

DORMER PRAMET



S7xx 系列高性能整体硬铣刀 产品扩展

ProLaunch 2021



SAFETY FIRST

Dormer Pramet's objective is **zero harm** to our people, the environment we work in, our customers and our suppliers.



ALARM



EMERGENCY
EXIT



ASSEMBLY
POINT



FIRST AID



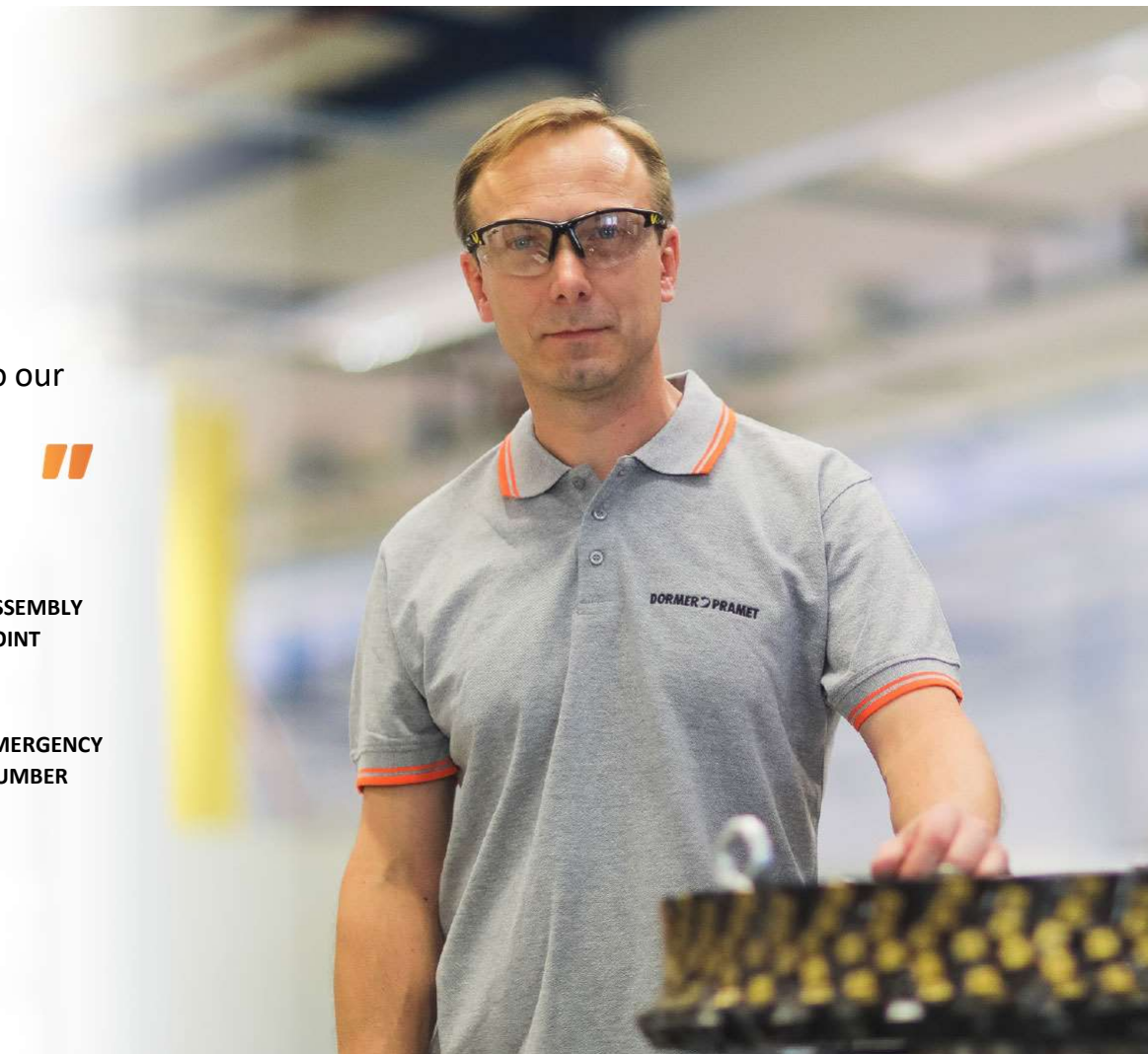
PROTECTIVE
EQUIPMENT



EMERGENCY
NUMBER

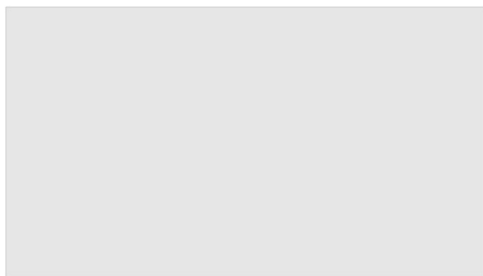
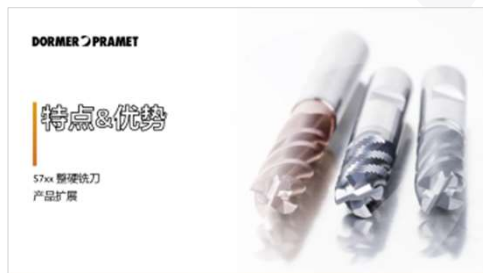


PSYCHOLOGICAL
SAFETY



产品预览

S7xx 整硬铣刀扩展



DORMER PRAMET

产品介绍

S7xx 整硬铣刀
产品扩展



S7xx 高性能铣刀扩展

产品介绍



为什么要扩展高性能整体铣刀

- 缩颈设计提升切削深度
- 粗加工刀具也需要缩颈和HB侧固柄设计

开发目的

- 高效率 – 4齿设计可提升效率
- 出色的表面精度 – 不等螺旋角设计
- 光顺的切削 – 正前角降低加工硬化
- 安全性 – 缩颈设计可避免与墙壁干涉

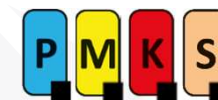
产品预览

介绍

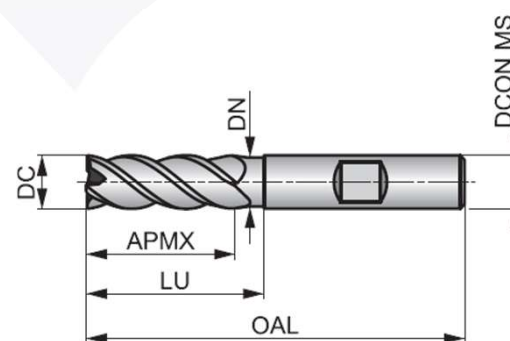
刀具型号	DC Range	NOF	APMX	螺旋角 λ	前角 γ	缩颈	涂层	齿距	柄部标准	P	M	K	S	N	H
立铣刀															
S722HB	3.0 – 20.0	4	3 ~ 2xDC	40°	7°	Yes	AlCrN	differential	DIN 6535 HB	■	■	■	■		
S761	3.0 – 20.0	4	3 ~ 2xDC	40°	10°	No	AlCrN	differential	DIN 6535 HA	■	■	■	■		
S768	4.0 – 20.0	4	5 ~ 3xDC	unequal°	10°	Yes	TiSiN	differential	DIN 6535 HA	■	■	■	■		
S766	4.0 – 20.0	4	2.7 ~ 2xDC	unequal°	10°	No	TiSiN	differential	DIN 6535 HA	■	■	■	■		
S765HB	6.0 – 20.0	4	2.7 ~ 2xDC	40°	10°	No	AlCrN	differential	DIN 6535 HB	■	■	■	■		
S765	6.0 – 20.0	4	2.7 ~ 2xDC	40°	10°	No	AlCrN	differential	DIN 6535 HA	■	■	■	■		

S722HB

介绍



型号	DC [mm]	RE [mm]	DCON MS [mm]	APMX [mm]	OAL [mm]	NOF	LU [mm]	DN [mm]
S722HB3.0	3.00	0.10	6.00	9.00	50.0	4	15.00	2.80
S722HB4.0	4.00	0.10	6.00	11.00	57.0	4	20.00	3.70
S722HB5.0	5.00	0.10	6.00	13.00	57.0	4	20.00	4.60
S722HB6.0	6.00	0.10	6.00	20.00	60.0	4	25.00	5.50
S722HB8.0	8.00	0.20	8.00	20.00	64.0	4	26.00	7.40
S722HB10.0	10.00	0.20	10.00	27.00	70.0	4	32.00	9.20
S722HB12.0	12.00	0.20	12.00	26.00	83.0	4	37.00	11.00
S722HB14.0	14.00	0.20	14.00	26.00	83.0	4	37.00	13.00
S722HB16.0	16.00	0.20	16.00	32.00	92.0	4	42.00	15.00
S722HB18.0	18.00	0.20	18.00	32.00	92.0	4	42.00	17.00
S722HB20.0	20.00	0.20	20.00	38.00	104.0	4	50.00	19.00



参数
DC
RE
DCON MS
APMX
OAL
NOF
LU
DN

描述
切削直径
刀尖圆角
柄部直径
最大切削深度
全长
有效长度
颈部直径



W
侧固柄



CC-HKS
强力刀柄



SC
热胀刀柄



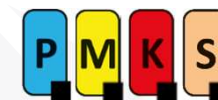
HC
液压刀柄



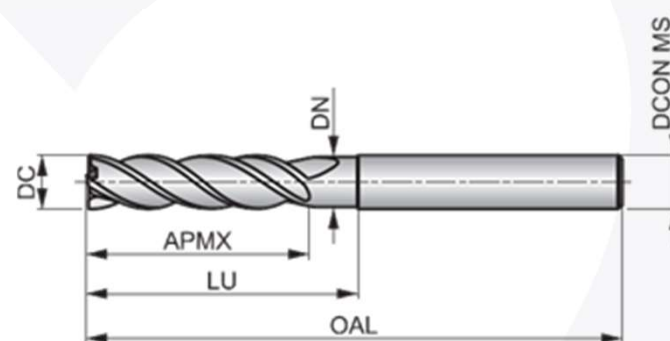
CC-ER
带精密夹头ER刀柄

S768

介绍



型号	DC [mm]	RE [mm]	DCON MS [mm]	APMX [mm]	OAL [mm]	NOF	LU [mm]	DN [mm]
S7684.0	4.00	0.10	6.00	19.00	75.0	4	32.00	3.70
S7685.0	5.00	0.10	6.00	19.00	75.0	4	32.00	4.60
S7686.0	6.00	0.10	6.00	25.00	75.0	4	32.00	5.50
S7688.0	8.00	0.20	8.00	30.00	75.0	4	38.00	7.40
S76810.0	10.00	0.20	10.00	40.00	100.0	4	50.00	9.20
S76812.0	12.00	0.30	12.00	45.00	100.0	4	55.00	11.00
S76816.0	16.00	0.30	16.00	65.00	125.0	4	75.00	15.00
S76820.0	20.00	0.30	20.00	65.00	125.0	4	75.00	19.00



参数
DC
RE
DCON MS
APMX
OAL
NOF
LU
DN

描述
切削直径
刀尖圆角
柄部直径
最大切削深度
全长
齿数
有效长度
颈部直径



SC
热胀刀柄



HC
液压刀柄



CC-HKS
强力刀柄

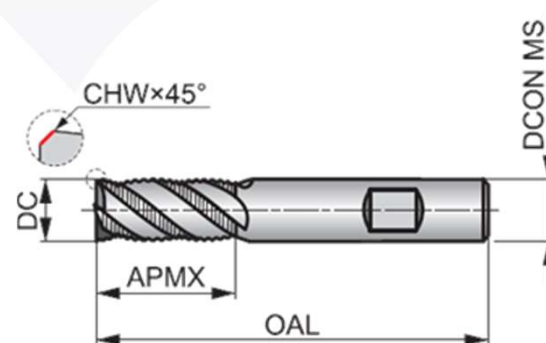


CC-ER
带精密夹头ER刀柄

S765HB

介绍

型号	DC [mm]	RE [mm]	DCON MS [mm]	APMX [mm]	OAL [mm]	NOF
S765HB6.0	6.00	0.10	6.00	16.00	50.0	4
S765HB8.0	8.00	0.20	8.00	20.00	64.0	4
S765HB10.0	10.00	0.20	10.00	22.00	70.0	4
S765HB12.0	12.00	0.20	12.00	26.00	75.0	4
S765HB14.0	14.00	0.30	14.00	32.00	90.0	4
S765HB16.0	16.00	0.30	16.00	32.00	90.0	4
S765HB18.0	18.00	0.30	18.00	38.00	100.0	4
S765HB20.0	20.00	0.40	20.00	38.00	100.0	4



参数
DC
RE
DCON MS
APMX
OAL
NOF

描述
切削直径
刀尖圆角
柄部直径
最大切削深度
全长
齿数



W
侧固柄



CC-HKS
强力刀柄



HC
液压刀柄

应用市场

介绍



DORMER PRAMET

特点&优势

S7xx 整硬铣刀
产品扩展



钢和铸钢(P-材料组)

ISO group		WMG (Work Material Group)		Hardness (HB or HRC)	Ultimate Tensile Strength (MPa)	Examples of material (AISI, EN, DIN, SS, STN, BS, UNE, GB, AFNOR, GOST, UNI)	
P	P1	■ P1.1	Free machining steel <i>(carbon steels with increased machinability)</i>	sulfurized	< 240 HB	≤ 830	AISI 1108, EN 15S22, DIN 1.0723, SS 1922, ČSN 11120, BS 210A15, UNE F.210F, GB Y15, AFNOR 10F1, GOST A30, UNI CF10S20
		■ P1.2		sulfurized and phosphorized	< 180 HB	≤ 620	AISI 1211, EN 11SMn30, DIN 1.0715, SS 1912, ČSN 11109, BS 230M7, UNE F.2111, GB Y15, AFNOR S250, GOST A40G, UNI CF9SMn28
		■ P1.3		sulfurized/phosphorized and leaded	< 180 HB	≤ 620	AISI 12L13, EN 11SMnPb30, DIN 1.0718, SS 1914, ČSN 12110, BS 210M16, UNE F.2114, GB Y15Pb, AFNOR S250Pb, GOST AS35G2, UNI CF10SPb20
	P2	■ P2.1	Plain carbon steel <i>(steels comprised of mainly iron and carbon)</i>	containing <0.25%C	< 180 HB	≤ 620	AISI 1015, EN C15, DIN 1.0401, SS 1350, ČSN 11301 , BS 080A15, UNE F.111, GB 15, AFNOR C18RR, GOST St2ps, UNI Fe360
		■ P2.2		containing <0.55%C	< 240 HB	≤ 830	AISI 1030, EN C30, DIN 1.0528, SS 1550, ČSN 12031, BS 080M32, UNE F.1130, GB 30, AFNOR AF50C30, GOST 30G, UNI Fe590
		■ P2.3		containing >0.55%C	< 300 HB	≤ 1030	AISI 1060, EN C60, DIN 1.0601, SS 1655, ČSN 12061, BS 080A62, UNE F513, GB 60, AFNOR 1C60, GOST 60G, UNI C60
	P3	■ P3.1	Alloy steel <i>(carbon steels with an alloying content ≤ 10%)</i>	annealed	< 180 HB	≤ 620	AISI 3415, 4140, 4340, 6150, 8620, EN 15NiCr13, 42CrMo4, 41NiCrMo7-3-2, DIN 1.5732, 1.7223, 1.6563, 1.8159, 1.6523, SS 2244, 2541, 2230, 2506, ČSN 15020, BS 1501-240, UNE F.2601, GB 16Mo, AFNOR 15D3, GOST 15M, UNI 16Mo3KW
		■ P3.2		hardened and tempered	180 - 260 HB	> 620 ≤ 900	
		■ P3.3			260 - 360 HB	> 900 ≤ 1240	
	P4	■ P4.1	Tool steel <i>(special alloy steel for tools, dies and molds)</i>	annealed	< 26 HRC	≤ 900	AISI D2, EN X155CrVMo12-1, DIN 1.2370, SS 2736, ČSN 19573, BS BD2, UNE F.520A, GB Cr12Mo1V1, AFNOR Z160CDV12, GOST Ch12MF, UNI X155CrVMo121KU
		■ P4.2		hardened and tempered	26 - 39 HRC	> 900 ≤ 1240	
		▣ P4.3			39 - 45 HRC	> 1240 ≤ 1450	



不锈钢(M-材料组)

ISO group		WMG (Work Material Group)		Hardness (HB or HRC)	Ultimate Tensile Strength (MPa)	Examples of material (AISI, EN, DIN, SS, STN, B.S, UNE, CN, AFNOR, GOST, UNI)	
M	M1	■ M1.1	Ferritic stainless steel (straight chromium non-hardenable alloys)	< 160 HB	≤ 520	AISI S429, EN X7Cr14, DIN 1.4001, SS 2326, BS 434S17, UNE F.3401, AFNOR Z8C12, GOST 08Ch13, UNI X6CrTi12	
		■ M1.2		160 - 220 HB	> 520 ≤ 700	AISI 446, EN X10CrAl24, DIN 1.4762, SS 2322, ČSN 17113, BS 430S17, UNE F.3154, GB 10Cr17, AFNOR Z10CAS24, GOST 12Ch17, UNI X16Cr26	
	M2	■ M2.1	Martensitic stainless steel (straight chromium hardenable alloys)	annealed	< 200 HB	≤ 670	AISI 430F, EN X14CrMoS17, DIN 1.4104, SS 2383, ČSN 17140, BS 410S21, UNE F.3117, AFNOR Z10CF17, UNI X10CrS17
		■ M2.2		quenched and tempered	200 - 280 HB	> 670 ≤ 950	AISI 440C, EN X105CrMo17, DIN 1.4125, SS 2385, ČSN 17023, BS 425C11, UNE F.3402; GB 102Cr17Mo, AFNOR Z100CD17, GOST 95Ch18, UNI GX6CrNi 13 04
		M2.3		precipitation-hardened	280 - 380 HB	> 950 ≤ 1300	AISI 420, EN X45Cr13, DIN 1.4034, ČSN 17029, BS 425C11, UNE F.3405, AFNOR Z44C14, GOST 20X17H12, UNI X30Cr13
	M3	■ M3.1	Austenitic stainless steel (chromium-nickel and chromium-nickel-manganese alloys)	< 200 HB	≤ 750	AISI 304, 309, 5848 EN X5CrNi18-12, X15CrNiSi20-12, X45CrNiW18-9, DIN 1.4303, 1.4828, 1.4873, SS 2352, ČSN 17249, BS 305S17, UNE F.3513, GB 10Cr18Ni12, AFNOR Z8CN18.12, UNI X7CrNi18 10	
		■ M3.2		200 - 260 HB	> 750 ≤ 870		
		M3.3		260 - 300 HB	> 870 ≤ 1040		
	M4	M4.1	Austenitic-ferritic (DUPLEX) or super-austenitic stainless steel (alloys with austenitic-ferritic microstructure, austenitic alloys with > 20%Ni)	< 300 HB	≤ 990	AISI 329, EN X1-NiCrMoCU25-20-5, DIN 1.4539, SS 2562, ČSN 17265, BS 318S13, UNE F.3552, GB 022Cr25NiMo2N, AFNOR Z1NCDU25.20	
		M4.2	Precipitation hardening austenitic stainless steel	300 - 380 HB	≤ 1320	AISI 631 (17-7PH), EN X7CrNiAl17-7, DIN 1.4568, SS 2388, ČSN 17465, BS 301S13, UNE F.3217, GB 07Cr17Ni7Al, AFNOR Z9CNA17-07	



铸铁(K-材料组)

ISO group		WMG (Work Material Group)		Hardness (HB or HRC)	Ultimate Tensile Strength (MPa)	Examples of material (ASTM, EN, DIN, SS, STN, B.S, UNE, CN, AFNOR, GOST, UNI)	
K	K1	■ K1.1	Gray iron or Automotive Gray iron <i>(iron-carbon castings with a lamellar graphite microstructure)</i>	ferritic or ferritic-pearlitic	< 180 HB	≤ 190	ASTM A48 Grade 20, EN-JL-100, DIN GG-10 (0.6010), STN 422410
		■ K1.2		ferritic-pearlitic or pearlitic	180 - 240 HB	> 190 ≤ 310	ASTM A48 Grade 30, EN-JL-1030, DIN GG-20 (0.6020), SS 0120, STN 422420
		■ K1.3		pearlitic	240 - 280 HB	> 310 ≤ 390	ASTM A48 Grade 50, EN-JL-1060, DIN GG-35 (0.6035), SS 0135, STN 422435
	K2	■ K2.1	Malleable iron <i>(iron-carbon castings with a graphite-free microstructure)</i>	ferritic	< 160 HB	≤ 400	ASTM A602 Grade M3210, EN-JM-1130, DIN GTS-35 (0.8135), SS 0815
		■ K2.2		ferritic or pearlitic	160 - 200 HB	> 400 ≤ 550	ASTM A602 Grade M4504 (F20001), EN-JM-1040, DIN GTS-50-05 (0.8045)
		■ K2.3		pearlitic	200 - 240 HB	> 550 ≤ 660	ASTM A602 Grade M7002, EN-JM-1140, DIN GTS-45 (0.8145), STN 422540
	K3	■ K3.1	Ductile iron <i>(iron-carbon castings with a nodular graphite microstructure)</i>	ferritic	< 180 HB	≤ 560	ASTM A536 Grade 60-40-18, EN-JS-1030, DIN GGG-40 (0.7040), STN 422304
		■ K3.2		ferritic or pearlitic	180 - 220 HB	> 560 ≤ 680	ASTM A536 Grade 80-55-06, EN-JS-1050, DIN GGG-50 (0.7050), STN 422305
		■ K3.3		pearlitic	220 - 260 HB	> 680 ≤ 800	ASTM A536 Grade 100-70-03, EN-JS-1060, DIN GGG-60 (0.7060), STN 422306
	K4	■ K4.1	Austenitic gray iron <i>(iron-carbon alloy castings with an austenitic lamellar graphite microstructure)</i>		< 180 HB	≤ 190	ASTM A436 Type 1 (L-NiCuCr 15 6 2), DIN GGL-NiMn 13 7 (0.6652)
		■ K4.2	Austenitic ductile iron <i>(iron-carbon alloy castings with an austenitic nodular graphite microstructure)</i>		< 240 HB	≤ 740	ASTM A439 Type D-2B (S-NiCr 20 3), DIN GGG-NiMn 23 4, GOST ЧН19Х3Ш
		■ K4.3	Austempered ductile iron <i>(iron-carbon alloy castings with an ausferrite microstructure)</i>		< 280 HB	> 840 ≤ 980	ASTM A897 Grade 110-70-11
		■ K4.4			280 - 320 HB	> 980 ≤ 1130	ASTM A897 Grade 125-80-10, EN-JS-1100, DIN GGG-90 (5.3400)
		■ K4.5			320 - 360 HB	> 1130 ≤ 1280	ASTM A897 Grade 2 (150-110-07), EN-JS-1110, DIN GGG-100 (5.3403)
	K5	■ K5.1	Compacted graphite iron <i>(iron-carbon castings with a vermicular graphite structure)</i>	ferritic	< 180 HB	≤ 400	ASTM A842 Grade 300, EN-GJV-300, DIN GGV 30, GOST ЧВГ30,
■ K5.2			ferritic-pearlitic	180 - 220 HB	> 400 ≤ 450	ASTM A842 Grade 350, EN-GJV-350, DIN GGV 35 (5.2200), GOST ЧВГ30,	
■ K5.3			pearlitic	220 - 260 HB	> 450 ≤ 500	ASTM A842 Grade 450, EN-GJV-450, DIN GGV 45, GOST ЧВГ45,	



高温合金(S-材料组)

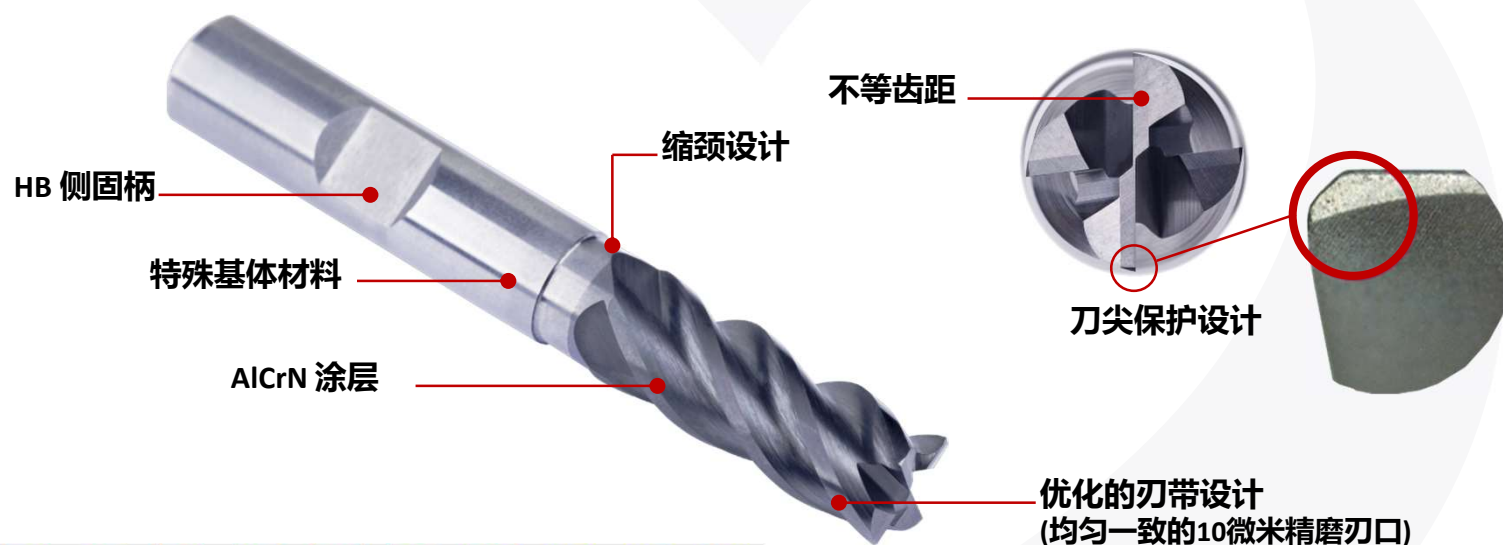
ISO group		WMG (Work Material Group)		Hardness (HB or HRC)	Ultimate Tensile Strength (MPa)	Examples of material (UNS, EN, DIN, SS, STN, B.S, UNE, CN, AFNOR, GOST, UNI)
S	S1	S1.1	Titanium or titanium alloys	< 200 HB	≤ 660	UNS R50250 (Grade 1), EN Ti 99.6, DIN 3.7035, BS TA.2, UNE Ti-Po2, AFNOR T-40, GOST BT1-00
		■ S1.2		200 - 280 HB	> 660 ≤ 950	UNS R56404 (Grade 29), EN Ti2Cu, DIN 3.7124, BS TA.21, UNE Ti-P11, AFNOR T-U2
		S1.3		280 - 360 HB	> 950 ≤ 1200	UNS R54250 (Grade 38), EN TiAl6V4, DIN 3.7165, ČSN TiAl6VELI, BS TA. 13, UNE Ti-P63, AFNOR T-A6V, GOST BT6
	S2	■ S2.1	Fe-based high-temperature alloys	< 200 HB	≤ 690	UNS N08801 (Incoloy 801), EN X8 NiCrAlTi31-21, DIN 1.4959, BS NA 15, AFNOR Z8NC33-21
		S2.2		200 - 280 HB	> 690 ≤ 970	UNS N19907, EN X6NiCrTiMoVB25-15-2, DIN 1.4980, SS 2570, BS HR52, AFNOR Z6NCTDV25.15B, GOST 36HXTIO
	S3	■ S3.1	Ni-based high-temperature alloys	< 280 HB	≤ 940	UNS A09706 (Inconel 706), EN NiCr25FeAl, DIN 2.4856, ČSN Inconel 625, BS HR 6, UNE F.3313, GB 1Cr16Ni35, AFNOR NC22FeDNB, GOST XH38BT
		S3.2		280 - 360 HB	> 940 ≤ 1200	UNS N07001, EN NiCr20Co13Mo4Ti3Al, DIN 2.4654, BS HR 2, ČSN Waspaloy, AFNOR NCKD 20ATV, GOST XH80T6IO
	S4	■ S4.1	Co-based high-temperature alloys	< 240 HB	≤ 800	UNS R30016 (Stellite 6b), EN CoCr20W15Ni, DIN 2.4964, AFNOR KC 20 WN, GOST ЛK52
		S4.2		240 - 320 HB	> 800 ≤ 1070	UNS R30016 (Stellite 6b), EN CoCr20W15Ni, DIN 2.4964, AFNOR KC 20 WN, GOST ЛK52



S722HB

产品特点

HM	N	NOF 4 $\pm$
	λ 40°	γ 7°
DIN 6535HB	AlCrN	DC h9



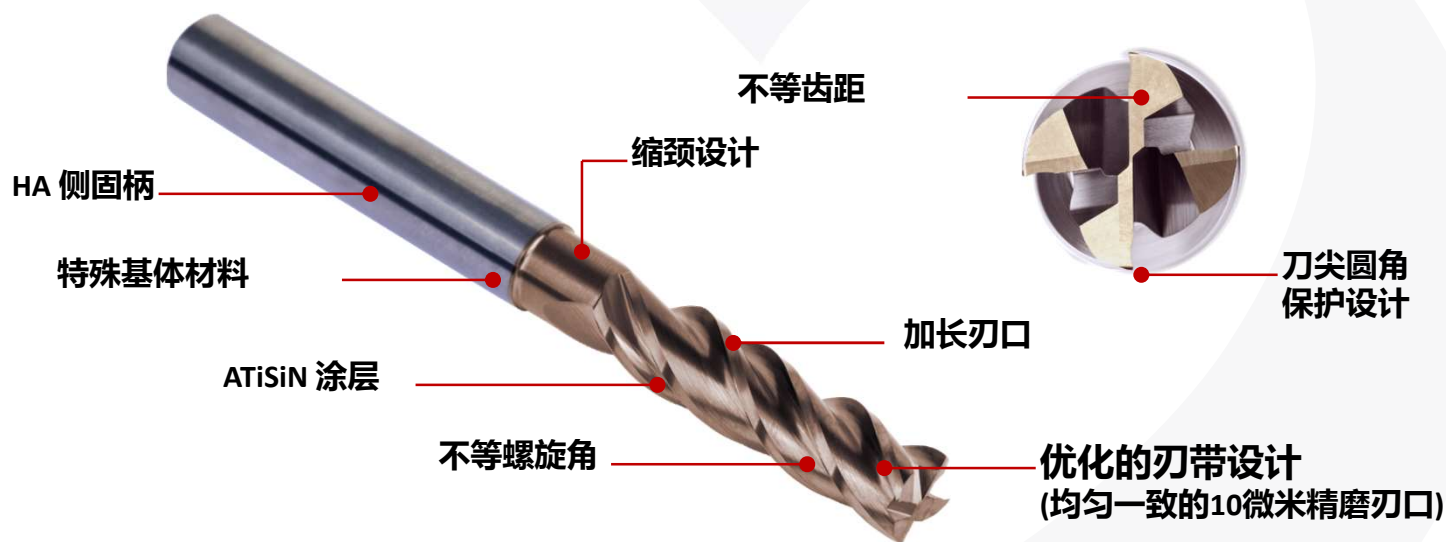
P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	M1.1	M1.2	M2.1
■ 199 J	■ 223 J	■ 230 J	■ 170 J	■ 150 J	■ 133 J	■ 138 J	■ 111 J	■ 94 J	■ 82 J	■ 70 J	■ 115 J	■ 97 J	■ 102 J
M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1	K4.2
■ 84 J	■ 94 J	■ 81 J	■ 196 J	■ 145 J	■ 109 J	■ 202 J	■ 164 J	■ 131 J	■ 178 J	■ 136 J	■ 110 J	■ 165 J	■ 125 J
K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	S1.2	S2.1	S3.1	S4.1				
■ 91 J	■ 78 J	■ 65 J	■ 187 J	■ 141 J	■ 109 J	■ 69 J	■ 53 J	■ 40 J	■ 31 J				

DCON MS tolerance h6; RE ± 0.02 mm

S768

产品特点

HM	N	
	λ	γ 10°
DIN 6535HA	TiSiN	DC h9
	DORMER	



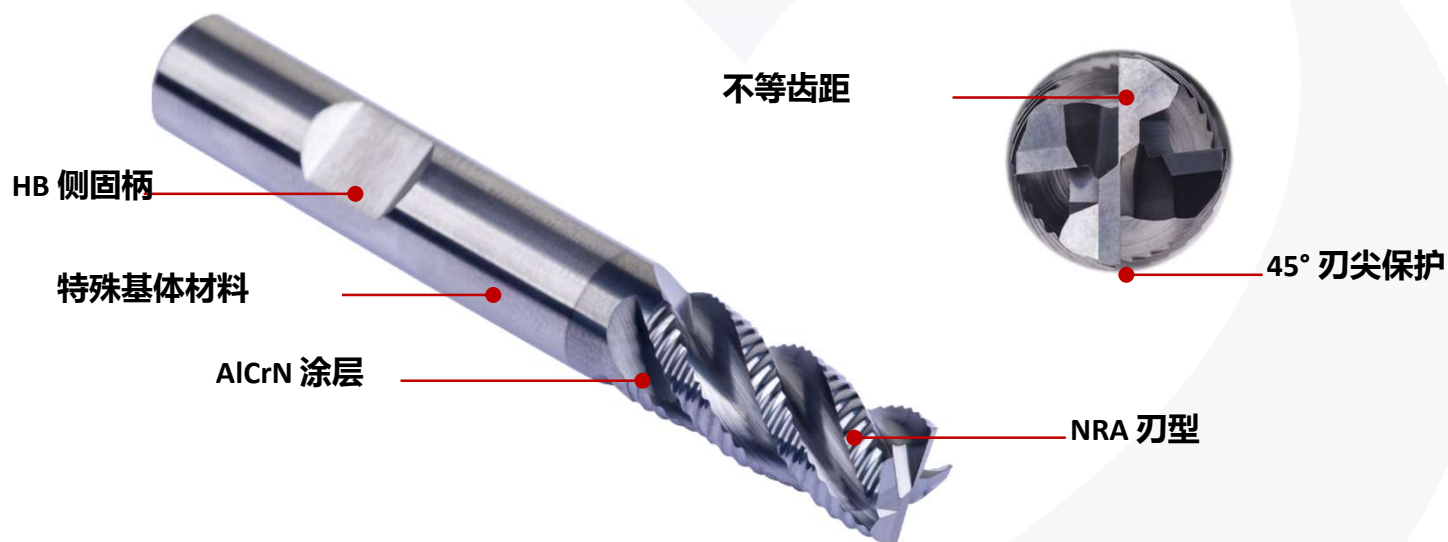
P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	M1.1	M1.2	M2.1
■ 148 I	■ 165 I	■ 170 I	■ 126 I	■ 111 I	■ 98 G	■ 102 I	■ 82 G	■ 69 G	■ 60 G	■ 52 G	■ 85 I	■ 72 I	■ 76 I
M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1	K4.2
■ 62 I	■ 70 I	■ 60 I	■ 146 I	■ 108 I	■ 81 I	■ 150 I	■ 122 I	■ 97 G	■ 132 I	■ 102 I	■ 82 G	■ 123 G	■ 92 G
K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	S1.2	S2.1	S3.1	S4.1				
■ 68 G	■ 58 I	■ 48 I	■ 139 G	■ 104 G	■ 81 G	■ 50 I	■ 39 G	■ 29 G	■ 23 G				

DCON MS tolerance h6; RE ±0.01mm

S765HB

产品特点

HM	NRA	NOF 4 $\neq$
	λ 40°	γ 10°
DIN 6535HA	AlCrN	DC h9
	DORMER	



P1.1	P1.2	P1.3	P2.1	P2.2	P2.3	P3.1	P3.2	P3.3	P4.1	P4.2	M1.1	M1.2	M2.1
■ 211 J	■ 236 J	■ 243 J	■ 180 J	■ 158 J	■ 140 J	■ 146 J	■ 117 J	■ 99 J	■ 86 J	■ 74 J	■ 122 J	■ 103 J	■ 108 J
M2.2	M3.1	M3.2	K1.1	K1.2	K1.3	K2.1	K2.2	K2.3	K3.1	K3.2	K3.3	K4.1	K4.2
■ 89 J	■ 100 J	■ 86 J	■ 208 J	■ 154 J	■ 116 J	■ 214 J	■ 174 J	■ 139 J	■ 189 J	■ 145 J	■ 117 J	■ 176 J	■ 132 J
K4.3	K4.4	K4.5	K5.1	K5.2	K5.3	S1.2	S2.1	S3.1	S4.1				
■ 97 J	■ 83 J	■ 69 J	■ 199 J	■ 149 J	■ 116 J	■ 72 J	■ 56 J	■ 42 J	■ 33 J				

DCON MS tolerance h6; CHW $\pm 0.02 \times 45^\circ$ mm.

DORMER PRAMET

加工推荐

S7xx 整硬铣刀
产品扩展



新图标

如何识别

基体材料

HM	HM	硬质合金
----	----	------

刀具类型

W	W	软材料槽型
NRA	NRA	HRA粗加工刃型
FS	FS	FS断屑槽
	W NRA	W-槽型 + HRA粗加工刃型

齿

Z 2	NOF 2	齿数
Z 4	NOF 4	齿数 + 不等齿距设计

刀具长度

		切削长度
--	--	------

切削角度

$\lambda 12^\circ$ $\gamma 10^\circ$	$\lambda 25^\circ$	螺旋角
	$\gamma 20^\circ$	前角
$\lambda \neq 10^\circ$	$\lambda \neq$	不等螺旋角

刀柄

DIN 6535HA	DIN 6535HA	标准柄
------------	------------	-----

表面处理

		表面光亮处理
Hi	Hi	表面抛光处理

涂层

TiSiN	TiSiN	TiSiN 涂层
-------	-------	----------

冷却

		内冷
--	--	----

刀具公差

h9	DC h9	切削直径公差
----	-------	--------

切削方向

		切削方向
--	--	------

刀具标准

DIN 6527K	DIN 6527K	长度标准
DORMER	DORMER	长度标准

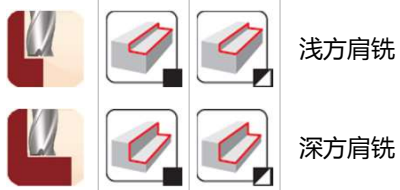
新图标

加工推荐

开槽工序



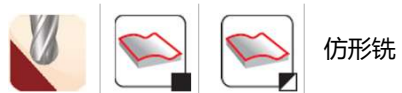
方肩铣



面铣



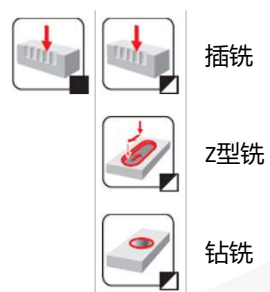
仿形铣



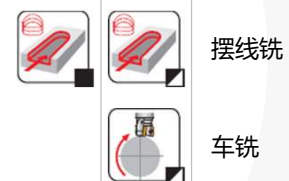
坡走铣



插铣



其他工序



切削数据

怎样识别数据?

新WMG 材料组

■ 首选

▣ 次选

切削数据仅在产品页

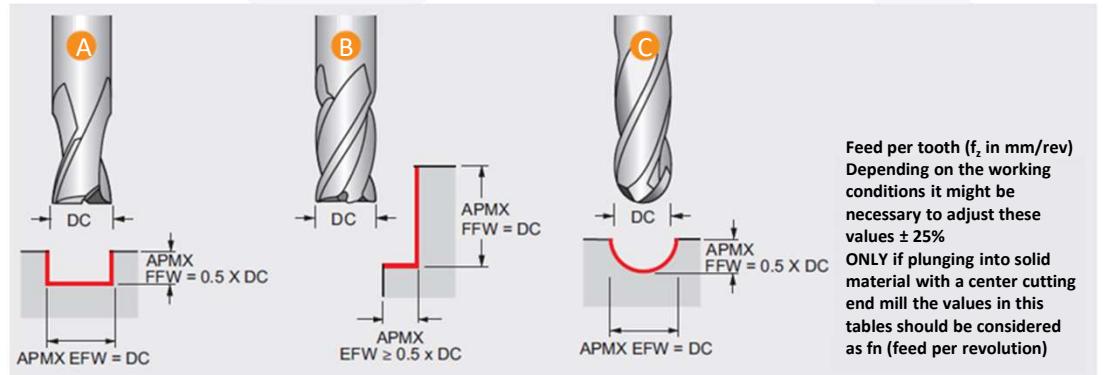
P1.1 ■ 199 J	P1.2 ■ 223 J	P1.3 ■ 230 J	P2.1 ■ 170 J	P2.2 ■ 150 J	P2.3 ■ 133 I	P3.1 ■ 138 J
M2.2 ■ 84 I	M3.1 ■ 94 I	M3.2 ■ 81 I	K1.1 ■ 196 J	K1.2 ■ 145 J	K1.3 ■ 109 J	K2.1 ■ 202 J
K4.3 ■ 91 I	K4.4 ■ 78 I	K4.5 ■ 65 I	K5.1 ■ 187 I	K5.2 ■ 141 I	K5.3 ■ 109 I	S1.2 ■ 69 I

Product Family Code														
		S722HB	S765HB	S768	S770HB	S771HB	S772HB	S773HB	S791	S561	S610	S611	S614	S629
		3.00 - 20.00	6.00 - 20.00	4.00 - 20.00	10.00 - 20.00	10.00 - 20.00	10.00 - 20.00	10.00 - 20.00	6.00 - 16.00	1.00 - 20.00	2.00 - 20.00	3.00 - 20.00	3.00 - 16.00	1.00 - 20.00
														
P	P1	■	■	■	■	■	■	■						
	P2	■	■	■	■	■	■	■						
	P3	■	■	■	■	■	■	■						
	P4	■	■	■	■	■	■	■						
M	M1	■	■	■	■	■	■	■	■					
	M2	■	■	■	■	■	■	■	■					
	M3	■	■	■	■	■	■	■	■					
	M4								▣					
K	K1	■	■	■	■	■	■	■	■					
	K2	■	■	■	■	■	■	■	■					
	K3	■	■	■	■	■	■	■	■					
	K4	■	■	■	■	■	■	■	■					
	K5	■	■	■	■	■	■	■	■					
N	N1								▣		■	■	■	■
	N2								▣		■	■	■	■
	N3										■	■	■	■
	N4								▣		■	■	■	■
	N5													
S	S1	■	■	■	■	■	■	■	▣					
	S2	■	■	■	■	■	■	■	▣					
	S3	■	■	■	■	■	■	■	▣					
	S4	■	■	■	■	■	■	■	▣					
H	H1									■				
	H2									■				
	H3									■				
	H4									■				

新的预览页仅展示适用性，不包括具体参数

切削数据

如何计算速度和进给等参数?



How to use this table to find the feed per tooth (f_z):

1. Find your Alpha Code on the product page (example: 170J, „J“ is the Alpha Code).
2. Find the closest diameter for your cutting application in the top row of the table.
3. Find your Alpha Code in the left column of the table.
4. The intersection (cell) of the Diameter and Alpha Code is the feed per tooth (f_z).

FOR SOLID
CARBIDE
MILLING
CUTTERS ONLY

P1.1	P1.2	P1.3	P2.1	P2.2
■ 199 J	■ 223 J	■ 230 J	■ 170 J	■ 150 J
M2.2	M3.1	M3.2	K1.1	K1.2
■ 84 I	■ 94 I	■ 81 I	■ 196 J	■ 145 J
K4.3	K4.4	K4.5	K5.1	K5.2
■ 91 I	■ 78 I	■ 65 I	■ 187 I	■ 141 I

	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	25.00
I	0.003	0.006	0.011	0.019	0.024	0.030	0.032	0.036	0.039	0.042	0.049	0.054	0.061	0.066	0.073	0.079	0.088
J	0.004	0.009	0.014	0.026	0.033	0.041	0.044	0.048	0.053	0.057	0.066	0.074	0.083	0.090	0.099	0.107	0.120
K	0.006	0.012	0.019	0.035	0.044	0.054	0.059	0.064	0.070	0.076	0.088	0.098	0.110	0.120	0.132	0.142	0.160

校正因子

如何校正速度和进给?

1 Slot Milling

Correction factors for cutting speed V_c and feed per tooth for slot milling operations at different depths of cut

APMX FFW / DC	25%	50%	100%	150%				
	1.25	1.00	0.75	0.50				
	1.25	1.00	0.75	0.50				

2 Shoulder Milling

Correction factors for cutting speed V_c and feed per tooth for square shoulder milling with <50% radial immersion

APMX EFW / DC	5%	10%	15%	20%	25%	30%	40%	≥ 50%
	1.48	1.35	1.27	1.22	1.19	1.16	1.11	1.00
	2.29	1.67	1.40	1.25	1.15	1.09	1.02	1.00

We recommend to avoid milling with 50% radial immersion

校正因子

如何计算球头铣刀的校正因子？

3a Plain Copy Milling (with Ball Nose Cutters)

Correction factors for cutting speed V_c for plain copy milling at different depths of cut

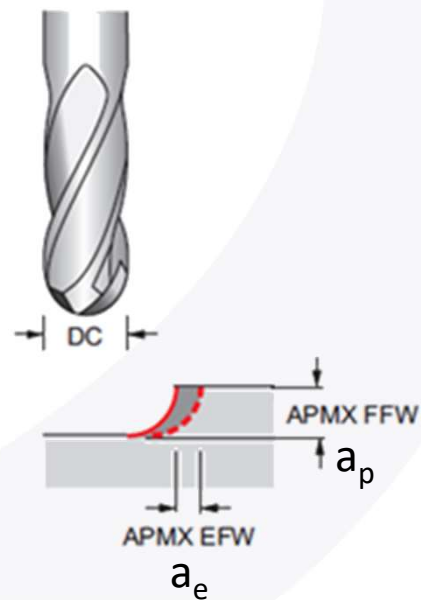
APMX FFW / DC	5%	10%	15%	20%	25%	30%	40%	50%
	2.29	1.67	1.40	1.25	1.15	1.09	1.02	1.00

3b Line offset f_e (step over distance) for achieving a theoretical surface roughness R_{th}

$\varnothing DC$	μm	2	4	8	16	32	63	125	250
2		0.13	0.18	0.25	0.36	0.50	0.70	0.97	1.32
3		0.15	0.22	0.31	0.44	0.62	0.86	1.20	1.66
4		0.18	0.25	0.36	0.50	0.71	1.00	1.39	1.94
5		0.20	0.28	0.40	0.56	0.80	1.12	1.56	2.18
6		0.22	0.31	0.44	0.62	0.87	1.22	1.71	2.40
8		0.25	0.36	0.51	0.71	1.01	1.41	1.98	2.78

3c Correction factors for feed per tooth f_z for plain copy milling with a line offset $<50 \times D$ at different depths of cut

APMX FFW	APMX EFW	5%	10%	15%	20%	25%	30%	35%	40%	50%
5%		5.26	3.82	3.21	2.87	2.65	2.50	2.40	2.34	2.29
10%		3.82	2.78	2.33	2.08	1.92	1.82	1.75	1.70	1.67
15%		3.21	2.33	1.96	1.75	1.62	1.53	1.47	1.43	1.40
20%		2.87	2.08	1.75	1.56	1.44	1.36	1.31	1.28	1.25
25%		2.65	1.92	1.62	1.44	1.33	1.26	1.21	1.18	1.15
30%		2.50	1.82	1.53	1.36	1.26	1.19	1.14	1.11	1.09



DORMER PRAMET



SIMPLY
RELIABLE



/DormerPrametSocial



Dormer Pramet



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dormerpramet.com

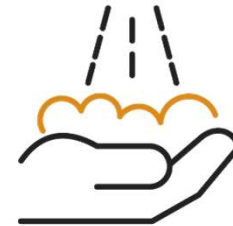
COVID-19 PRECAUTIONS



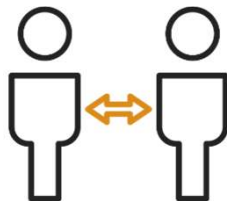
**FOLLOW LOCAL
GUIDELINES**



**STAY HOME WHEN
FEELING SICK**



**WASH YOUR HANDS
CAREFULLY**



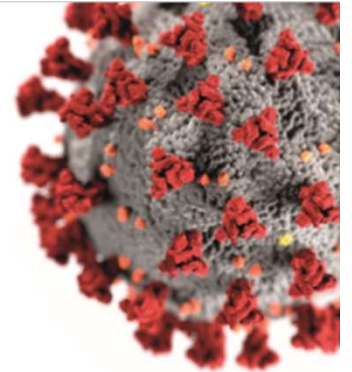
**OBSERVE PHYSICAL
DISTANCING GUIDELINES**



**COUGH AND SNEEZE
CORRECTLY**



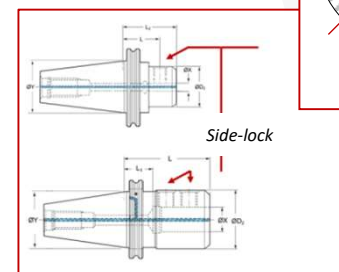
**AVOID TOUCHING
YOUR FACE**



侧固柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
侧固柄	6 - 20	●	●	●		●	●	●	●	●	●	●
	25 - 40		●	●			●	●	●	●	●	●
侧固柄 with peripheral coolant	6 - 20		●	●			●	●			●	●
	25 - 40		●	●			●	●			●	●



W



Torques for DIN 1835

Bore	Screw	Torque
Ø 6 mm	M 6 SW 3	10 Nm
Ø 8 mm	M 8 SW 4	10 Nm
Ø 10 mm	M 10 SW 5	16 Nm
Ø 12 mm	M 12 SW 6	28 Nm
Ø 14 mm	M 12 SW 6	28 Nm
Ø 16 mm	M 14 SW 6	42 Nm
Ø 18 mm	M 14 SW 6	42 Nm
Ø 20 mm	M 16 SW 8	50 Nm
Ø 25 mm	M 18 × 2 SW 10	60 Nm
Ø 32 mm	M 20 × 2 SW 10	72 Nm
Ø 40 mm	M 20 × 2 SW 10	72 Nm
Ø 50 mm	M 24 × 2 SW 12	90 Nm



W-C

With peripheral coolant channels
(for tools without through coolant)

- High torque transmission
- Easy handling
- Low cost
- Poor balance and radial run-out
- Every shank size needs one chuck
- Not suited for high speeds
- Heavy roughing- semi finishing



HKS 强力刀柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
High-performance Chuck	3 – 20		•	•			•	•			•	•
	25 – 32		•	•			•	•			•	•

HKS



Form AD/B
 $\nabla \leq 0,003$
 G6,3
 15.000 min⁻¹



HKS-C

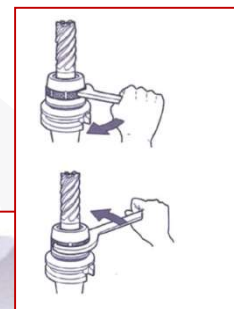
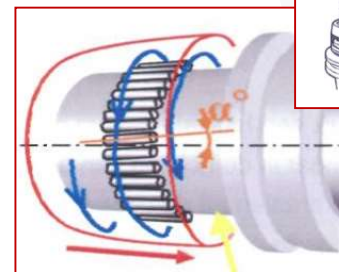


HKS-C-S

Sealed for tough coolant

Size	20mm	25mm
Clamping torque	50-70 Nm	80-100 Nm
Clamping force	780 Nm	2000 Nm

- Easy handling
- For h6 shanks
- **For operations involving high MRR**
- High retention force
- High torque transmission
- Highest stability
- Accurate
- Flexible



SC 热胀刀柄 HOLDERS

Tooling systems

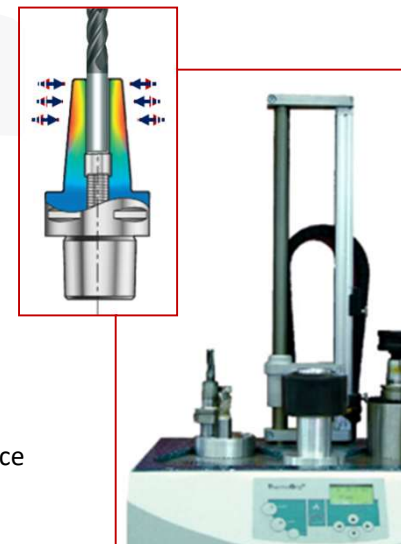
描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
液压刀柄	3 - 20	•	•	•		•	•	•			•	•
	25 - 32		•	•			•	•			•	•

SC



Form AD/B
 $\nabla \leq 0,003$
 G6.3 15.000 min⁻¹

- Requires a shrink-fit device
- For h6 shanks
- For finishing
- High torque transmission
- High levels of accuracy
- Extremely rigid



HC 液压刀柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
液压刀柄	6 – 20	•	•	•		•	•	•			•	•
	25 – 32		•	•			•	•			•	•
	40			•								

HC



Form AD/B
 $\nabla \leq 0,003$
 G6.3
 15.000 min⁻¹



HC-C



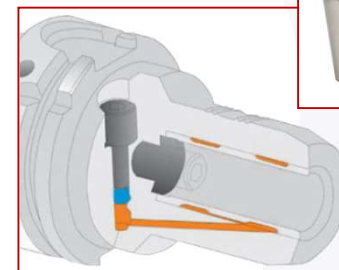
HC-C-S

Sealed for tough coolant

Torque

Clamping- $\varnothing$ mm	Moment (Nm)
6	10
8	20
10	40
12	50
14	80
16	100
18	150
20	200
25	250
32	400
40	550

- Easy handling
- For h6 shanks
- **For finishing and super finishing**
- Medium-high torque transmission
- High run-out accuracy
- Dampen vibrations in low speed range



ER COLLET CHUCK

Tooling systems

ER Collet chuck are not the first choice to recommend for holding indexable milling cutters. However if a customer wants to, we should recommend to use at least high precision collets (ER-C-P or ER-C-SC4)!

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A		DIN 228-1					
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100	MT2	MT3	MT4	MT5	MT6	
ER Collet Chuck	1 – 10 (ER16)	●	●	●		●	●	●			●		●					
	2 – 16 (ER25)	●	●	●		●	●	●	●		●	●	●	●	●			
	2 – 20 (ER32)	●	●	●		●	●	●	●	●	●	●		●	●			
	3 – 26 (ER40)	●	●	●		●	●	●	●	●	●	●				●		

CC-ER



Form AD/B
 $\nabla \leq 0,003$
 G6,3
 15.000 min⁻¹



- Medium torque transmission
- Low to medium run-out accuracy
- Assembly requires some instruction (read instructions) 
- Moderate repeatability
- Dampen vibration
- Not suited for high speeds
- Flexible (broader range of collets than OZ system)
- Clean carefully
- Rotate the tool to achieve best run-out



SC 热胀刀柄 HOLDERS

Tooling systems

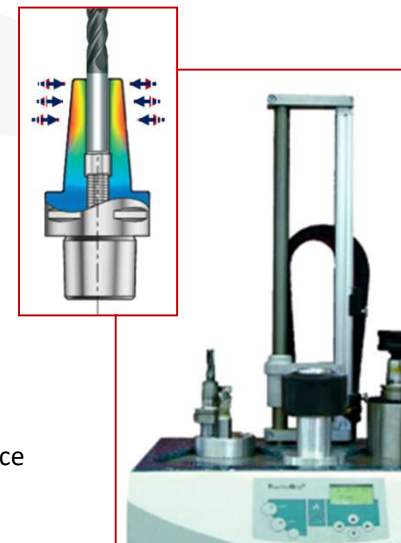
描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
液压刀柄	3 - 20	•	•	•		•	•	•			•	•
	25 - 32		•	•			•	•			•	•

SC



Form AD/B
 $\nabla \leq 0,003$
 G6.3 15.000 min⁻¹

- Requires a shrink-fit device
- For h6 shanks
- For finishing
- High torque transmission
- High levels of accuracy
- Extremely rigid



5768 介绍

规格	100	125	160	200	250	315	400	500	630	800	1000
最大直径 (mm)	100	125	160	200	250	315	400	500	630	800	1000
最大长度 (mm)	100	125	160	200	250	315	400	500	630	800	1000
最大重量 (kg)	10	15	25	40	60	100	150	250	400	600	1000

5768 介绍

HC 液压刀柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
液压刀柄	6 – 20	•	•	•		•	•	•			•	•
	25 – 32		•	•			•	•			•	•
	40			•								

HC



HC-C



HC-C-S

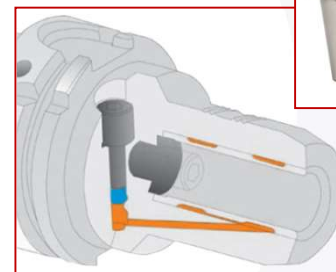
Sealed for tough coolant



Torque

Clamping- $\varnothing$ mm	Moment (Nm)
6	10
8	20
10	40
12	50
14	80
16	100
18	150
20	200
25	250
32	400
40	550

- Easy handling
- For h6 shanks
- **For finishing and super finishing**
- Medium-high torque transmission
- High run-out accuracy
- Dampen vibrations in low speed range



HKS 强力刀柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
High-performance Chuck	3 – 20		•	•			•	•			•	•
	25 – 32		•	•			•	•			•	•

HKS



Form AD/B
 $\nabla \leq 0,003$
 G6,3
 15.000 min⁻¹



HKS-C

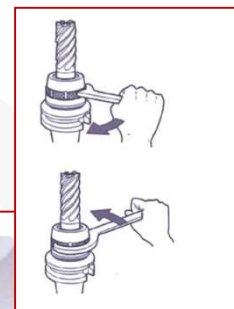
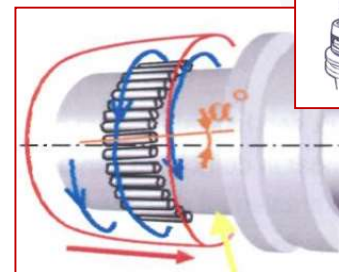


HKS-C-S

Sealed for tough coolant

Size	20mm	25mm
Clamping torque	50-70 Nm	80-100 Nm
Clamping force	780 Nm	2000 Nm

- Easy handling
- For h6 shanks
- **For operations involving high MRR**
- High retention force
- High torque transmission
- Highest stability
- Accurate
- Flexible



5768 介绍

规格	10	16	20	25	32	40	50	63	80	100
最大夹持直径 (mm)	10	16	20	25	32	40	50	63	80	100
最大夹持长度 (mm)	100	100	100	100	100	100	100	100	100	100
最大夹持力 (kN)	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5
最大夹持扭矩 (Nm)	10	15	20	25	30	35	40	45	50	55

ER COLLET CHUCK

Tooling systems

ER Collet chuck are not the first choice to recommend for holding indexable milling cutters. However if a customer wants to, we should recommend to use at least high precision collets (ER-C-P or ER-C-SC4)!

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A		DIN 228-1					
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100	MT2	MT3	MT4	MT5	MT6	
ER Collet Chuck	1 – 10 (ER16)	●	●	●		●	●	●			●		●					
	2 – 16 (ER25)	●	●	●		●	●	●	●		●	●	●	●	●			
	2 – 20 (ER32)	●	●	●		●	●	●	●	●	●	●		●	●			
	3 – 26 (ER40)	●	●	●		●	●	●	●	●	●	●				●		

CC-ER



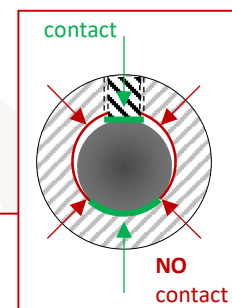
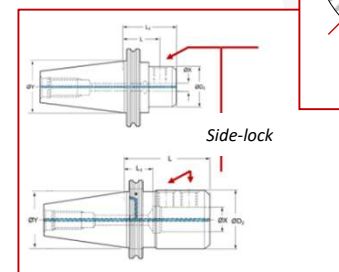
- Medium torque transmission
- Low to medium run-out accuracy
- Assembly requires some instruction (read instructions) 
- Moderate repeatability
- Dampen vibration
- Not suited for high speeds
- Flexible (broader range of collets than OZ system)
- Clean carefully
- Rotate the tool to achieve best run-out



侧固柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
侧固柄	6 - 20	●	●	●		●	●	●	●	●	●	●
	25 - 40		●	●			●	●	●	●	●	●
侧固柄 with peripheral coolant	6 - 20		●	●			●	●			●	●
	25 - 40		●	●			●	●			●	●



W



Torques for DIN 1835

Bore	Screw	Torque
Ø 6 mm	M 6 SW 3	10 Nm
Ø 8 mm	M 8 SW 4	10 Nm
Ø 10 mm	M 10 SW 5	16 Nm
Ø 12 mm	M 12 SW 6	28 Nm
Ø 14 mm	M 12 SW 6	28 Nm
Ø 16 mm	M 14 SW 6	42 Nm
Ø 18 mm	M 14 SW 6	42 Nm
Ø 20 mm	M 16 SW 8	50 Nm
Ø 25 mm	M 18 × 2 SW 10	60 Nm
Ø 32 mm	M 20 × 2 SW 10	72 Nm
Ø 40 mm	M 20 × 2 SW 10	72 Nm
Ø 50 mm	M 24 × 2 SW 12	90 Nm



W-C

With peripheral coolant channels
(for tools without through coolant)

- High torque transmission
- Easy handling
- Low cost
- Poor balance and radial run-out
- Every shank size needs one chuck
- Not suited for high speeds
- Heavy roughing- semi finishing



HKS 强力刀柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
High-performance Chuck	3 – 20		•	•			•	•			•	•
	25 – 32		•	•			•	•			•	•

HKS



Form AD/B
 $\nabla \leq 0,003$
 G6,3
 15.000 min⁻¹



HKS-C

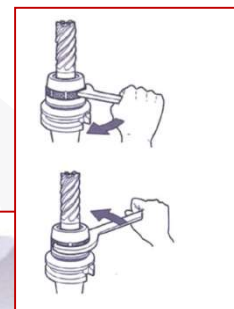
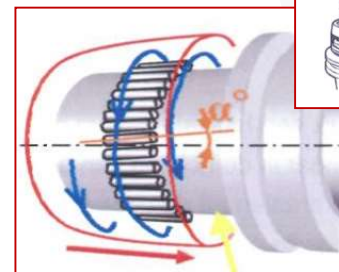


HKS-C-S

Sealed for tough coolant

Size	20mm	25mm
Clamping torque	50-70 Nm	80-100 Nm
Clamping force	780 Nm	2000 Nm

- Easy handling
- For h6 shanks
- **For operations involving high MRR**
- High retention force
- High torque transmission
- Highest stability
- Accurate
- Flexible



HC 液压刀柄

Tooling systems

描述	Diameter range	DIN 69871				JIS B 6339			DIN 2080		DIN 69893-A	
		SK30	SK40	SK50	SK60	BT30	BT40	BT50	SK40	SK50	HSK63	HSK100
液压刀柄	6 – 20	•	•	•		•	•	•			•	•
	25 – 32		•	•			•	•			•	•
	40			•								

HC



Form AD/B
 $\nabla \leq 0,003$
 G6.3
 15.000 min⁻¹



HC-C-S

Sealed for tough coolant



Torque

Clamping- $\varnothing$ mm	Moment (Nm)
6	10
8	20
10	40
12	50
14	80
16	100
18	150
20	200
25	250
32	400
40	550

- Easy handling
- For h6 shanks
- **For finishing and super finishing**
- Medium-high torque transmission
- High run-out accuracy
- Dampen vibrations in low speed range

