4	75	20	-	63	12	42	M12×1.75P
I	BT40-SLN16-90	●	155.4	90	22	-	63	16	48	M14×2.0P
I	BT40-SLN20-90	●	155.4	90	25	-	63	20	52	M16×2.0P
I	BT40-SLN25-100	●	165.4	100	24	25	63	25	65	M18×2.0P
I	BT40-SLN32-100	●	165.4	100	24	28	63	32	72	M20×2.0P
I	BT40-SLN42-110	●	175.4	110	30	32	63	42	90	M20×2.0P
I	BT50-SLN6-100	●	201.8	100	12	-	100	6	25	M6×1.0P
I	BT50-SLN8-100	●	201.8	100	14	-	100	8	28	M8×1.25P
I	BT50-SLN10-100	●	201.8	100	25	-	100	10	35	M10×1.5P
I	BT50-SLN12-100	●	201.8	100	20	-	100	12	42	M12×1.75P
I	BT50-SLN16-100	●	201.8	100	22	-	100	16	48	M14×2.0P
I	BT50-SLN20-100	●	201.8	100	25	-	100	20	52	M16×2.0P
I	BT50-SLN25-100	●	201.8	100	24	25	100	25	65	M18×2.0P
I	BT50-SLN32-105	●	206.8	105	24	28	100	32	72	M20×2.0P
I	BT50-SLN42-120	●	221.8	120	30	32	100	42	90	M20×2.0P

●标准库存 Standard inventory

BT-MTA 带扁尾莫氏刀柄
BT-MTA Morse taper adapter A type

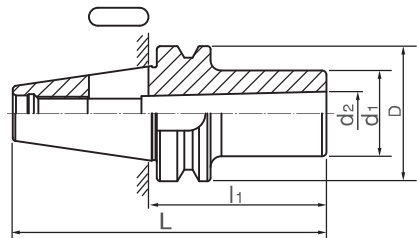


Fig I

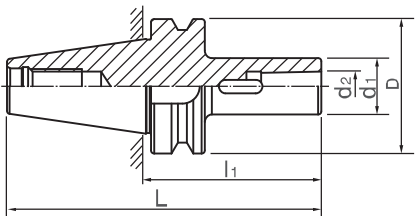


Fig II

Fig	型号 Model	库存 Stock	尺寸 Size (mm)					
			L	l1	D	d1	d2	drill
I	BT30-MTA1-45	●	93.4	45	46	25	12.065	2.0-14.0
II	BT30-MTA1-120	●	168.4	120	46	25	12.065	2.0-14.0
I	BT30-MTA2-60	●	108.4	60	46	32	17.780	14.1-23.0
II	BT30-MTA2-120	●	168.4	120	46	32	17.780	14.1-23.0
I	BT30-MTA3-90	●	138.4	90	46	40	23.825	23.1-32.0
I	BT40-MTA1-45	●	110.4	45	63	25	12.065	2.0-14.0
II	BT40-MTA1-120	●	185.4	120	63	25	12.065	2.0-14.0
I	BT40-MTA2-45	●	110.4	45	63	32	17.780	14.1-23.0
II	BT40-MTA2-120	●	185.4	120	63	32	17.780	14.1-23.0
I	BT40-MTA3-75	●	140.4	75	63	40	23.825	23.1-32.0
II	BT40-MTA3-135	●	200.4	135	63	40	23.825	23.1-32.0
I	BT40-MTA4-90	●	165.4	90	63	50	31.267	32.0-50.0
II	BT40-MTA4-165	●	230.4	165	63	50	31.267	32.0-50.0
I	BT50-MTA1-45	●	146.8	45	100	25	12.065	2.0-14.0
II	BT50-MTA1-120	●	221.8	120	100	25	12.065	2.0-14.0
II	BT50-MTA1-180	●	281.8	180	100	25	12.065	2.0-14.0
I	BT50-MTA2-60	●	161.8	60	100	32	17.780	14.1-23.0
II	BT50-MTA2-135	●	236.8	135	100	32	17.780	14.1-23.0
II	BT50-MTA2-180	●	281.8	180	100	32	17.780	14.1-23.0
I	BT50-MTA3-65	●	166.8	65	100	40	23.825	23.1-32.0
II	BT50-MTA3-150	●	251.8	150	100	40	23.825	23.1-32.0
II	BT50-MTA3-180	●	281.8	180	100	40	23.825	23.1-32.0
I	BT50-MTA4-95	●	196.8	95	100	50	31.267	32.0-50.0
II	BT50-MTA4-180	●	281.8	180	100	50	31.267	32.0-50.0
I	BT50-MTA5-105	●	206.8	105	100	65	44.399	50.0-75.0

●标准库存 Standard inventory

BT-MTB 带扁尾莫氏刀柄
BT-MTB Morse taper adapter B type

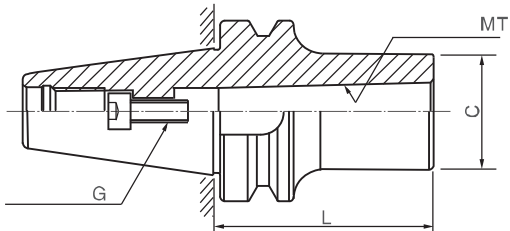


Fig I

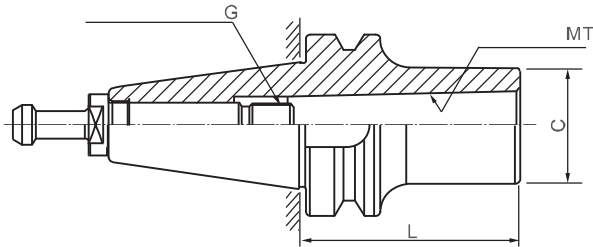


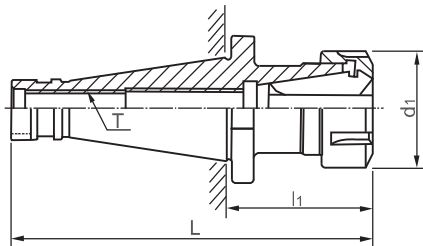
Fig II

Fig	型号 Model	库存 Stock	尺寸 Size (mm)				
			L	d1	G	d2	MT
I	BT30-MTB1-45	●	45	25	M6	12.065	MTB1
I	BT30-MTB2-60	●	60	32	M10	17.780	MTB2
I	BT40-MTB1-45	●	45	25	M6	12.065	MTB1
I	BT40-MTB2-45	●	45	32	M10	17.780	MTB2
I	BT40-MTB3-75	●	75	40	M12	23.825	MTB3
II	BT40-MTB4-90	●	90	48	M16	31.267	MTB4
I	BT50-MTB1-45	●	45	25	M6	12.065	MTB1
I	BT50-MTB2-60	●	60	32	M10	17.780	MTB2
I	BT50-MTB3-75	●	75	40	M12	23.825	MTB3
I	BT50-MTB4-75	●	75	50	M16	31.267	MTB4
II	BT50-MTB5-105	●	105	70	M20	44.399	MTB5

BT40-MTB4/MTB5 the puller bolt is not standard fitting,must purchase alone

●标准库存 Standard inventory

NT-ER 弹性筒夹刀柄
NT-ER Mil chuck

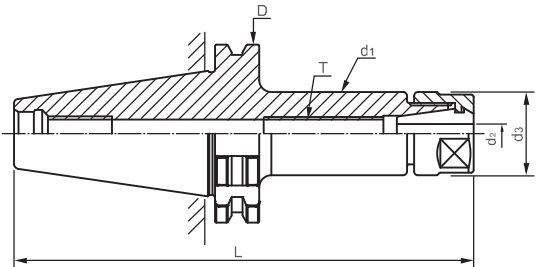


型号 Model	库存 Stock	尺寸 Size (mm)			卡 簧	螺钉 screw
		L1	L	d1		
NT30-ER16A-45	●	45	113.4	28	1/2"-12UNC	M12x1.75
NT30-ER20A-45	●	45	113.4	34		
NT30-ER16UM-55	●	55	123.4	42		
NT30-ER32UM-60	●	60	128.4	50		
NT30-ER40UM-70	●	70	138.4	63		
NT40-ER16A-45	●	45	138.4	28	5/8"-11UNC	M16x2.0
NT40-ER20A-45	●	45	138.4	34		
NT40-ER25UM-55	●	55	148.4	42		
NT40-ER32UM-60	●	60	153.4	50		
NT40-ER40UM-70	●	70	163.4	63		
NT50-ER32UM-75	●	75	201.8	50	1"-8UNC	M24x3.0
NT50-ER40UM-80	●	80	206.8	63		
NT50-ER50KM-80	●	80	206.8	78		

The spanner must purchase alone

●标准库存Standard inventory

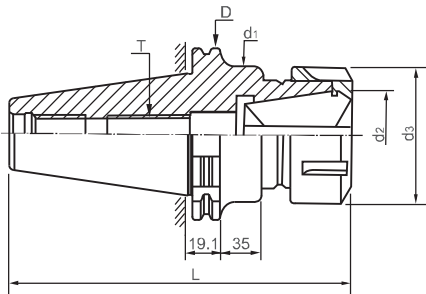
DAT(JT)-ER 弹性筒夹刀柄
DAT(JT)-ERA Mill chuck



型号 Model	库存 Stock	尺寸 Size (mm)					
		L	Nut	D	d1	d2	T
DAT30-ER11A-80	●	127.8	ER11A	50	19	0.5-7.0	M10x1.5P
DAT30-ER16A-63	●	110.8	ER16A	50	28	0.5-10	M10x1.5P
DAT30-ER16A-120	●	167.8	ER16A	50	28	0.5-10	M10x1.5P
DAT30-ER20A-63	●	110.8	ER20A	50	34	0.5-13	M12x1.75P
DAT30-ER20A-120	●	167.8	ER20A	50	34	0.5-13	M12x1.75P
DAT40-ER11A-80	●	148.4	ER11A	63.55	19	0.5-7.0	M10x1.5P
DAT40-ER11A-100	●	193.4	ER11A	63.55	19	0.5-7.0	M10x1.5P
DAT40-ER16A-100	●	168.4	ER16A	63.55	28	0.5-10	M10x1.5P
DAT40-ER16A-150	●	218.4	ER16A	63.55	28	0.5-10	M10x1.5P
DAT40-ER16A-200	●	268.4	ER16A	63.55	28	0.5-10	M10x1.5P
DAT40-ER20A-70	●	138.4	ER20A	63.55	34	0.5-13	M12x1.75P
DAT40-ER20A-100	●	168.4	ER20A	63.55	34	0.5-13	M12x1.75P
DAT40-ER20A-150	●	218.4	ER20A	63.55	34	0.5-13	M10x1.5P
DAT50-ER16A-100	●	201.75	ER16A	97.5	22	0.5-10	M10x1.5P
DAT50-ER16A-160	●	151.75	ER16A	97.5	22	0.5-10	M10x1.5P
DAT50-ER16A-180	●	301.75	ER16A	97.5	22	0.5-10	M10x1.5P
DAT50-ER20A-100	●	201.75	ER20A	97.5	26.5	0.5-13	M12x1.75P
DAT50-ER20A-150	●	251.75	ER20A	97.5	26.5	0.5-13	M12x1.75P
DAT50-ER20A-200	●	301.75	ER20A	97.5	26.5	0.5-13	M12x1.75P

●标准库存Standard inventory

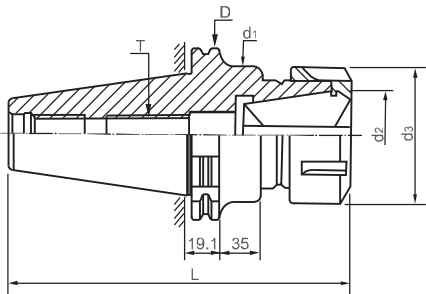
DAT(JT)-ER 弹性筒夹刀柄
DAT(JT)-ERM/UM Mill chuck



型号 Model	库存 Stock	尺寸 Size (mm)					
		L	Nut	D	d1	d3	T
DAT30-ER11M-80	●	127. 8	ER11M	50	19	16	M10x1.5P
DAT30-ER16M-63	●	110. 8	ER16M	50	28	22	M10x1.5P
DAT30-ER16M-120	●	167. 8	ER16M	50	28	22	M10x1.5P
DAT30-ER20M-63	●	110. 8	ER20M	50	34	28	M12x1.75P
DAT30-ER20M-120	●	167. 8	ER20M	50	34	28	M12x1.75P
DAT30-ER25UM-63	●	110. 8	ER25UM	50	42	42	M16x2.0P
DAT30-ER32UM-63	●	110. 8	ER25UM	50	50	50	M16x2.0P
DAT40-ER11M-80	●	148. 4	ER11M	63. 55	19	16	M10x1.5P
DAT40-ER11M-100	●	168. 4	ER11M	63. 55	19	16	M10x1.5P
DAT40-ER16M-70	●	138. 4	ER16M	63. 55	28	22	M10x1.5P
DAT40-ER16M-100	●	168. 4	ER16M	63. 55	28	22	M10x1.5P
DAT40-ER16M-150	●	218. 4	ER16M	63. 55	28	22	M10x1.5P
DAT40-ER16M-200	●	268. 4	ER16M	63. 55	28	22	M10x1.5P
DAT40-ER20M-70	●	138. 4	ER20M	63. 55	34	28	M12x1.75P
DAT40-ER20M-100	●	168. 4	ER20M	63. 55	34	28	M12x1.75P
DAT40-ER20M-150	●	218. 4	ER20M	63. 55	34	28	M12x1.75P
DAT40-ER20M-200	●	268. 4	ER20M	63. 55	34	28	M12x1.75P
DAT40-ER25UM-70	●	138. 4	ER25UM	63. 55	42	42	M16x2.0P
DAT40-ER25UM-100	●	168. 4	ER25UM	63. 55	42	42	M16x2.0P
DAT40-ER25UM-150	●	218. 4	ER25UM	63. 55	42	42	M16x2.0P
DAT40-ER25UM-200	●	268. 4	ER25UM	63. 55	42	42	M16x2.0P
DAT40-ER32UM-70	●	138. 4	ER32UM	63. 55	50	50	M16x2.0P
DAT40-ER32UM-100	●	168. 4	ER32UM	63. 55	50	50	M16x2.0P
DAT40-ER32UM-150	●	218. 4	ER32UM	63. 55	50	50	M16x2.0P
DAT40-ER32UM-200	●	268. 4	ER32UM	63. 55	50	50	M16x2.0P

●标准库存Standard inventory ○订单生产The order production

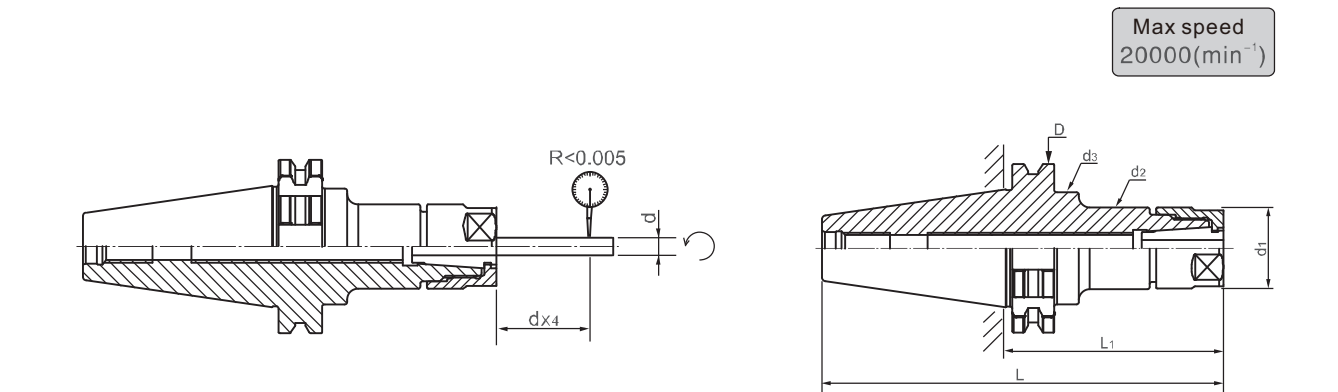
DAT(JT)-ER 弹性筒夹刀柄
DAT(JT)-ERM/UM Mill chuck



型号 Model	库存 Stock	尺寸 Size (mm)					
		L	Nut	D	d1	d3	T
DAT40-ER40UM-70	●	138. 4	ER40UM	63. 35	63	63	M20x2.0P
DAT40-ER40UM-100	●	168. 4	ER40UM	63. 35	63	63	M20x2.0P
DAT40-ER40UM-150	●	218. 4	ER40UM	63. 35	63	63	M20x2.0P
DAT40-ER50UM-100	●	168. 4	ER50UM	63. 35	78	78	M20x2.0P
DAT50-ER16UM-100	●	201. 75	ER16UM	97. 5	22	22	M10x1.5P
DAT50-ER16UM-150	●	251. 75	ER16UM	97. 5	22	22	M10x1.5P
DAT50-ER16UM-200	●	301. 75	ER16UM	97. 5	22	22	M10x1.5P
DAT50-ER16UM-250	●	351. 75	ER16UM	97. 5	22	22	M10x1.5P
DAT50-ER20UM-70	●	171. 75	ER20UM	97. 5	26. 5	28	M12x1.75P
DAT50-ER20UM-100	●	201. 75	ER20UM	97. 5	26. 5	28	M12x1.75P
DAT50-ER20UM-150	●	261. 75	ER20UM	97. 5	26. 5	28	M12x1.75P
DAT50-ER25UM-80	●	171. 75	ER25UM	97. 5	29	42	M16x2.0P
DAT50-ER25UM-100	●	201. 75	ER25UM	97. 5	29	42	M16x2.0P
DAT50-ER25UM-150	●	251. 75	ER25UM	97. 5	29	42	M16x2.0P
DAT50-ER25UM-200	●	301. 75	ER25UM	97. 5	29	42	M16x2.0P
DAT50-ER32UM-80	●	181. 75	ER32UM	97. 5	34	50	M16x2.0P
DAT50-ER32UM-100	●	201. 75	ER32UM	97. 5	34	50	M16x2.0P
DAT50-ER32UM-150	●	251. 75	ER32UM	97. 5	34	50	M16x2.0P
DAT50-ER32UM-200	●	301. 75	ER32UM	97. 5	34	50	M16x2.0P
DAT50-ER40UM-80	●	181. 75	ER40UM	97. 5	38	63	M20x2.0P
DAT50-ER40UM-120	●	221. 75	ER40UM	97. 5	38	63	M20x2.0P
DAT50-ER40UM-160	●	261. 75	ER40UM	97. 5	38	63	M20x2.0P
DAT50-ER40UM-200	●	301. 75	ER40UM	97. 5	38	63	M20x2.0P
DAT50-ER50UM-160	●	261. 75	ER50UM	97. 5	49	78	M24x2.0P

●标准库存Standard inventory ○订单生产The order production

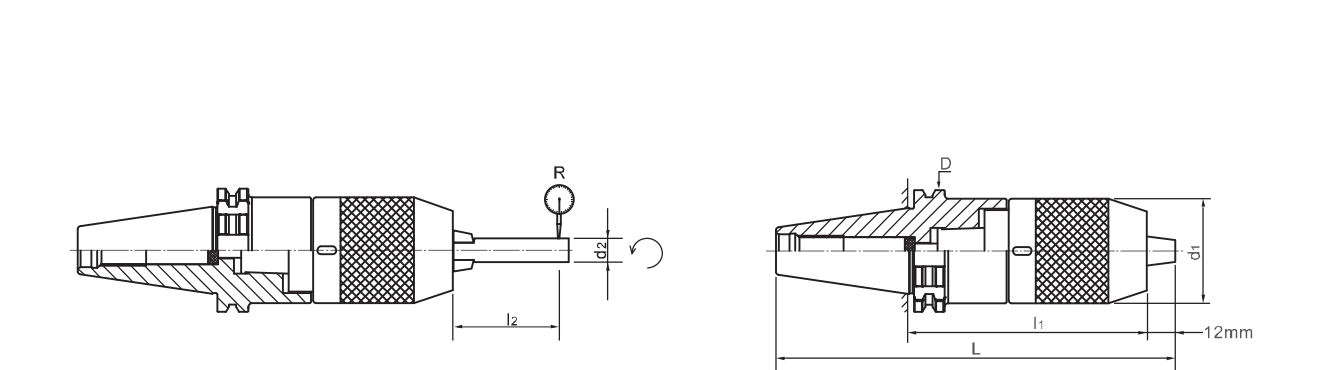
DAT(JT)-SK 高速刀柄
DAT(JT)-SKA/M Mill chuck



型号 Model	库存 Stock	尺寸 Size (mm)						
		L	Nut	D	d1	d2	d3	Clamping range
DAT30-SK6A-60	●	107. 8	SK6A	50	19.5	20.5	20. 5	0.7–6.0
DAT30-SK6A-90	●	137. 8	SK6A	50	19.5	20.5	32	0.7–6.0
DAT30-SK10A-60	●	107. 8	SK10A	50	27.5	29	29	1.75–10.0
DAT30-SK10A-90	●	137. 8	SK10A	50	27.5	29	29	1.75–10.0
DAT40-SK6A-60	●	128. 4	SK6A	63. 55	19.5	20.5	20. 5	0.7–6.0
DAT40-SK6A-90	●	158. 4	SK6A	63. 55	19.5	20.5	32	0.7–6.0
DAT40-SK6A-120	●	188. 4	SK6A	63. 55	19.5	20.5	32	0.7–6.0
DAT40-SK10A-60	●	128. 4	SK10A	63. 55	27.5	29	29	1.75–10.0
DAT40-SK10A-90	●	158. 4	SK10A	63. 55	27.5	29	40	1.75–10.0
DAT40-SK10A-120	●	188. 4	SK10A	63. 55	27.5	29	40	1.75–10.0
DAT40-SK10A-150	●	218. 4	SK10A	63. 55	27.5	29	40	1.75–10.0
DAT50-SK10A-105	●	206. 75	SK10A	97.5	27.5	29	29	1.75–10.0
DAT50-SK10A-135	●	236. 75	SK10A	97.5	27.5	29	32	1.75–10.0
DAT50-SK10A-165	●	266. 75	SK10A	97.5	27.5	29	32	1.75–10.0
DAT30-SK16M-90	●	137. 8	SK16M	50	40	41.9	41. 9	2.75–16.0
DAT30-SK16M-120	●	167. 8	SK16M	50	40	41.9	41. 9	2.75–16.0
DAT30-SK16M-150	●	197. 8	SK16M	50	40	41.9	41. 9	2.75–16.0
DAT30-SK25M-90	●	137. 8	SK25M	50	55	56.1	56. 1	16.0–25.4
DAT40-SK16M-60	●	128. 4	SK16M	63. 55	40	41.9	41. 9	2.75–16.0
DAT40-SK16M-90	●	158. 4	SK16M	63. 55	40	41.9	41. 9	2.75–16.0
DAT40-SK16M-120	●	188. 4	SK16M	63. 55	40	41.9	41. 9	2.75–16.0
DAT40-SK16M-150	●	218. 4	SK16M	63. 55	40	41.9	41. 9	2.75–16.0
DAT40-SK25M-90	●	158. 4	SK25M	63. 55	55	56.1	56. 1	16.0–25.4
DAT40-SK25M-120	●	188. 4	SK25M	63. 55	55	56.1	56. 1	16.0–25.4
DAT50-SK16M-105	●	206. 75	SK16M	97.5	40	41.9	41. 9	2.75–16.0
DAT50-SK16M-135	●	236. 75	SK16M	97.5	40	41.9	41. 9	2.75–16.0
DAT50-SK16M-165	●	266. 75	SK16M	97.5	40	41.9	50	2.75–16.0
DAT50-SK16M-195	●	296. 75	SK16M	97.5	40	41.9	52	2.75–16.0
DAT50-SK25M-105	●	206. 75	SK25M	97.5	55	56.1	56. 1	16.0–25.4
DAT50-SK25M-135	●	236. 75	SK25M	97.5	55	56.1	56. 1	16.0–25.4
DAT50-SK25M-165	●	266. 75	SK25M	97.5	55	56.1	56. 1	16.0–25.4
DAT50-SK25M-195	●	296. 75	SK25M	97.5	55	56.1	56. 1	16.0–25.4

●标准库存Standard inventory ○订单生产The order production

DAT(JT)-APU 一体式钻夹头刀柄
DAT(JT)-APU Integrated keyless drill chuck



型号 Model	库存 Stock	尺寸 Size (mm)						Clamping range	R
		L	L1	L2	D	d1	d2		
DAT40-APU8-85	●	162.4	85	55	63.55	37	8	0.5-8	0.04
DAT40-APU13-110	●	187.4	110	75	63.55	50	13	1-13	
DAT40-APU13-150	●	227.4	150	125	63.55	57	13	1-13	
DAT40-APU16-110	●	187.4	110	80	63.55	57	16	1-16	
DAT40-APU16-150	●	227.4	150	125	63.55	57	16	1-16	
DAT50-APU8-90	●	203.8	90	55	97.50	37	8	0.5-8	
DAT50-APU13-105	●	218.8	105	75	97.50	50	13	1-13	
DAT50-APU16-105	●	218.75	105	80	97.50	57	16	1-16	

●标准库存Standard inventory ○订单生产The order production

DAT(JT)-FMB 平面铣刀柄
DAT(JT)-FMB Face mill arbor(Metric)

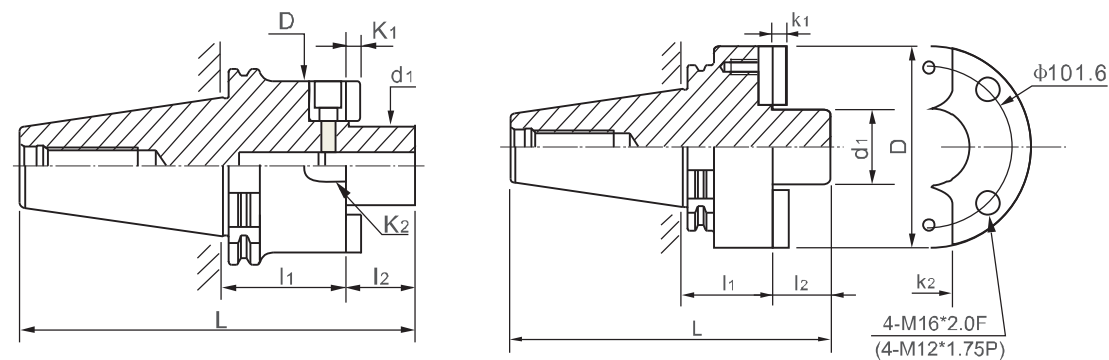


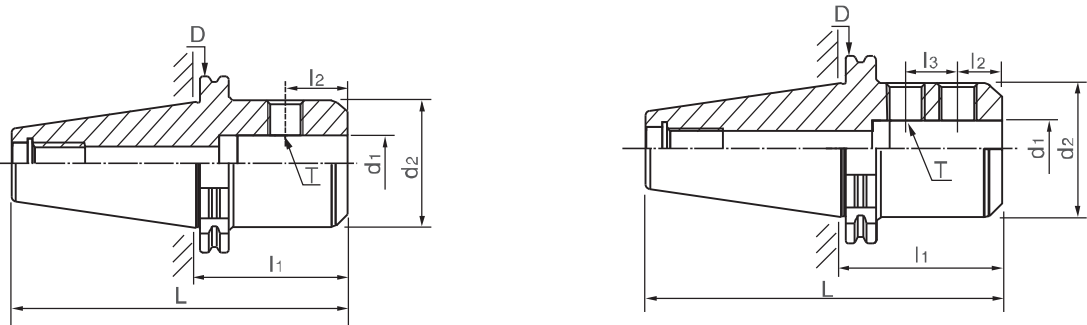
Fig I

Fig II

型号 Model	库存 Stock	尺寸 Size (mm)			D	d1	K1	K2	Fig
		L	L1	L2					
DAT30-FMB22-35	●	100.8	35	18	48	22	4.8	10	I
DAT30-FMB27-35	●	102.8	35	20	60	27	5.8	12	I
DAT40-FMB22-45	●	131.4	45	18	48	22	4.8	10	I
DAT40-FMB27-60	●	148.4	60	20	60	27	5.8	12	I
DAT40-FMB32-60	●	150.4	60	22	78	32	6.8	14	I
DAT40-FMB40-60	●	153.4	60	25	89	40	8.3	16	I
DAT50-FMB22-45	●	164.75	45	18	48	22	4.8	10	I
DAT50-FMB27-45	●	166.75	45	20	60	27	5.8	12	I
DAT50-FMB32-45	●	168.75	45	22	78	32	6.8	14	I
DAT50-FMB40-50	●	176.75	50	25	89	40	8.3	16	I
DAT50-FMB60-70	●	196.75	70	25	140	60	12.5	25.4	I

●标准库存Standard inventory ○订单生产The order production

DAT(JT)-SLN 侧固式刀柄
DAT(JT)-SLN Side lock holder



型号 Model	库存 Stock	尺寸 Size (mm)							T
		L	L1	L2	L3	D	d1	d2	
DAT30-SLN6-50	●	97.8	50	18	-	50	6	25	M6x1.0P
DAT30-SLN8-50	●	97.8	50	18	-	50	8	28	M8x1.25P
DAT30-SLN10-50	●	97.8	50	20	-	50	10	35	M10x1.5P
DAT30-SLN12-50	●	97.8	50	22.5	-	50	12	42	M12x1.75P
DAT30-SLN16-63	●	110.8	63	24	-	50	16	48	M14x2.0P
DAT40-SLN6-50	●	118.4	50	18	-	63.55	6	25	M6x1.0P
DAT40-SLN8-50	●	118.4	50	18	-	63.55	8	28	M8x1.25P
DAT40-SLN10-50	●	118.4	50	20	-	63.55	10	35	M10x1.5P
DAT40-SLN12-50	●	118.4	50	22.5	-	63.55	12	42	M12x1.75P
DAT40-SLN16-63	●	131.4	63	24	-	63.55	16	48	M14x2.0P
DAT40-SLN20-63	●	131.4	63	25	-	63.55	20	52	M16x2.0P
DAT40-SLN25-100	●	168.4	100	24	25	63.55	25	65	M18x2.0P
DAT40-SLN32-100	●	168.4	100	24	28	63.55	32	72	M20x2.0P
DAT50-SLN6-63	●	164.75	63	18	-	97.5	6	25	M6x1.0P
DAT50-SLN8-63	●	164.75	63	18	-	97.5	8	28	M8x1.25P
DAT50-SLN10-63	●	164.75	63	20	-	97.5	10	35	M10x1.5P
DAT50-SLN12-63	●	164.75	63	22.5	-	97.5	12	42	M12x1.75P
DAT50-SLN16-63	●	164.75	63	24	-	97.5	16	48	M14x2.0P
DAT50-SLN20-63	●	164.75	63	25	-	97.5	20	52	M16x2.0P
DAT50-SLN25-80	●	181.75	80	24	25	97.5	25	65	M18x2.0P
DAT50-SLN32-100	●	201.75	100	24	28	97.5	32	72	M20x2.0P
DAT50-SLN40-100	●	201.75	100	30	32	97.5	40	90	M20x2.0P
DAT50-SLN42-100	●	201.75	100	30	32	97.5	42	90	M20x2.0P
DAT50-SLN50-120	●	221.75	120	35	35	97.5	50	100	M20x2.0P

●标准库存Standard inventory ○订单生产The order production

BT-C 强力铣刀柄套装
BT-C Multilock milling chuck of whole set



型号 Model	库存 Stock	尺寸 Size (mm) Chuck	Wrench
BT40-C32-105	●	6, 8, 10, 12, 16, 20, 25	C32
BT50-C32-110	●	6, 8, 10, 12, 16, 20, 25	C32
BT50-C42-135	●	6, 8, 10, 12, 16, 20, 25, 32	C42

●标准库存Standard inventory ○订单生产The order production

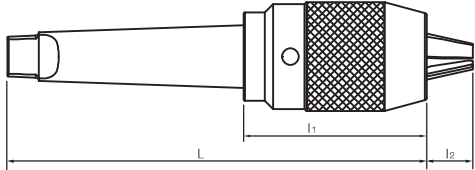
DAT(JT)-C 强力铣刀柄套装
DAT(JT)-C Multilock milling chuck of whole set



型号 Model	库存 Stock	尺寸 Size (mm) Chuck	Wrench
DAT40-C32-105	●	6, 8, 10, 12, 16, 20, 25	C32
DAT50-C32-110	●	6, 8, 10, 12, 16, 20, 25	C32
DAT50-C42-135	●	6, 8, 10, 12, 16, 20, 25, 32	C42

●标准库存Standard inventory ○订单生产The order production

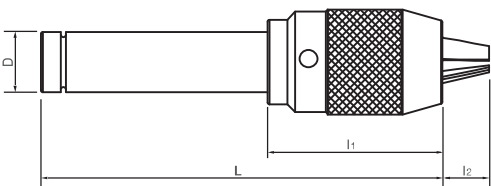
MT-APU 一体式钻夹头
MT-APU INTEGRATED KEYLESS DRILL CHUCK



型号 Model	库存 Stock	L	尺寸 Size (mm) l1	l2
MT2-APU8	●	164	70	10
MT2-APU13	●	174	80	10
MT3-APU13	●	179	80	10
MT3-APU16	●	184	85	12
MT4-APU13	●	202	80	10
MT4-APU16	●	207	85	12

●标准库存Standard inventory ○订单生产The order production

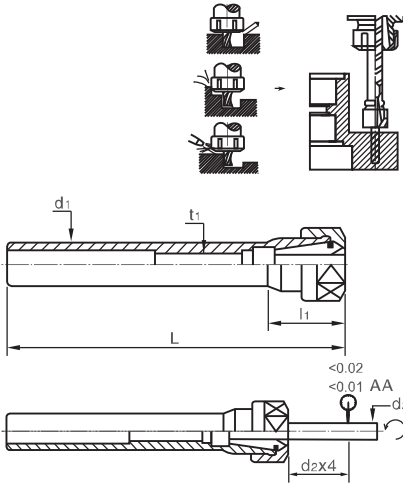
C-APU 一体式钻夹头
C-APU Integrated keyless drill chuck



型号 Model	库存 Stock	D	L	尺寸 Size (mm) l1	l2
C20-APU8	●	20	120	70	10
C20-APU13	●	20	140	80	10
C20-APU16	●	20	150	80	10
C25-APU13	●	25	161	80	10
C25-APU16	●	25	165	80	12
C32-APU13	●	32	165	85	10
C32-APU16	●	32	165	85	12

●标准库存Standard inventory ○订单生产The order production

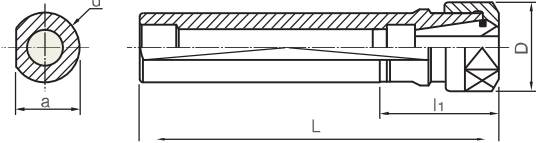
ER延长杆 (A型 铣刀具用)
ER EXTENSION(A TYPE FOR MILLER)



型号 Model	库存 Stock	d1	L	尺寸 Size (mm) L1	t1
ER11A-100-C16	●	C16	121.6	21.6	M6x1.0P
ER11A-150-C16	●	C16	171.6	21.6	M6x1.0P
ER16A-100-C16	●	C16	135.1	35.1	M10x1.5P
ER16A-150-C16	●	C16	185.1	35.1	M10x1.5P
ER16A-100-C20	●	C20	135.1	35.1	M10x1.5P
ER16A-150-C20	●	C20	185.1	35.1	M10x1.5P
ER16A-200-C20	●	C20	235.1	35.1	M10x1.5P
ER20A-100-C20	●	C20	140.5	40.5	M12x1.75P
ER20A-150-C20	●	C20	190.5	40.5	M12x1.75P
ER20A-200-C20	●	C20	240.5	40.5	M12x1.75P

●标准库存Standard inventory ○订单生产The order production

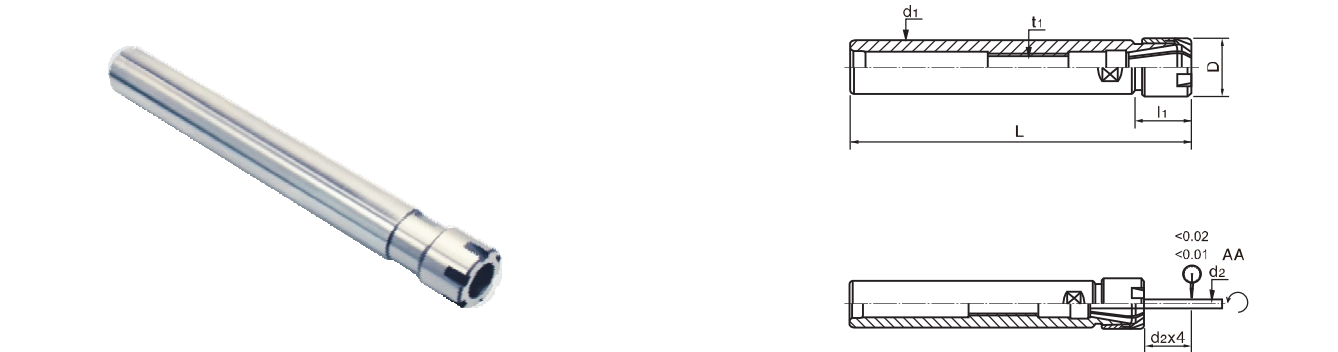
ER延长杆 (A型 车床用)
ER Extension(A type.for lathe)



型号 Model	库存 Stock	L	L1	尺寸 Size (mm) a	D	d
ER16A-100-C20B	●	100	29	19	28	20
ER20A-100-C20B	●	100	33	19	34	20
ER20A-100-C25B	●	100	33	24	34	25

●标准库存Standard inventory ○订单生产The order production

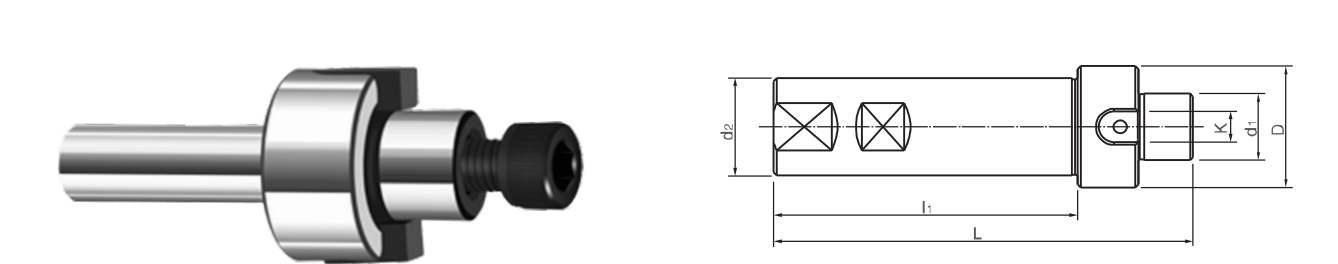
ER 延长杆 (M/UM型)
ER Extension(M/UM type)



型号 Model	库存 Stock	尺寸 Size (mm)					
		L	L1	D	d1	t1	
ER8M-100-C10	●	115.5	15.5	12	10	M4×0.7P	
ER8M-150-C10	●	165.5	15.5	12	10	M4×0.7P	
ER11M-100-C12	●	130.5	30.5	16	12	M8×1.5P	
ER11M-150-C12	●	180.5	30.5	16	12	M8×1.5P	
ER16M-100-C16	●	139.5	39.5	22	16	M12×1.75P	
ER16M-150-C16	●	189.5	39.5	22	16	M12×1.75P	
ER16M-200-C16	●	239.5	39.5	22	16	M12×1.75P	
ER16M-100-C20	●	139.5	39.5	22	20	M12×1.75P	
ER16M-150-C20	●	189.5	39.5	22	20	M12×1.75P	
ER16M-200-C20	●	239.5	39.5	22	20	M12×1.75P	
ER20M-100-C20	●	144.5	44.5	28	20	M12×1.75P	
ER20M-150-C20	●	194.5	44.5	28	20	M12×1.75P	
ER20M-200-C20	●	244.5	44.5	28	20	M12×1.75P	
ER25M-120-C20	●	172	52	42	20	M12×1.75P	
ER25M-150-C20	●	202	52	42	20	M12×1.75P	
ER25M-120-C32	●	172	52	42	32	M12×1.75P	
ER25M-150-C32	●	202	52	42	32	M12×1.75P	
ER32M-120-C32	●	175	55	50	32	M16×2.0P	
ER32M-150-C32	●	205	55	50	32	M16×2.0P	

●标准库存Standard inventory ○订单生产The order production

C-FMA 刀盘延长杆
C-FMA-Face mill extension(English)



型号 Model	库存 Stock	尺寸 Size (mm)					
		L	L1	D	d1	d2	K
FMA25.4-R8	●	145	105	47	25.4	—	9.525
FMA25.4x60L-C20	●	100	60	47	25.4	20	
FMA25.4x60L-C32	●	100	60	47	25.4	32	
FMA25.4x100L-C32	●	140	100	47	25.4	32	
FMA25.4x150L-C32	●	190	150	47	25.4	32	
FMA25.4x200L-C32	●	240	200	47	25.4	32	
FMA25.4x60L-C42	●	100	60	59	25.4	42	
FMA25.4x100L-C42	●	140	100	59	25.4	42	
FMA25.4x150L-C42	●	190	150	59	25.4	42	
FMA25.4x200L-C42	●	240	100	59	25.4	42	

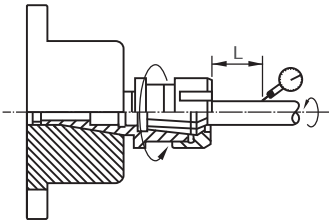
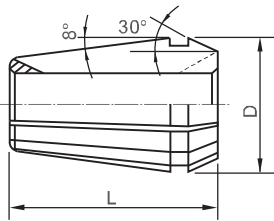
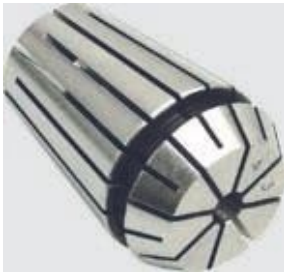
●标准库存Standard inventory ○订单生产The order production

C-FMB 刀盘延长杆
C-FMB-Face mill extension(Metric)

型号 Model	库存 Stock	尺寸 Size (mm)					
		L	L1	D	d1	d2	K
FMB22-R8	●	143	105	47	22	—	10
FMB22x60L-C20	●	98	60	47	22	20	
FMB22x60L-C32	●	98	60	47	22	32	
FMB22x100L-C32	●	138	100	47	22	32	
FMB22x150L-C32	●	188	150	47	22	32	
FMB22x200L-C32	●	238	200	47	22	32	
FMB22x60L-C42	●	98	60	47	22	42	
FMB22x100L-C42	●	138	100	47	22	42	
FMB22x150L-C42	●	188	150	47	22	42	
FMB22x200L-C42	●	238	200	47	22	42	
FMB27x60L-C42	●	100	60	59	27	42	12
FMB27x100L-C42	●	140	100	59	27	42	
FMB27x150L-C42	●	190	150	59	27	42	
FMB27x200L-C42	●	240	200	59	27	42	

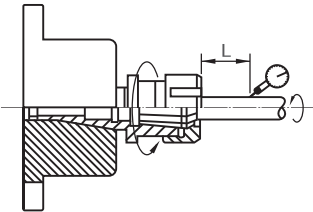
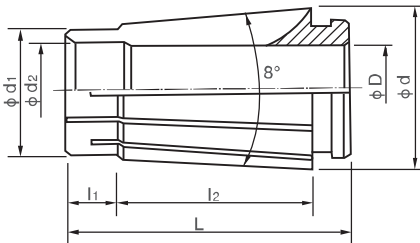
●标准库存Standard inventory ○订单生产The order production

ER筒夹
ER Spring collet



卡簧 dm 夹持范围 (mm)	ER11 L/D (mm)	ER16 L/D (mm)	ER20 L/D (mm)	ER25 L/D (mm)	ER32 L/D (mm)	ER40 L/D (mm)	卡簧 dm 夹持范围 (mm)
1.0-0.5	ER11-1	ER16-1	ER20-1	ER25-1			1.0-0.5
1.5-1.0	ER11-1.5						1.5-1.0
2.0-1.5	ER11-2	ER16-2	ER20-2	ER25-2			2.0-1.5
2.5-2.0	ER11-2.5						2.5-2.0
3.0-2.5	ER11-3	ER16-3	ER20-3	ER25-3	ER32-3		3.0-2.5
3.5-3.0	ER11-3.5						3.5-3.0
4.0-3.5	ER11-4	ER16-4	ER20-4	ER25-4	ER32-4	ER40-4	4.0-3.5
4.5-4.0	ER11-4.5						4.5-4.0
5.0-4.5	ER11-5	ER16-5	ER20-5	ER25-5	ER32-5	ER40-5	5.0-4.5
5.5-5.0	ER11-5.5						5.5-5.0
6.0-5.5	ER11-6	ER16-6	ER20-6	ER25-6	ER32-6	ER40-6	6.0-5.5
6.5-6.0	ER11-6.5						6.5-6.0
7.0-6.5	ER11-7						7.0-6.5
7.0-6.0		ER16-7	ER20-7	ER25-7	ER32-7	ER40-7	7.0-6.0
8.0-7.0		ER16-8	ER20-8	ER25-8	ER32-8	ER40-8	8.0-7.0
9.0-8.0		ER16-9	ER20-9	ER25-9	ER32-9	ER40-9	9.0-8.0
10.0-9.0		ER16-10	ER20-10	ER25-10	ER32-10	ER40-10	10.0-9.0
11.0-10.0			ER20-11	ER25-11	ER32-11	ER40-11	11.0-10.0
12.0-11.0			ER20-12	ER25-12	ER32-12	ER40-12	12.0-11.0
13.0-12.0			ER20-13	ER25-13	ER32-13	ER40-13	13.0-12.0
14.0-13.0				ER25-14	ER32-14	ER40-14	14.0-13.0
15.0-14.0				ER25-15	ER32-15	ER40-15	15.0-14.0
16.0-15.0				ER25-16	ER32-16	ER40-16	16.0-15.0
17.0-16.0					ER32-17	ER40-17	17.0-16.0
18.0-17.0					ER32-18	ER40-18	18.0-17.0
19.0-18.0					ER32-19	ER40-19	19.0-18.0
20.0-19.0					ER32-20	ER40-20	20.0-19.0
21.0-20.0						ER40-21	21.0-20.0
22.0-21.0						ER40-22	22.0-21.0
23.0-22.0						ER40-23	23.0-22.0
24.0-23.0						ER40-24	24.0-23.0
25.0-24.0						ER40-25	25.0-24.0
26.0-25.0						ER40-26	26.0-25.0

SKS 高速刀柄用筒夹
SKS Spring collet for high speed milling chuck



SKS6

Cat. No	Clamping range	d
0.8	0.7 ~ 0.8	10.4
1.0	0.9 ~ 1.0	
1.25	1.15 ~ 1.25	
1.5	1.3 ~ 1.5	
1.75	1.55 ~ 1.75	
2	1.8 ~ 2.0	
2.25	2.05 ~ 2.25	
2.5	2.3 ~ 2.5	
2.75	2.55 ~ 2.75	
3	2.8 ~ 3.0	
3.5	3.0 ~ 3.5	
4	3.5 ~ 4.0	
4.5	4.0 ~ 4.5	
5	4.5 ~ 5.0	
5.5	5.0 ~ 5.5	
6	5.5 ~ 6.0	

SKS10

Cat. No	Clamping range	d
2	1.75 ~ 2.0	15.6
2.25	2.0 ~ 2.25	
2.5	2.25 ~ 2.5	
2.75	2.5 ~ 2.75	
3	2.75 ~ 3.0	
3.5	3.0 ~ 3.5	
4	3.5 ~ 4.0	
4.5	4.0 ~ 4.5	
5	4.5 ~ 5.0	
5.5	5.0 ~ 5.5	
6	5.5 ~ 6.0	
6.5	6.0 ~ 6.5	
7	6.5 ~ 7.0	
7.5	7.0 ~ 7.5	
8	7.5 ~ 8.0	
8.5	8.0 ~ 8.5	
9	8.5 ~ 9.0	
9.5	9.0 ~ 9.5	
10	9.5 ~ 10.0	

SKS16

Cat. No	Clamping range	d
3	2.75 ~ 3.0	24.6
3.5	3.0 ~ 3.5	
4	3.5 ~ 4.0	
4.5	4.0 ~ 4.5	
5	4.5 ~ 5.0	
5.5	5.0 ~ 5.5	
6	5.5 ~ 6.0	
6.5	6.0 ~ 6.5	
7	6.5 ~ 7.0	
7.5	7.0 ~ 7.5	
8	7.5 ~ 8.0	
8.5	8.0 ~ 8.5	
9	8.5 ~ 9.0	
9.5	9.0 ~ 9.5	
10	9.5 ~ 10.0	
10.5	10.0 ~ 10.5	
11	10.5 ~ 11.0	
11.5	11.0 ~ 11.5	
12	11.5 ~ 12.0	
12.5	12.0 ~ 12.5	
13	12.5 ~ 13.0	
13.5	13.0 ~ 13.5	
14	13.5 ~ 14.0	
14.5	14.0 ~ 14.5	
15	14.5 ~ 15.0	
15.5	15.0 ~ 15.5	
16	15.5 ~ 16.0	

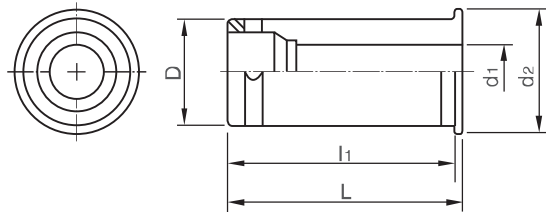
SKS25

Cat. No	Clamping range	d
16.5	16.0 ~ 16.5	35.7
17	16.5 ~ 17.0	
17.5	17.0 ~ 17.5	
18	17.5 ~ 18.0	
18.5	18.0 ~ 18.5	
19	18.5 ~ 19.0	
19.5	19.0 ~ 19.5	
20	19.5 ~ 20.0	
20.5	20.0 ~ 20.5	
21	20.5 ~ 21.0	
21.5	21.0 ~ 21.5	
22	21.5 ~ 22.0	
22.5	22.0 ~ 22.5	
23	22.5 ~ 23.0	
23.5	23.0 ~ 23.5	
24	23.5 ~ 24.0	
24.5	24.0 ~ 24.5	
25	24.5 ~ 25.0	
25.4	25.0 ~ 25.4	

Cat. No	d	d1	d2	L	L1	L2
SKS6	10.5	7.5	5.8	25	4	17.4
SKS10	15.5	12	9.8	30.5	5	21.3
SKS16	24.6	18.8	15.75	45	8	32
SKS25	35.6	28.9	25.4	57	8.5	43

L mm	D mm	A Level	UP Level
6	1.0 ~ 1.4	0.01	5μ
10	1.5 ~ 2.9		
16	3.0 ~ 5.9		
25	6.0 ~ 9.9		
40	10.0 ~ 17.9		
50	18.0 ~ 26.9		
60	27.0 ~ 34.0		

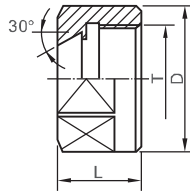
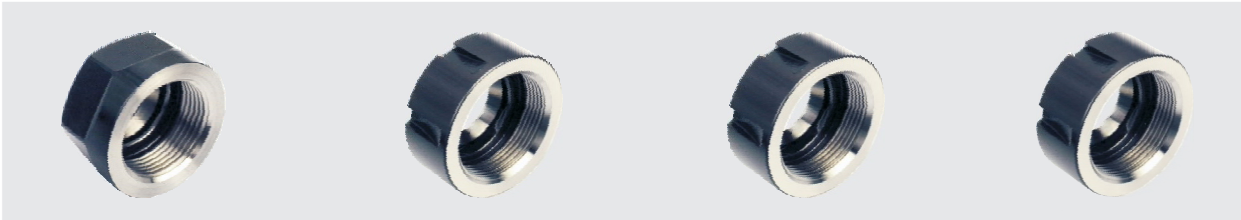
强力筒夹
Straight spring collet



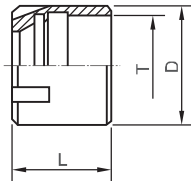
型号 Model	库存 Stock	D	d1	尺寸 Size (mm)	d2	L	l1
C20	●	20	6,8,10,12,15,15.6,16		25	52.50	49
C32	●	32	3,4,5,6,8,10,12,15,15.6,16,19,20,24,25		37.50	63	60.7
C42	●	42	6,8,10,12,15,15.6,16,19,20,24,25,32		47	80	77

●标准库存Standard inventory

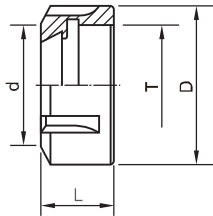
ER螺帽
ER Clamping nut



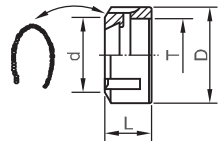
A Type



M Type



UM/RD Type

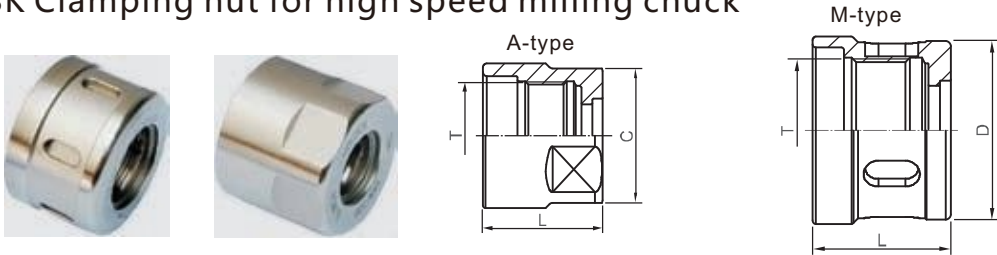


KM/RD Type

型号 Model	库存 Stock	L	D	尺寸 Size (mm) d	T	Manner
ER11	●	11.3	19	17	M14×0.75P	A
ER16	●	18	28	21	M22×1.5P	
ER20	●	19.5	34	25	M25×1.5P	
ER8	●	10.8	12	-	M10×0.75P	M
ER11	●	12	16	-	M13×0.75P	
ER16	●	18	22	-	M19×1.0P	
ER20	●	19	28	-	M24×1.0P	
ER25	●	20	35	-	M30×1.0P	
ER25	●	20	42	32	M32×1.5P	UM/RD
ER32	●	23.5	50	38.5	M40×1.5P	
ER40	●	25.3	63	48.3	M50×1.5P	
ER50	●	35	78	60	M64×2.0P	KM/RD
ER25	●	22.5	42	29	M32×1.5P	
ER32	●	26	50	38.5	M40×1.5P	
ER40	●	29	63	48.3	M50×1.5P	
ER50	●	40	78	59	M64×2.0P	

●标准库存Standard inventory ○订单生产The order production

BT-SK 高速刀柄用螺帽
BT-SK Clamping nut for high speed milling chuck



型号 Model	库存 Stock	L	C	尺寸 Size (mm)	D	T
SK6-A	●	21	18	-	-	M15.5 × 1.0P
SK10-A	●	24	26	-	-	M21.5 × 1.0P
SK16-M	●	31	-	40	-	M32 × 1.5P
SK25-M	●	37	-	55	-	M45 × 1.5P

●标准库存Standard inventory ○订单生产The order production

OZ螺帽
OZ Clamping nut



型号 Model	库存 Stock	L	尺寸 Size (mm)	D1	D2
OZ25	●	30	62	-	M48 × 2
OZ32	●	33.5	72	-	M60 × 2.5

●标准库存Standard inventory ○订单生产The order production

扳手
Wrench



型号 Model	库存 Stock	11A	16A	尺寸 Size (mm)	20A	H06	H10
Applicable clamping nut	●	ER11	ER16	ER20	SKA06	SKA10	

* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production



型号 Model	库存 Stock	8M	11M	尺寸 Size (mm)	16M	20M	25M
Applicable clamping nut	●	ER8	ER11	ER16	ER20	ER25	

●标准库存Standard inventory ○订单生产The order production



型号 Model	库存 Stock	25UM.KM	32UM.KM	尺寸 Size (mm)	40UM.KM	50UM.KM
Applicable clamping nut	●	ER25	ER32	ER40	ER50	

●标准库存Standard inventory ○订单生产The order production



型号 Model	库存 Stock	ER25	OZ25	OZ32	C20	C32	尺寸 Size (mm)	SK16	SK25	APU8	APU13	APU16
Min~Max	●	38 ~ 42	55 ~ 62	68 ~ 72	55 ~ 62	64 ~ 77	38 ~ 42	55 ~ 62	38 ~ 42	45 ~ 52	55 ~ 62	

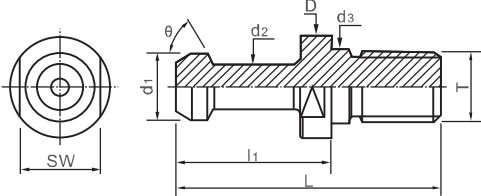
●标准库存Standard inventory ○订单生产The order production



型号 Model	库存 Stock	GH06	尺寸 Size (mm)	GH10	GH16	GH25
Applicable clamping nut	●	GSK06	GSK10	GSK16	GSK25	

●标准库存Standard inventory ○订单生产The order production

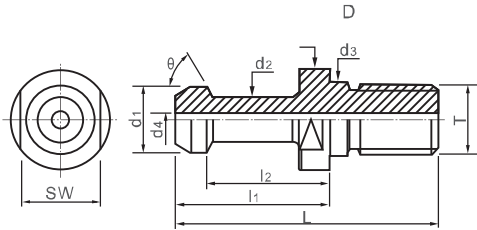
拉钉
Pull studs



型号 Model	库存 Stock	尺寸 Dimensions(mm)						
		D	d1	d2	d3	L	l1	T
BT30-45°	○	16.5	11	7	12.5	42	23	M12
BT40-45°	○	23	15	10	17	60	35	M16
BT50-45°	○	38	23	17	25	85	45	M24
BT30-60°	○	16.5	11	7	12.5	43	23	M12
BT40-60°	○	23	15	10	17	60	35	M16
BT50-60°	○	38	23	17	25	85	45	M24
BT30-90°	○	16.5	11	7	12.5	43	23	M12
BT40-90°	○	23	15	10	17	60	35	M16
BT50-90°	○	38	23	17	25	85	45	M24

●标准库存Standard inventory ○订单生产Order production

拉钉 (带冷却孔)
BT Pull stud(centre through coolant)

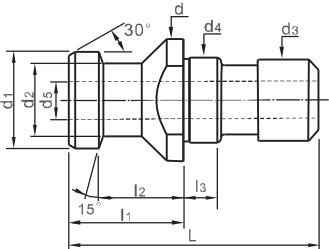


型号 Model	库存 Stock	尺寸 Dimensions(mm)								
		D	D1	D2	D3	D4	L	L1	L2	T
BT40-45° W	○	23	15	10	17	4	60	35	28	M16
BT40-60° W	○	23	15	10	17	4	60	35	28	M16
BT40-90° W	○	23	15	10	17	4	60	35	28	M16
BT50-45° W	○	38	23	17	25	5	85	45	35	M24
BT50-60° W	○	38	23	17	25	5	85	45	35	M24
BT50-90° W	○	38	23	17	25	5	85	45	35	M24

●标准库存Standard inventory ○订单生产Order production

- 常规制造不带冷却孔,若需要冷却孔,订货时说明.
- There is no cooling hole in conventional manufacturing, if there is a cooling hole, please specify when ordering.

JIS 拉钉(DIN 69872)
JIS Pull stud

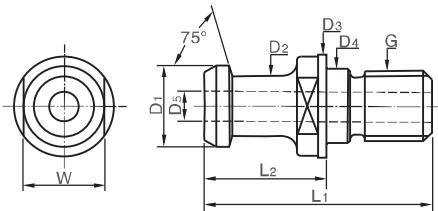
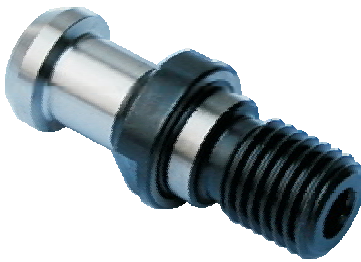


型号 Model	库存 Stock	尺寸 Dimensions(mm)									
		L	L1	L2	L3	d	d1	d2	d3	d4	d5
DIN69872-30	○	44	24	19	5	17	13	9	M12	13	-
DIN69872-40(A)	○	54	26	20	7	23	19	14	M16	17	7.0
DIN69872-50(A)	○	74	34	25	10	36	28	21	M24	25	11.5

●标准库存Standard inventory ○订单生产Order production

- 常规制造不带冷却孔,若需要冷却孔,订货时说明.
- There is no cooling hole in conventional manufacturing, if there is a cooling hole, please specify when ordering.

JIS 拉钉
JIS Pull stud

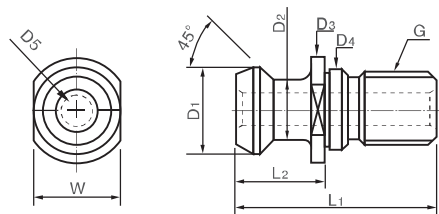


型号 Model	库存 Stock	尺寸 Dimensions(mm)								
		l1	l2	D1	D2	D3	D4	D5	W	G
JIS B6339-40P	○	54	29	19	14	23	17	7	19	M16
JIS B6339-50P	○	74	34	28	21	38	25	10	30	M24

●标准库存Standard inventory ○订单生产Order production

- 常规制造不带冷却孔,若需要冷却孔,订货时说明.
- There is no cooling hole in conventional manufacturing, if there is a cooling hole, please specify when ordering.

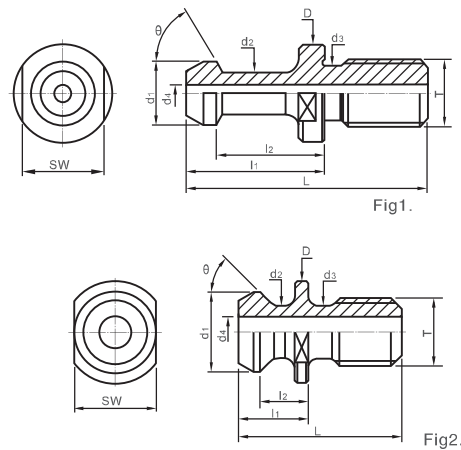
拉钉(MAZAK)
Pull studs



型号 Model	库存 Stock	尺寸 Dimensions(mm)								
		L1	L2	D1	D2	D3	D4	D5	W	G
MAZAK-BT40	○	44.1	19.1	18.8	12.45	22	17	7	19	M16
MAZAK-BT50	○	65.2	25.2	29	20.83	37	25	10	30	M24

●标准库存Standard inventory ○订单生产Order production
- 常规制造不带冷却孔,若需要冷却孔,订货时说明.
- There is no cooling hole in conventional manufacturing, if there is a cooling hole, please specify when ordering.

CAT拉钉
CAT pull studs



型号 Model	库存 Stock	尺寸 Dimensions(mm)										Fig
		D	d1	d2	d3	d4	L	I1	I2	SW	T-UNG	
CAT30-45° - ANSI	○	0.65	0.25	0.385	0.385	-	1.10	0.460	0.320	0.53	1/2"-13	2
CAT40-45° - ANSI	○	0.94	0.74	0.490	0.490	-	1.50	0.460	0.440	0.75	5/8"-11	
CAT50-45° - ANSI	○	1.44	1.14	0.820	0.820	-	2.30	1.00	0.700	1.25	1"-8	2
CAT40-45° - W	○	0.94	0.74	0.490	0.490	0.281	1.50	0.640	0.440	0.75	5/8"-11	
CAT50-45° - W	○	1.44	1.14	0.820	0.820	0.468	2.30	1.00	0.400	1.25	1"-8	1
CAT40-45° - MAS	○	0.905	0.590	0.394	0.512	-	2.25	1.266	0.99	0.748	5/8"-11	
CAT40-60° - MAS	○	0.905	0.590	0.394	0.512	-	2.25	1.266	0.99	0.748	5/8"-11	1
CAT40-90° - MAS	○	0.905	0.590	0.394	0.512	-	2.25	1.266	0.99	0.748	5/8"-11	
CAT50-45° - MAS	○	1.102	0.906	0.669	0.827	-	3.346	-	1.378	1.181	1"-8	1
CAT50-60° - MAS	○	1.102	0.906	0.669	0.827	-	3.346	-	1.378	1.181	1"-8	
CAT50-90° - MAS	○	1.102	0.906	0.669	0.827	-	3.346	-	1.378	1.181	1"-8	1
CTA40-45°	○	0.905	0.590	0.394	0.512	0.157	2.25	1.266	0.99	0.748	5/8"-11	
CTA40-60°	○	0.905	0.590	0.394	0.512	0.157	2.25	1.266	0.99	0.748	5/8"-11	1
CTA40-90°	○	0.905	0.590	0.394	0.512	0.157	2.25	1.266	0.99	0.748	5/8"-11	
CTA50-45°	○	1.102	0.906	0.669	0.827	0.256	3.346	1.722	1.378	1.181	1"-8	1
CTA50-60°	○	1.102	0.906	0.669	0.827	0.256	3.346	1.722	1.378	1.181	1"-8	
CTA50-90°	○	1.102	0.906	0.669	0.827	0.256	3.346	1.722	1.378	1.181	1"-8	1
CAT30-45° - M	○	0.65	0.52	0.385	0.385	-	1.10	0.460	0.320	0.53	M12x1.75P	
CAT40-45° - M	○	0.94	0.74	0.490	0.490	-	1.50	0.640	0.440	0.75	M16x2.0P	2
CAT50-45° - M	○	1.44	1.140	0.820	0.820	-	2.30	1.00	0.700	1.25	M2.4x3.0P	

●标准库存Standard inventory ○订单生产Order production

机床主轴清洁棒
Spindle taper wiper

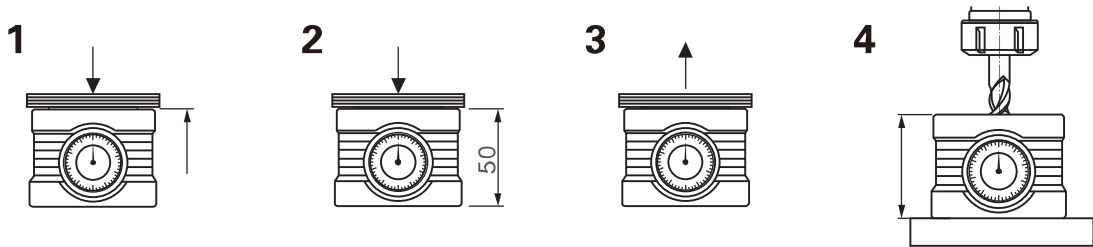
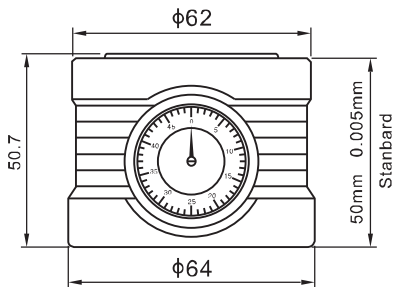


型号 Model	库存 Stock	尺寸 Dimensions(mm)	
		Taper No.	Apply to
W30	●	#30	BT30 DAT(JT)30
W40	●	#40	BT40 DAT(JT)40
W50	●	#50	BT50 DAT(JT)50
HSK-W63	●	HSK63	HSK 63

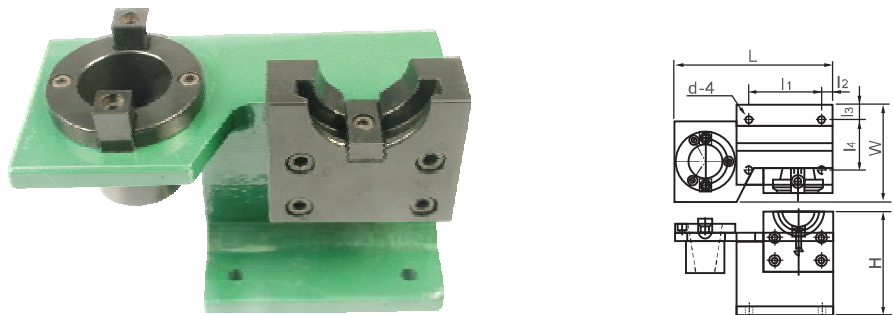
●标准库存Standard inventory ○订单生产Order production

Z轴设定仪 (磁性)
Z-Axis zero presetter (Magnetic)

型号 Model	H
ZDI-50A	50



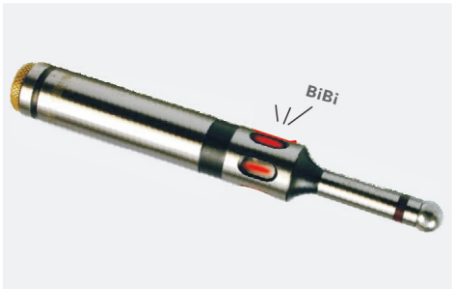
BT/DAT/CAT 锁刀座
BT/DAT/CAT Tool locking fixture



型号 Model	库存 Stock	尺寸 Dimensions(mm)						
		L	I1	I2	I3	I4	H	W
LD-BT30	○	210	95	10	15	67	130	100
LD-BT40	○	210	95	10	15	67	130	100
LD-BT50	○	275	113	20	24	105	200	150
LD-DAT30	○	210	95	10	15	67	130	100
LD-DAT40	○	210	95	10	15	67	130	100
LD-DAT50	○	275	113	20	24	105	200	150
LD-CAT30	○	210	95	10	15	67	130	100
LD-CAT40	○	210	95	10	15	67	130	100
LD-CAT50	○	275	113	20	24	105	200	150

●标准库存Standard inventory ○订单生产Order production

光电蜂鸣寻边器
OP Electronic edge finder with led and beep

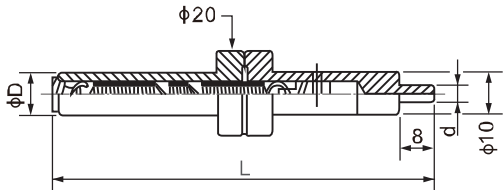


型号 Model	D	L1	L2
OP20	20	155	10
OP32	32	155	10

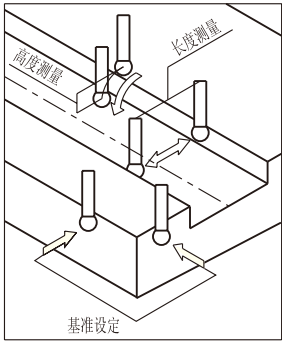
光电蜂鸣短寻边器
ST Shorter electronic edge finder with led and beep

Cat. No	Shank diameter	Length	Ball probe
ST-20	φ 20	97	φ 10

旋转寻边器
ME Rotary edge finder

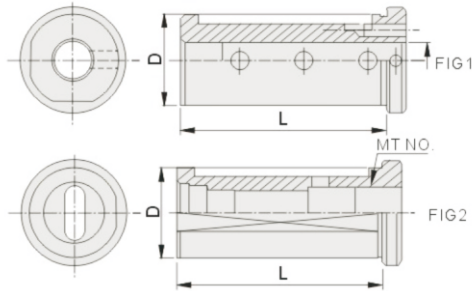


Cat. No	库存 Stock	D Shank diameter	L Length	Ball probe	Accaracy
ME-420	○	φ 10	90	φ 4, φ 10	± 0.002
ME-1020 磁性 Magnetic	○	φ 10	90	φ 10	± 0.002



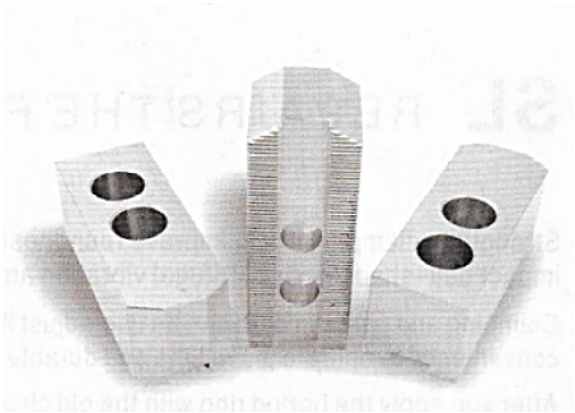
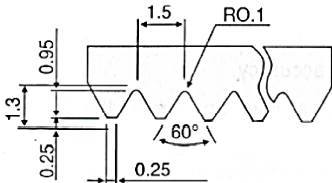
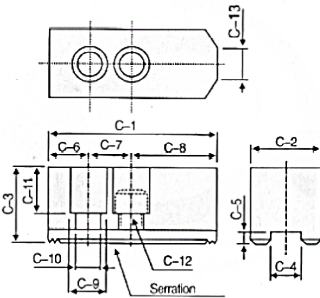
⚠ 警告：请缓慢接近工件，避免损伤测头或测量不准确！
⚠ Warning: Please approach the workpiece slowly to avoid damage to the probe or inaccurate measurement!

刀套
Sleeve



SIZE	FIG	D	d	MT	L
NC25-8	1	25	8		80
NC25-10	1	25	10		80
NC25-12	1	25	12		80
NC25-16	1	25	16		80
NC25-20	1	25	20		80
NC25-MTA1	2	25		1	80
NC25-MTA2	2	25		2	80
NC25-MTA3	2	25		3	80
NC32-8	1	32	8		80
NC32-10	1	32	10		80
NC32-12	1	32	12		80
NC32-16	1	32	16		80
NC32-20	1	32	20		80
NC32-25	1	32	25		80
NC32-MTA1	2	32		1	80
NC32-MTA2	2	32		2	80
NC32-MTA3	2	32		3	80
NC40-8	1	40	8		80
NC40-10	1	40	10		80
NC40-12	1	40	12		80
NC40-16	1	40	16		80
NC40-20	1	40	20		80
NC40-25	1	40	25		80
NC40-32	1	40	32		80
NC40-MTA1	2	40		1	80
NC40-MTA2	2	40		2	80
NC40-MTA3	2	40		3	80
NC40-MTA4	2	40		4	80
NC50-8	1	50	8		80
NC50-10	1	50	10		80
NC50-12	1	50	12		80
NC50-16	1	50	16		80
NC50-20	1	50	20		80
NC50-25	1	50	25		80
NC50-32	1	50	32		80
NC50-40	1	50	40		80
NC50-MTA1	2	50		1	80
NC50-MTA2	2	50		2	80
NC50-MTA3	2	50		3	80
NC50-MTA4	2	50		4	80

HC标准软爪
HC STANDARD SOFT JAW

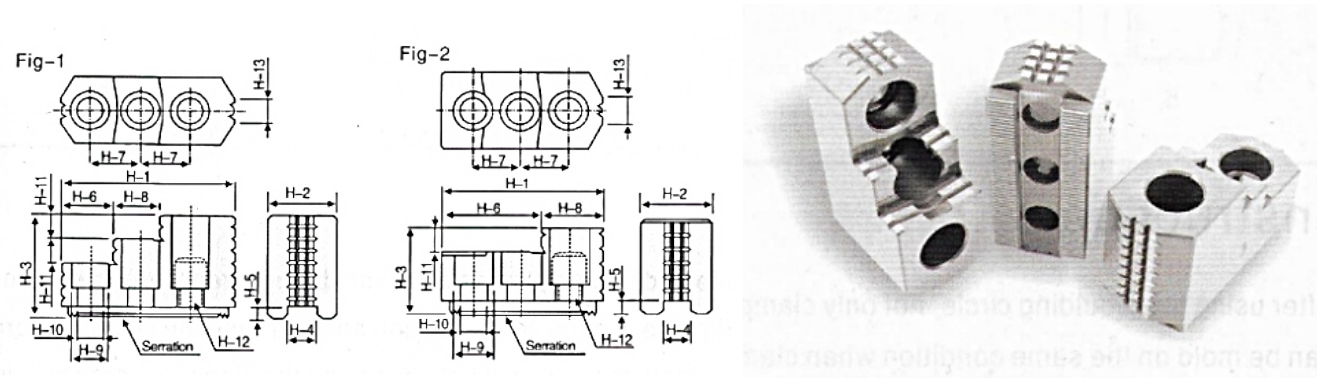


SPECIFICATIONS

型号 Model	库存 Stock	尺寸 Dimensions(mm)													Serration Pitch	Matching Chuck	3 Jaw Weight (kg)
		C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11	C-12	C-13			
HC04	○	53	23	23	10	5	9	14	30	13.5	9	14	M8	3	1.5x60°	3B-04.3N-04	0.45
HC05	○	62	25	30	10	5	9	14	39	13.5	9	21	M8	5	1.5x60°	3B-05.3N-05	0.7
HC06	○	73	31	36	12	5	15	20	38	17	11	23	M10	14	1.5x60°	3B-06.3N-06	1.5
HC08	○	95	35	37	14	5	24	25	46	19	13	22	M12	16	1.5x60°	3B-08.3N-08	2.4
HC10	○	110	40	42	16	5	30	30	50	19	13	27	M12	18	1.5x60°	3B-10.3N-10	3.7
HC12	○	130	50	50	21	5	39	30	61	25	17	30	M16	23	1.5x60°	3B-12	6.2
HC12-1	○	130	50	50	18	5	39	30	61	23	15	30	M14	23	1.5x60°	3N-12	6.25
HC15	○	165	62	62	22	8	37	43	85	32	21	38	M20	-	1.5x60°	3B-15	12.8
HC15-1	○	165	62	62	25.5	5	37	43	85	32	21	38	M20	-	1.5x60°	3N-15.3N-18	7.5
HC24-1	○	180	65	70	25	9	40	60	80	32	21	45	M20	-	3.0x60°	3N-21.3N-24	16

●标准库存Standard inventory ○订单生产Order production

HJ标准硬爪
HJ STANDARD HARD JAW



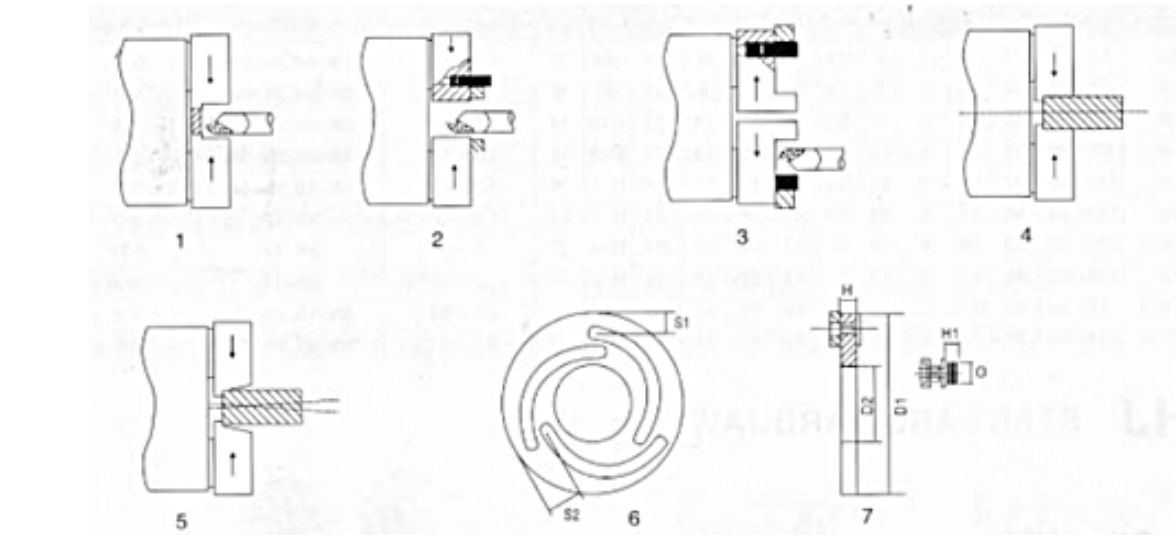
SPECIFICATIONS

型号 Model	库存 Stock	尺寸 Dimensions(mm)													Reference Drawing	Matching Chuck	3 Jaw Weight (kg)
		H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	H-11	H-12	H-13			
HJ05	○	53	23	27.5	10	4	30.5	14	22.5	13.5	8.5	10	M8	6	Fig-2	3B-05.3N-05	0.4
HJ06	○	67	31	36	12	5	39.5	20	27.5	17	11	10	M10	11	Fig-2	3B-06.3N-06	1.0
HJ08	○	86	35	51	14	5	31	25	18	19	13	12	M12	12	Fig-1	3B-08.3N-08	1.9
HJ10	○	99.5	40	54	16	5	43	30	17	19	13	13	M12	15	Fig-1	3B-10.3N-10	2.9
HJ12	○	103	50	52	21	4	62.5	30	40.5	25	17	17	M16	30	Fig-2	3B-12	3.5
HJ12-1	○	103	50	52	18	5	62.5	30	40.5	22	15	17	M14	30	Fig-2	3N-12	2.7
HJ15	○	149	62	86	22	8	63	43	34	32	21	20	M20	40	Fig-1	3B-15	9.6
HJ15-1	○	149	62	86	25.5	5	63	43	34	32	21	20	M20	40	Fig-1	3N-15.3N-18	9.5
HJ24-1	○	159.5	80	90	25	9	104.5	50	55	32	21	40	M20	55	Fig-2	3N-21.3N-24	14.5

●标准库存Standard inventory ○订单生产Order production

同心圈
SL REPAIRS THE FINGERNAIL

- Strengthen clamping force, improve roundness and cylinder precision . will not impact bell-shape and centrifugal vibration and the accuracy
- Clamping and opening both can be use.adjust the size as your (equipment. It is convenience to operate .save lime and durable
- After you apply the boring ring v/ith the old chuck, it can improve lho accuracy, clamping force and works like a new product



Instructions:

After using the moulding circle, not only clamping outside and opening inside come into being three kinds of molding. It can be mold on the same condition when clamping workpiece, reduce core vibration and increase the clamping force. (Picture I, II, III) As the moulding circle and the chuck molded, the core will not shake and the clamping force will up to 100%. improve the accuracy (Picture I). Using the hard jaw to clamp, the touching surfaces won't form bell shapes, the clamping force won't happen centrifugal vibration to impact on accuracy and have high-risk.

型号 Model	库存 Stock	尺寸 Dimensions(mm)							
		H	D1	D2	S1	S2	G	H1	O
SL-05	○	12	140	60	12	28	10	9	13.5
SL-06	○	12	168	80	12	32	10	9	16.5
SL-08	○	12	218	115	17	36	10	9	18.5
SL-10	○	12	258	150	15	40	10	9	18.5
SL-12	○	12	316	188	21	50	10	9	21.5
SL-15	○	20	380	230	23	52	12	16	31

●标准库存Standard inventory ○订单生产Order production

SI 单位换算表

SI Unit Conversion Table

■ 粗线表格灰色部分即SI单位
Bold lined units marked with gray background are SI Units

力
Force

N	Kgf	dyn
1	1.01972X10 ⁻¹	1X10 ⁵
9.080665	1	9.80665X10 ⁵
1X10 ⁻⁵	1.01972X10 ⁻⁶	1

应力
Stress

1pa=1N/m², 1Mpa=1N/mm²

Pa or N/m²	MPa or N/mm²	kgf/mm²	kgf/cm²	kgf/m²
1	1X10 ⁻⁶	1.01972X10 ⁻⁷	1.01972X10 ⁻⁵	1.01972X10 ⁻¹
1X10 ⁶	1	1.01972X10 ⁻¹	1.01972X10	1.01972X10 ⁵
9.80665X10 ⁶	9.80665	1	1X10 ²	1X10 ⁶
9.80665X10 ⁴	9.80665X10 ⁻²	1X10 ⁻²	1	1X10 ⁴
9.80665	9.80665X10 ⁻⁸	1X10 ⁻⁶	1X10 ⁻⁴	1

压力
Pressure

1pa=1N/m²

Pa	Kpa	Mpa	Bar	kgf/cm²
1	1X10 ⁻³	1X10 ⁻⁶	1X10 ⁻⁵	1.01972X10 ⁻⁵
1X10 ³	1	1X10 ⁻³	1X10 ⁻²	1.01972X10 ⁻²
1X10 ⁶	1X10 ³	1	1X10	1.01972X10
1X10 ⁵	1X10 ²	1X10 ⁻¹	1	1.01972
9.80665X10 ⁴	9.80665X10	9.80665X10 ⁻²	9.80665X10 ⁻¹	1

■ 摘录自 JIS 钢铁手册
Extracted from JIS Handbook"steel"

硬度换算表

Hardness Conversion Table

韦氏硬度 Vickers Hardness (HV)	布氏硬度 Brinell Hardness (HB)		洛氏硬度 Rockwell Hardness			肖氏硬度 Shore Hardness (HS)	抗拉强度 (近似值) Tensile Strength Mpa*
	标准球 Standard Ball	碳化钨球 Tungsten Carbide Ball	A量规 荷重60KGgf金钢石 圆锥压子 A Scale Load: 60kgf Diamond point (HRA)	B量规 荷重100Kgf,直径1.6mm (1/16 in),球HRB B Scale Load: 100kgf 1.6mm Dia.Ball (HRB)	C量规 荷重150kgf 金刚石圆锥压子HRC C Scale Load:150kgf Diamond Point (HRC)		
940	-	-	85.6	-	68.0	97	-
920	-	-	85.3	-	67.5	96	-
900	-	-	85.0	-	67.0	95	-
880	-	767	84.7	-	66.4	93	-
860	-	757	84.4	-	65.9	92	-
840	-	745	84.1	-	65.3	91	-
820	-	733	83.8	-	64.7	90	-
800	-	722	83.4	-	64.0	88	-
780	-	710	83.0	-	63.3	87	-
760	-	698	82.6	-	62.5	86	-
740	-	684	82.2	-	61.8	84	-
720	-	670	81.8	-	61.0	83	-
700	-	656	81.3	-	60.1	81	-
690	-	647	81.1	-	59.7	-	-
680	-	638	80.8	-	59.2	80	-
670	-	630	80.6	-	58.8	-	-
660	-	620	80.3	-	58.3	79	-
650	-	611	80.0	-	57.8	-	-
640	-	601	79.8	-	57.3	77	-
630	-	591	79.5	-	56.8	-	-
620	-	582	79.2	-	56.3	75	-
610	-	573	78.9	-	55.7	-	-
600	-	564	78.6	-	55.2	74	-
590	-	554	78.4	-	54.7	-	2055
580	-	545	78.0	-	54.1	72	2020
570	-	535	77.8	-	53.6	-	1985
560	-	525	77.4	-	53.0	71	1950
550	-	517	77.0	-	52.3	-	1905
540	-	507	76.7	-	51.7	69	1860
530	-	497	76.4	-	51.1	-	1825
520	-	488	76.1	-	50.5	67	1795
510	-	479	75.7	-	49.8	-	1750
500	-	471	75.3	-	49.1	66	1705
490	-	460	74.9	-	48.4	-	1660
480	-	452	74.5	-	47.7	64	1620
470	-	442	74.1	-	46.9	-	1570
460	-	433	73.6	-	46.1	62	1530
450	-	425	73.3	-	45.3	-	1495
440	-	415	72.8	-	44.5	59	1460
430	-	405	72.3	-	43.6	-	1410
420	-	397	71.8	-	42.7	57	1370
410	-	288	71.4	-	41.8	-	1330
400	-	379	70.8	-	40.8	55	1290
390	-	369	70.3	-	39.8	-	1240
380	-	360	69.8	(110.0)	38.8	52	1205
370	-	350	69.2	-	37.7	-	1170
360	-	341	68.7	(109.0)	36.6	50	1130
350	-	331	68.1	-	35.5	-	1095
340	-	322	67.6	(108.0)	34.4	47	1070
330	-	313	67.0	-	33.3	-	1035

硬度换算表
Hardness Conversion Table

韦氏硬度 Vickers Hardness (HV)	布式硬度 Brinell Hardness (HB)		洛式硬度 Rockwell Hardness			肖氏硬度 Shore Hardness (HS)	抗拉强度 (近似值) Tensile Strength Mpa*
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320	303	303	66.4	(107.0)	32.2	45	1005
310	294	294	65.8	-	31	-	980
300	284	284	65.2	-105.5	29.8	42	950
295	280	280	64.8	-	29.2	-	935
290	275	275	64.5	-104.5	28.5	41	915
285	270	270	64.2	-	27.8	-	905
280	265	265	63.8	103.5	27.1	40	890
275	261	261	63.5	-	26.4	-	875
270	256	256	63.1	102	25.6	38	855
265	252	252	62.7	-	24.8	-	840
260	247	247	62.4	(101.0)	24.0	37	825
255	243	243	62.0	-	23.1	-	805
250	238	238	61.6	99.5	22.2	36	795
245	233	233	61.2	-	21.3	-	780
240	228	228	60.7	98.1	20.3	34	765
230	219	219	-	96.7	(18.0)	33	730
220	209	209	-	95.0	(15.7)	32	695
210	200	200	-	93.4	(13.4)	30	670
200	190	190	-	91.5	(11.0)	29	635
190	181	181	-	89.5	(8.5)	28	605
180	171	171	-	87.1	(6.0)	26	580
170	162	162	-	85.0	(3.0)	25	545
160	152	152	-	81.7	(0.0)	24	515
150	143	143	-	78.7	-	22	490
140	133	133	-	75.0	-	21	455
130	124	124	-	71.2	-	20	425
120	114	114	-	66.7	-	-	390
110	105	105	-	62.3	-	-	-
100	95	95	-	56.2	-	-	-
95	90	90	-	52.0	-	-	-
90	86	86	-	48.0	-	-	-
85	81	81	-	41.0	-	-	-

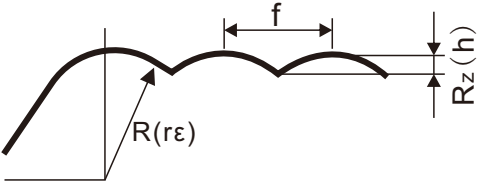
■ 此表摘自 JIS 钢铁手册 (SAE J417)
注 (1) 1MPa=1N/mm²
(2) 表中()内值不是实际使用值,仅做参考使用
Extracted from JIS Handbook "Iron & Steel"(SAE J 417)
Note(1)1MPa=1N/mm²
(2)Value in () is not in practical use, but reference only

表面粗糙度
Surface Roughness

理论 (几何) 表面粗糙度
Theoretical(Geometrical) surface Roughness

$$-R_z[h]=\frac{f^2}{8XR[r\epsilon]}\times 1,000$$

- R_z(h):理论表面粗糙度 Theoretical Surface Roughness(um)
- f:每旋转一周的进给量Feed Rare(mm/rev)
- R(ε):刀尖圆弧半径Corner Radius of Insert (mm)



表面粗糙度的计算方法
How to Obtain Surface Roughness Values

种类 Type	记号 Symbol	计算方法 How to obtain	说明图 Explanation
最大粗糙度 Max.Height Roughness	R _z	从粗曲线上沿平均线方向选取基准长度 (l) , 在这部分中的最高峰高度与最低谷深度的和以微米表示的值, 这个就是R _z 值。 $R_z=R_p+R_v$ R _y is a mean value in micron meter obtained from the distance of the highest peaks and the lowest valleys within the range of sampled reference lengths(l) in the direction of the center line of the roughness curve. $R_z=R_p+R_v$	
十点平均粗糙度 Ten Points Mean Roughness	R _{ZJIS}	从粗曲线上沿平均线方向选取基准长度 (l) , 在此长度中, 分别计算5个最高峰的平均值 (YP) 和5个最低谷的平均值 (YV) 。然后相加, 以微米表示, 就得到R _{ZJIS} 值。 $RZJIS=\frac{(YP1+YP2+YP3+YP4+YP5)+(YV1+YV2+YV3+YV4+YV5)}{5}$ R _z is a mean value in micron meter obtained from the distance of 5 highest peaks (YP) and the 5 lowest valleys (YV) measured from the center line of the roughness curve within the range of sampled reference length(l) $RZJIS=\frac{(YP1+YP2+YP3+YP4+YP5)+(YV1+YV2+YV3+YV4+YV5)}{5}$	Yp1,Yp2,Yp3,Yp4,Yp5: 基准长度 (l) 内的5个最高峰到中心线距离的和 Distance from the mean line to highest 5 peaks in the range of sampled reference length(l) Yv1,Yv2,Yv3,Yv4,Yv5: 在基准长度 (l) 内的5个最低谷到中心线距离的和 Distance from the mean line to the lowest 5 valleys in the range of sampled reference length(l)
算术平均粗糙度 Arithmetical Mean Roughness	R _a	从粗曲线上沿平均线方向选取基准长度 (l) , 把中心线方向看出X轴方向, 与其垂直的为Y轴方向。 若粗曲线可以有方程y=f(x)表示, 则以微米表示RA值可以由以下 方程式求出。 $Ra=\frac{1}{l}\int_0^l f(x) dx$ Ra is obtained from the following formula inmicron meter, the roughness curve is expressed by y=f(x),the X-axis is in the direction of the center line and the Y-axis is the vertical magnification of the roughness curve in the range of sampled reference lengths(l). $Ra=\frac{1}{l}\int_0^l f(x) dx$	

与三角记号的关系
Relationship with Triangle Symbol

算术平均粗糙度 Arithmetical Mean Roughness R _a (um)	最大粗糙度 Max.Height Roughness R _z (um)	十点平均粗糙度 Ten Points Mean Roughness R _z JIS(um)	三角记号 Triangle Note
0.025 0.05 0.1 0.2	0.1 0.2 0.3 0.4 0.8	0.1 0.2 0.4 0.8	
0.4 0.8 1.6	1.6 3.2 6.3	1.6 3.2 6.3	
3.2 6.3	12.5 25	12.5 25	
12.5 25	50 100	50 100	

JIS标准记号的表示例
Indication in JIS Standard

Ra的记号表示例 Example of Ra Indication	Rz的记号表示例 Example of Rz Indication
①仅表示上限的场合 (上限为6.3umRa时) When indication the upper limit only (when upper limit is 6.3umRa) ②表示上限和下限的场合 (上限为6.3umRa、下限为1.6umRa时) When indication both lower and upper limit (when upper limit is 6.3umRa,lower limit is 1.6umRa)	①仅表示上限的场合，在参数记号后面列出表面粗糙度 When indication upper limit only indicate surface roughness following the parameter symbol. ②表示上限和下限的场合，在参数记号后面，按照“上限~下限”的形式表示表面粗糙度。 When indication both lower and upper limit indication surface roughness as (upper limit ~lower limit) following the parameter symbol.

请注意R_a和R_z的表示方式各不相同
Note:The indications of R_a and R_z are different.

使用表面粗糙度标记的注意事项
Surface Roughness Symbol Caution

以上资料是根据 JIS B 0601-2001编制的。
为了与ISO标准一致，从JIS B 0601-2001版开始，变更为右表的记号。
The above information is based on JIS B 0601-2001.
However,some symbols were revised as shown in the right table in accordance with ISO standard from JIS B 0601-2001 version.

种类 Type	记号Symbol (JIS B 0601-1994)	记号Symbol (JIS B 0601-2001)
最大粗糙度 Max.Height Roughness	R _y	R _z
十点平均粗糙度 Ten Points Mean Roughness	R _z	(R _z JIS)
算术平均粗糙度 Arithmetical Mean Roughness	R _a	R _a

车削加工的计算公式
Basic Formylas of Turning

所需功率
Power Requirement

$$P_c = \frac{K_s X V_c X a_p X f}{6120 X \eta}$$

$$P_{HP} = \frac{K_s X V_c X a_p X f}{4500 X \eta}$$

- P_c: 所需功率 Power Requirement(KW)
- P_{HP}: 所需功率 Power Requirement(Horse Power)(HP)
- V_c: 切削速度 Cutting Speed(mm/min)
- f: 每转进给量 Feed Rate(mm/rev)
- a_p: 切深 Depth pf Cut(mm)
- K_s: 比切削阻力 Specific Cutting Resistance(kgf/mm²)
- η: 机械效率 Mechanical Efficiency(0.7~0.8)

$f = \frac{l}{n}$

l (mm/min):每分钟切削长度
Length of cut per minute

K_s的概略值 approximate value of K_s

铝 Aluminum: 800MPa
普通钢 General Steel:2,500~3,000MPa

软钢 (低碳钢) Low Carbon Steel	190	高碳合金钢 High Alloy Steel	245
中碳钢 Medium Carbon Steel	210	铸铁 Cast Iron	93
高碳钢 High Carbon Steel	240	可锻铸铁 Malleable Cast Iron	120
低碳合金钢 Low Alloy Steel	190	青铜/黄铜	70

切削速度
Cutting Speed

$$V_c = \frac{\pi X D_m X n}{1000}$$

- V_c: 切削速度 Cutting Speed(m/min)
- n: 转速 Spindle Revolution(min⁻¹)

表面粗糙度
Surface Roughness

$$R_z = h = \frac{f^2}{8XR(\gamma\varepsilon)} \times 1000$$

- R_z=h:理论表面粗糙度 Theoretical Surface Roughness(um)
- f:每转进给量 Feed Rate(mm/rev)

实际表面粗糙度 Actual Surface Roughness	钢的场合: 理论粗糙度 (Rz) X1.5~3 steel:Theoretical Surface Roughness(Rz)X1.5~3 铸铁的场合: 理论粗糙度 (Rz) X3~5
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铣削加工的计算公式
Basic Formylas of Milling

所需功率
Power Requirement

$$P_c = \frac{K_s X Q}{6120 X \eta}$$
$$= \frac{K_s X a_e X V_f X a_p}{6120000 X \eta}$$
$$= \frac{K_s X a_e X f_z X z X n X a_p}{6120000 X \eta}$$

$$P_{HP} = \frac{6120}{4500} P_c$$

- P_c: 所需功率 Power Requirement(KW)
- P_{HP}: 所需功率 Power Requirement(Horse Power)(HP)
- a_e: 切削宽度 Width of Cut(mm)
- V_f: 工作台进给速度 Table Feed(mm/min)
- f_z: 每刃进给量 Feed per Tooth(mm/t)
- Z: 刀盘刀数 Number of Inserts(pcs)
- n: 主轴旋转数 Spindle Revolution(min⁻¹)
- a_p: 切深 Depth of Cut(mm)
- K_s: 比切削阻力 Specific Cutting Resistance(kgf/mm²)
- η: 机械效率 Mechanical Efficiency(0.7~0.8)
- Q: 切削排出量 Chip Removal Volume(cm³/min)
- K_s的概略值 approximate value of K_s

铝 Aluminum: 800MPa 普通钢 General Steel: 2,500~3,000MPa			
软钢 (低碳钢) Low Carbon Steel	190	高合金钢 High Alloy Steel	245
中碳钢 Medium Carbon Steel	210	铸铁 Cast Iron	93
高碳钢 High Carbon Steel	240	可锻铸铁 Malleable Cast Iron	120
低碳合金钢 Low Alloy Steel	190	青铜/黄铜	70

切削排出量计算法
Chip Removal Volume

$$Q = \frac{a_c X v_f X a_p}{1000}$$
$$= \frac{a_e X f_z X z X n X a_p}{1000}$$

- Q: 切削排出量 Chip Removal Volume(cm³/min)
- a_e: 切削宽度 Width of Cut(mm)
- V_f: 工作台进给速度 Table Feed(mm/min)
- f_z: 每刃进给量 Feed per Tooth(mm/t)
- Z: 刀盘刀数 Number of Inserts(pcs)
- n: 主轴旋转数 Spindle Revolution(min⁻¹)
- a_p: 切深 Depth of Cut(mm)

工作台进给量和每刃进给量
Table Feed & Per Tough

$$f_z = \frac{V_f}{z X n}$$

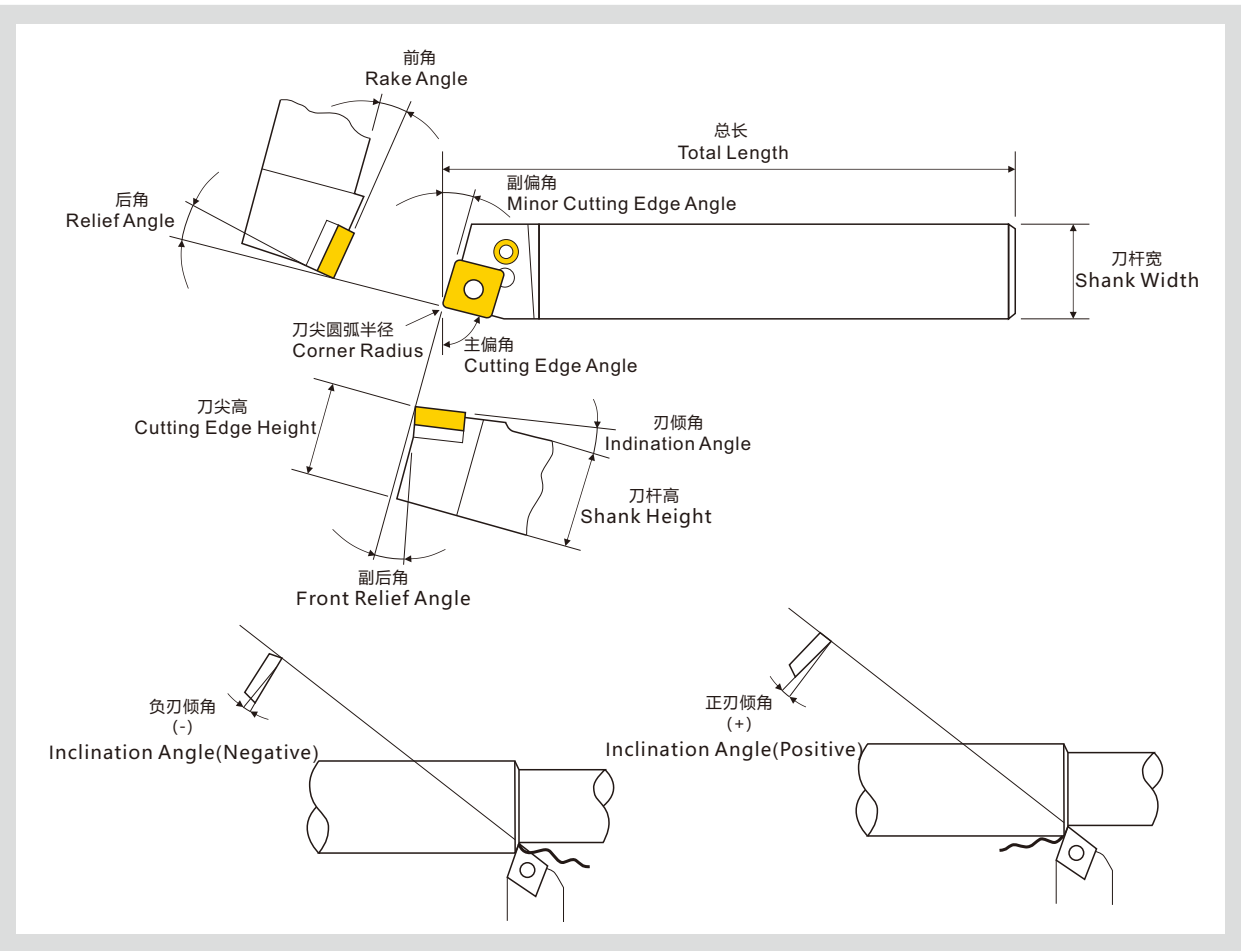
- f_z: 每刃进给量 Feed per Tooth(mm/t)
- V_f: 工作台进给速度 Table Feed(mm/min)
- Z: 刀盘刀数 Number of Inserts(pcs)
- n: 主轴旋转数 Spindle Revolution(min⁻¹)

切削速度
Cutting Speed

$$V_c = \frac{\pi X D_s X n}{1000}$$

- V_c: 切削速度 Cutting Speed(m/min)
- n: 主轴旋转数 Spindle Revolution(min⁻¹)
- D_s: 铣刀公称直径 Cutter Diameter(mm)

车刀各部分的名称角度
Terms and Angles of Turning Toolholder

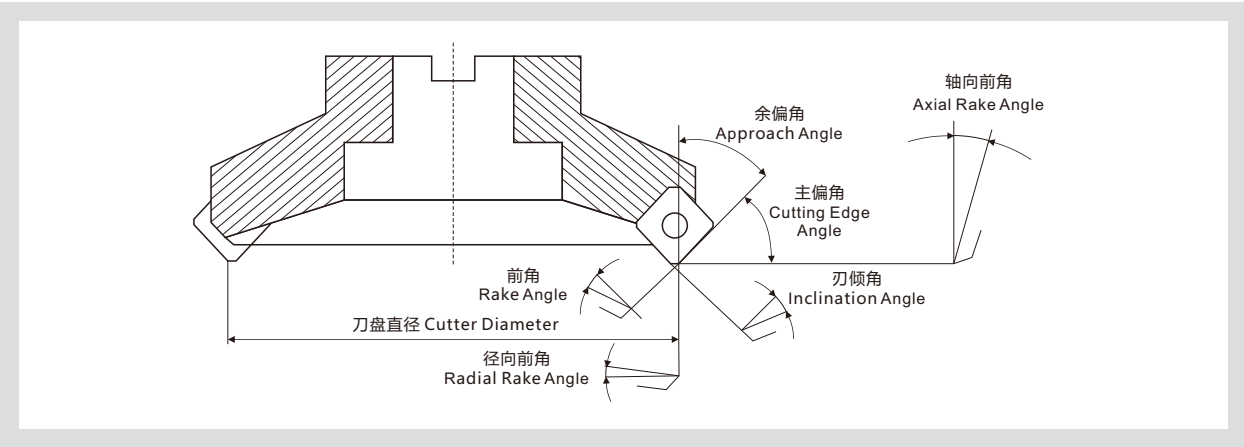


刀尖各角度的功能
Function of Tool Angle

刀尖角度 Tool Angle	作用 Function	效果 Effect
前角 Rake Angle	对切削阻力, 切削热, 切削排出, 工具寿命产生影响。 Affects cutting force, cutting heat, chip evacuation and tool life.	正角时, 可得到更锋利的切削效果, 切削阻力减少, 但刀尖强度降低。 加工科加工性好或细工件时, 推荐使用正角。 若在黑皮或继续加工需要较强的刀尖强度时, 推荐使用较小的前角或负角。 When it is positive (+) angle, sharper cutting performance is obtained, less cutting resistance but less edge strength. Positive (+) angle is recommended for easy to machine workpieces or thin workpieces. Smaller rake angle or negative (-) angle is recommended when a stronger edge is required like scale cutting or interrupted cutting.

刀尖角度 Tool Angle	作用 Function	效果 Effect
刃倾度 Inclination Angle	重切削时，切削开始点的刀尖上要承受很大的冲击力，为防止刀尖受此力而发生脆性损伤，故需有刃倾角。 • The corner will bear a strong impact when heavy cutting • It needs a suitable cutting edge inclination angle to prevent fracture	刃倾角为负时，切屑流向工件，为正时反向排出；刃倾角为正时，切削刃强度增大，但切削背分力也增加，易产生振动。推荐车削时为3°~5°，铣削时10°~15°。 • When it is negative---chip flows to the workpiece and vice versa. • When it is positive---cutting edge strength improves, but the back cutting force also increases and it is inclined to produce vibration. • Recommended values: Turning 3°~5°,Milling10°~15°.
主后角 Relief Angle	避免切刃以外的部分与加工面接触。 • Prevents the tool's contact to the workpiece surface,except the cutting edge	若后角小，刀尖强度变大，但后刀面磨损在短时间内变大，刀具寿命也会变短。 • When it is small,the cutting edge strength improves,but the wear at relief face increases,and tool life may decreases.
主偏角 Cutting Edge Angle	影响切屑控制能力与切削力方向。 • Affects chip control and the direction of cutting force	主偏角大时。切屑变厚且切屑控制能力提高 • When it is large,chip thickness becomes thick and chip control improves.
副偏角 Minor Cutting Edge Angle	减少已加工表面与刀具摩擦。 • Prevents friction between cutting edge and work surface	副偏角小，切削刃强度增加，但刀尖发热；副偏角小，背分力增加，切削时易产生振动；粗加工时副偏角宜小些，而精加工时则宜大些。一般为5°~15°。 • When it is small,the cutting edge strength will improve,but the tip is heated. • When it is small,back cutting force increases and it is inclined to produce cutting vibration. • It should be smaller for routh finishing,while it can be larger for rough finishing. • Recommended values:5°~15°.
刀尖圆弧半径 Corner Radius	对刀尖的强度及加工表面粗糙度影响很大。 • Affects tool nose strength and roughness of the finished surface	一般适宜值选进给量的2~3倍。 • Recommended values:2~3 times of feed rate.

铣刀各部分的名称角度
Terms and Angles of Milling Cutter

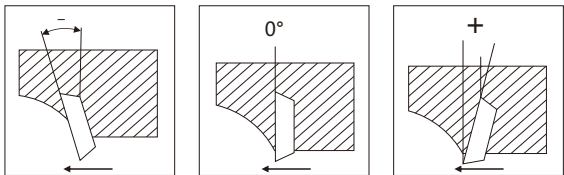


刀尖各角度的功能
Function of Tool Angle

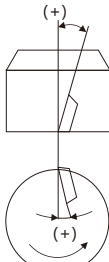
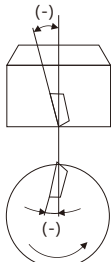
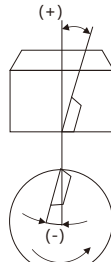
刀尖角度 Tool Angle	作用 Function	效果 Effect
轴向前角 Axial Rake Angle	控制切屑排出方向和切削力 • Controls chip flow direction and cutting force	正角时，切削性能好，且不易发生切屑粘连。 • When it is positive---Good cutting performance and less chip welding
径向前角 Radial Rake Angle	控制切屑排出方向和切削力 • Controls chip flow direction and cutting force	负角时，切屑排出性能好 • When it is negative---Good chip evacuation
前角 Rake Angle	决定实际切削刃锋利程度 • Determines the real sharp degree of tool edge	正角时，切削性能好且不易发生切屑粘连，但切削强度下降 负角时，切削性能差，易发生切屑粘连，但是切削强度高。 • When it is positive---Good cutting performance and less chip welding,but lower edge strength • When it is negative---Higher edge strength but easier to weld
余偏角 Approach Angle	决定切屑厚度和切屑排出方向 • Controls chip thickness and chip flow direction	角度大时。切屑厚度变小，切屑负荷变小，但背分力大。 • When it is large---Thinner chip thickness and lower cutting load
刃倾角 Inclination Angle	决定切屑排出方向 • Controls chip flowdirection	正角时。切屑排出好切屑阻力小，但切削强度较小。 • When it is positive---Good chip evacuation,less cutting resistance and lower edge stability of the corner part

不同前角的组合特征
Characteristic Of Different Rake Angle Combination

前角的正负
Positive/Negative Rake Angle



不同前角的组合特征
Characteristics Of Different Rake Angle Combination

基本刃型的组合 Combination of Rake Angles		(+)轴向正前角 Positive Axial Rake angle	(-)轴向负前角 Negative Axial Rake angle	(+)轴向正前角 Positive Axial Rake angle
				
		(+)径向正前角 Positive Radia Rake angle	(-)径向负前角 Negative Radial Rake Angle	(-)径向负前角 Negative Radial Rake Angle
		双重正角刃型 Double Positive	双重负角刃型 Double Negative	正负角刃型 Positive +Negative
		轴向前角 Axial Rake Angle	正 Positive (+)	负 Negative (-)
径向前角 Radial Rake Angle		正 Positive (+)	负 Negative (-)	负 Negative (-)
刀片样式 Tool Style		正角型刀片 Positive Angle (单面使用) (Single Side Used)	负角型刀片 Negative Angle (双面使用) (Double Side Used)	正角型刀片 Positive Angle (单面使用) (Single Side Used)
工件材料 Workpiece Material	钢 Steel	●	—	●
	铸铁 Cast Iron	—	●	●
	轻合金 Light Alloy	●	—	—
	难加工材料 Difficult-to-machine Material	●	—	●

车削加工问题及对策
Trouble Shooting (Turning)

故障内容 Trouble			对策与检查要点 Measures		刀具材质 Insert Grade		切削条件 Cutting Conditions					刀具几何形状 Tool Geometry					机床装夹 Setting/ Machine							
					硬度更高的材质 change to harder grade	韧性更大的材质 change to tougher grade	耐冲击性更好的材质 More thermal shock resistant grade	耐粘结性更好的材质 Change to more welding resistant grade	切削速度 Vc 提高/增加 Higher(Larger)↑ 降低/减少 Lower(Smaller)↓	进给量 fz	切深 ap	改变走刀路线 Tool path review	切削液 Coolant		校正刀片断屑槽槽形 Chipbreaker review	前角 Rake angle	刀尖圆弧半径 Corner-R	余偏角 Approach angle	切削刃强度/钝化 Edge strength/ honing	提高刀片精度等级 Change to higher tolerance	提高刀杆刚性 Tool holder rigidity	工件刀具的安装 Workpiece/tool installation	刀柄悬伸长度 Over hang length	动力・机械传动情况 Power, rigidity
													湿式 Usage of mist	干式 Dry										
											增大 Increase ↑ 减少 Decrease ↓													
尺寸的不稳定 Unstable dimension	工件尺寸不稳定 Unstable workpiece dimension	刀片精度不适当 Unsuitable insert tolerance															●							
		刀具或工件的逃隙 Tool or workpiece evacuation										●	●	↑	↓	↓			●	●	●	●		
	切削中频繁偏心 Frequent offset during cutting	后刀面磨损增大 Flank wear increase	●												●	↑								
		切削条件不适当 Unsuitable cutting conditions				●	↓	↑																
表面粗糙度 Surface roughness	表面粗糙度差 Poor surface roughness	刃口切削瘤 Built-up edge			●	↑																		
		刀具磨损使切削性能不佳 Poor cutting by tool wear	●		●	↓					●		●	↑	↑	↓	↓	●						
		崩损 Chipping		●				↓	↓				●	↑		↑	↓	●		●	●	●		
		粘刀，刃口积屑瘤 Welding, built-up edge			●	↑					●		●	↑			↓	↓						
		切削条件不适当 Unsuitable cutting conditions				↑	↓	↓	↓		●													
		刀具材质/几何形状不适当 Unsuitable tool geometry/geometry										●		↑	↑	↓	↓	●						
发热 Heat	切削发热使加工精度恶化或 刀具寿命降低 Deterioration of accuracy or tool life by cutting heat	振动，振刀 Vibration, chattering	●			↓	↓	↓					●	↑	↓	↓	↓	↓	●	●	●	●		
		切削条件不适当 Unsuitable cutting conditions				↓	↓	↓	↓		●													
		刀具材质/几何形状不适当 Unsuitable tool geometry/geometry	●									●	↑	↑	↓	↓								
		切削条件不适当 Unsuitable cutting conditions				↓	↓	↑		●	●													
毛刺、欠损、毛边 Burr, Chipping, Scuffing	钢，铝—毛刺 Steel, Aluminium - Burr	刀具材质/几何形状不适当 Unsuitable tool geometry/geometry	●									●	↑	↓	↓	↓								
		切削条件不适当 Unsuitable cutting conditions				↓	↓	↑		●	●													
	铸铁-欠损 Cast iron workpiece chip off	切削条件不适当 Unsuitable cutting conditions					↓	↓	↓	●				●	↑	↑	↑	↓		●	●	●	●	
		刀具材质/几何形状不适当 Unsuitable tool geometry/geometry	●										●	↑	↓	↓	↓							
	软钢-毛边 Mild steel scuffing	切削条件不适当 Unsuitable cutting conditions					↑	↓	↓		●													
		刀具材质/几何形状不适当 Unsuitable tool geometry/geometry	●		●								●	↑			↓	↓						
切刃的损伤 Edge damage	后刀面和前刀面磨损增大 Wear increase at relief face rake face	后刀面的磨损 Flank wear	●			↓					●	●	↑	↑		↓	↓							
		前刀面的磨损 Rake face wear	●			↓	↓	↓	↓		●	●	↑		↑									
	境界磨损 Notching			●	↓					●														
	崩损 Chipping		●			↓	↓	↓						↑	↑	↑	↑	●	●	●	●			
	崩裂 Crack	刀具材质/切削条件不适当 Unsuitable tool grade/cutting conditions	●	●			↓	↓	↓					↑	↑	↑	↑	●	●	●	●			
	热龟裂 Thermal Crack	刀具材质/切削条件不适当 Unsuitable tool grade/cutting conditions		●		↓	↓	↓	↓		●	●	↑			↓	↓							
	切刃刀尖角部的变形 Edge nose deformation	继续加工时刀尖部变形 Edge nose deformation during interrupted cutting	●			↓	↓	↓	↓			●	↓	↓	↓	↑	↑							
	刃口积屑瘤 Built-up edge	刀具材质/切削条件不适当 Unsuitable tool grade/cutting conditions			●	↑	↑			●		●	↑			↓	↓	●						
切屑处理 Chip control	长切屑缠绕 Long, tangling chips	切削条件不适当 Unsuitable cutting conditions				↓	↑	↑	↑	●		●												
		刀具切刃形状不适当 Unsuitable tool geometry										●		↓	↓									
	短切屑四处飞溅 Chips scattering	切削条件不适当 Unsuitable cutting conditions					↓	↓	↓		●													
		刀具切刃形状不适当 Unsuitable tool geometry										●		↑	↑	↑								

(1)为防止振刀，可采用较大的进给量。To prevent chattering, the higher f may be suitable
(2)为避免毛边，可采用较大的进给量。To prevent scuffing, the higher f may be suitable

铣削加工问题及对策
Trouble Shooting (Milling)

故障内容 Trouble			对策与检查要点 Measures			主要原因 Trouble Item			刀具材质 Insert Grade				切削条件 Cutting Conditions					刀具几何形状 Tool Geometry					机床装夹 Setting/ Machine								
									硬度更高的材质 change to harder grade	韧性更大的材质 change to tougher grade	耐冲击性更好的材质 More thermal shock resistant grade	耐粘结性更好的材质 Change to more welding resistant grade	切削速度 Vc Cutting speed	进给量 fz Feed rate	切深 ap Depth of cut	刀盘直径与切削宽度 Cutter Dia cutting width review	改变走刀路线 Tool path review	切削液 Coolant		附断屑槽刀片 Insert with chip breaker	刀片后角 Relief angle	刀尖角 Corner angle	切削刃强度/钝化 Edge strength honing	刀盘刃数 Insert number	刀片安装凹槽 Insert pocket	修光刃形状/追刀槽/磨齿/磨边 Wiper edge (relief angle) review	刀刃振动精度的检查 Insert run out check	刀具刚性的检查 Cutter rigidity	工件/刀具的安装 Workpiece/tool installation	刀柄悬伸长度 Over hang length	动力、机械松动情况 Power,rigidity
																		喷雾式 Usage of mist	干式 Dry												
切刃的损伤 Edge damage	后刀面磨损增大 Flank wear increase	切削条件不适当 Unsuitable cutting conditions				● ↓						●																			
		刀具切刃形状不适当 Unsuitable tool geometry	●												● ↑		● ↓			●											
	前刀面磨损增大 Rake face wear increase	切削条件不适当 Unsuitable cutting conditions				● ↓	● ↓	● ↓				●				● ↑	● ↑	● ↓													
		刀具切刃形状不适当 Unsuitable tool geometry	●												● ↑	● ↑	● ↓														
	切削刃崩损 Chipping cracking	切削条件不适当 Unsuitable cutting conditions					● ↓	● ↓	●			●				● ↓	●	● ↑			●	●	●	●	●						
		刀具切刃形状不适当 Unsuitable tool geometry		●											● ↓	●	● ↑				●	●	●	●	●						
	热冲击破损 Edge breakage by thermal shock	切削条件不适当 Unsuitable cutting conditions				● ↓	● ↓	● ↓					●			● ↑		● ↓													
		刀具切刃形状不适当 Unsuitable tool geometry			●											● ↑		● ↓													
刃口积屑瘤 Built-up edge	切削条件不适当 Unsuitable cutting conditions				● ↑	● ↑						●				● ↑		● ↓													
	刀具切刃形状不适当 Unsuitable tool geometry			●											● ↑		● ↓														
加工精度 Machining accuracy	精加工表面不佳 Poor surface finish	切削条件不适当 Unsuitable cutting conditions				● ↑	● ↓	● ↓				●																			
		刀具切刃形状不适当 Unsuitable tool geometry	●		●												● ↓	● ↓			●	●		●	●						
	毛刺 Burr	切削条件不适当 Unsuitable cutting conditions				● ↓	● ↓	● ↓	●			●				● ↑	● ↓	● ↓			●										
		刀具切刃形状不适当 Unsuitable tool geometry														● ↑	● ↓	● ↓													
	欠损 Workpiece chip off	切削条件不适当 Unsuitable cutting conditions														● ↑	● ↑	● ↓	● ↑		●										
		刀具切刃形状不适当 Unsuitable tool geometry														● ↑	● ↑	● ↓	● ↓												
平面度/平行度差 Poor planeness parallelness	工具或刀具的逃隙 Tool or workpiece evacuation					● ↓	● ↓					● ₁		●	● ↑	● ↓	● ↓	● ↓		●	●	●	●	●							
其他 Others	振动/振刀大 Heavy chattering vibration	安装过程/切削条件不适当 Unsuitable cutting conditions installation				● ↓	● ↓	● ↓	●			● ₄		●	● ↑	● ↓	● ↓	● ↓				●	●	●							
		刀具切刃形状不适当 Unsuitable tool geometry																													
	切削缠绕堵塞 Damaging chips	切削条件不适当 Unsuitable cutting conditions				● ↑	● ↑	● ₅	●			● ₆	●		●					● ↓	●										
		刀具切刃形状不适当 Unsuitable tool geometry													●	● ↑			● ↓												
(1) 由于切削热，使工件表面变形 If the surface is warped by cutting heat (2) 为了防止振刀，可采用较大进给量 To prevent chattering, the higher fz may be suitable (3) 为防止振刀，可采用较大的切深 To prevent chattering, the larger ap may be suitable (4) 螺旋加工时推荐使用逆铣加工方法 Down-cut method is recommended for helical end milling (5) 大进给量也可以 Higher fz may be suitable (6) 推荐使用压缩空气 Compressed air is recommended																															

客户单位
Customer Company

联系人
Name

电话 TEL

刀具名称
Request tool

图号
Part No.

规格Specification

日期
DATE

填表人
Applicant

机床 Machine	机床名称: Machine Name																																																
	★机床类型: ☐ 数控车 ☐ 立式加工中心 ☐ 卧式加工中心 ☐ 专机 ☐ 其他 Machine type: CNC Lathe Vertical machining center Horizontal machining center Special machine Other machine																																																
	★夹柄型号: ☐ 热膨胀夹头 ☐ 液压夹头 ☐ 弹簧夹头 ☐ 侧固式 ☐ 专用丝锥夹头 ☐ 钻夹头 ☐ 其他 Holder type: Shrink fit chuck Hydraulic chuck Collet chuck Side lock chuck Special taps chuck Drill chuck Others																																																
	★机床主轴类型: ☐ BT30 ☐ BT40 ☐ BT50 ☐ HSK ☐ 其他 Machine Spindle Type Others																																																
加工工艺 Processing technic	★冷却类型: ☐ 内冷 ☐ 外冷 ☐ 干式切削 Cooling type: internal cooling external cooling dry cutting																																																
	★提供零件简图 Workpiece Picture																																																
	★工件材料: Workpiece Material																																																
	★硬度: Hardness																																																
应用 Application	★加工表面状态 ☐ 毛坯表面 ☐ 已加工过表面 Machined surface Base Surface Machined Surface																																																
	★是否干涉 ☐ 无 ☐ 干涉 干涉长____mm Interference NO Interference Length																																																
	★孔要求 Hole requirement																																																
	★客户对刀具耐用度要求: Customer requirements for tool durability:																																																
应用 Application	目前客户使用状况 Current customer usage	新产品 New Products	☐ 是 参数是否由我司提供 Yes Condition provide by our Company																																														
			☐ 不是 请填写替换刀具内容 NO Please write replace tool details as below																																														
		替换刀具 Replace tool	刀具品牌: Tool Brand										★寿命 Tool Life						★进给f _n (mm/rev) Feederate																														
			切削速度V _c (m/min) Cutting Speed										★转速n(r/min) Rotation Speed						★失效形式 Invalid Mode																														
申请人 Applicant:			销售主管 Sales Executive:														技术主管 Technical director:																																
备注: 打★为必填项目 Remark: ★ Necessary filling item																																																	
www.kovestool.cn																																																	