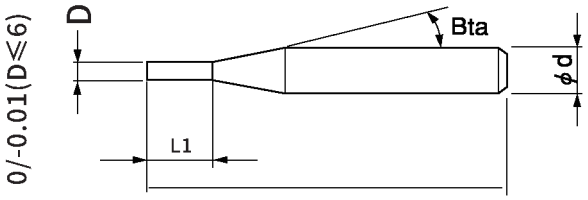
MG | HB Coating | 43 | SD 0-0.003

Highly recommend★ ◎ ○
/Recommend/Suggest

DIE STEEL	Grade
Carbon steels (S45C/S55C)	◎
Alloy steels (SK/SCM/SUS)	◎
Prehardened steels (NAK/HPM)	◎
Hardened steels (~55/~60/~70HRC)	○
SPECIAL MATERIAL	
Aluminum alloys	○
Graphite	
Copper	◎
Plastics	
Carbon fiber	
Titanium alloys	○
Heat resistant alloys	
Cemented carbide	
Hard brittle (non-metallic)material	

Specialty

*Special U-shaped chip evacuation groove design;
*Tungsten steel with ultra-fine particles;
*New HB coating with low friction for HRC28~HRC52 mold steel, long life and excellent surface finishing.

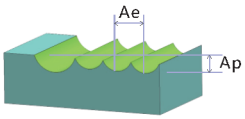


Total 15 models

Unit (mm)

Model Number	D Outside Diameter	L1 Length Of Cut	L2 Effective Length	BTa Shank Taper Angle	L Overall Length	T Number Of Flutes	d Shank Diameter	In Stock
SHBS2-0020040	0.2	0.4	–	12°	50	2	4	○
SHBS2-0030060	0.3	0.6	–	12°	50	2	4	○
SHBS2-0040080	0.4	0.8	–	12°	50	2	4	○
SHBS2-0050100	0.5	1	–	12°	50	2	4	○
SHBS2-0060150	0.6	1.5	–	12°	50	2	4	○
SHBS2-0070180	0.7	1.8	–	12°	50	2	4	○
SHBS2-0080200	0.8	2	–	12°	50	2	4	○
SHBS2-0100300	1.0	3	–	12°	50	2	4	○
SHBS2-0150400	1.5	4	–	12°	50	2	4	○
SHBS2-0200500	2.0	5	–	12°	50	2	4	○
SHBS2-0250650	2.5	6.5	–	12°	50	2	4	○
SHBS2-0300800-4	3	8	–	12°	50	2	4	○
SHBS2-0401000-4	4	10	–	–	50	2	4	○
SHBS2-0401000-6	4	10	–	12°	60	2	6	○
SHBS2-0601500	6	15	–	-	60	2	6	○

*New size added from this series. ○ Stocked items.



Side Milling

Work Material	Oxygen-free Copper Red Copper		HRC30-45 carbon steel and prehardened steel		HRC45-55 hardened steel	
(mm) Diameter	(min-1) Speed	(mm/min) Feed	(min-1) Speed	(mm/min) Feed	(min-1) Speed	(mm/min) Feed
D1.0	10000	150	10000	100	8000	60
D1.5	8000	180	8000	120	6000	60
D2.0	8000	200	7000	120	5000	60
D2.5	6000	300	6000	120	4500	60
D3	7000	300	5000	150	4000	80
D4	7000	300	4000	150	4000	100
D4	7000	300	4000	150	4000	100
D6	7000	300	3500	250	3000	200

2 Flutes

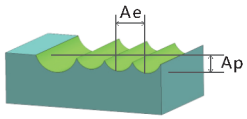
Square

Milling Amount for Side Milling(mm)

Length of Cut / Work Material	2.5D (Length of Cut=Diameter*2.5)	4D (Length of Cut=Diameter*4)
45HRC以下 Below 45HRC	ae=0.07D ap=2D	ae=0.07D ap=2D
45HRC以上 Above 45HRC	ae=0.03D ap=1.5D	ae=0.03D ap=1.5D

D: Diameter (mm)
ap: Axial Depth (mm)
ae: Radial Depth (mm)

Note:
*Decrease both spindle speed and feed rate proportionally when the milling parameters exceed the machine's maximum spindle speed;
*Recommend oil coolant for Stainless Steels and Heat Resistance Alloys;
*Recommend using a non-contact measuring device to avoid damaging the precision tip point;
*Decrease both spindle speed and feed rate proportionally in case of chattering.



Contour Milling

Work Material	Oxygen-free Copper Red Copper		HRC30-45 carbon steel and prehardened steel		HRC45-55 hardened steel	
(mm) Diameter	(min-1) Speed	(mm/min) Feed	(min-1) Speed	(mm/min) Feed	(min-1) Speed	(mm/min) Feed
D0.2	30000	200	30000	120	30000	120
D0.3	30000	220	30000	150	30000	150
D0.3	30000	300	30000	200	30000	200
D0.3	26000	300	26000	200	26000	200
D0.3	24000	500	24000	300	24000	300
D0.3	20000	500	20000	500	20000	500
D0.3	16000	800	16000	800	16000	800
D0.3	13000	1000	13000	1000	13000	1000
D0.3	13000	1200	13000	1200	13000	1200
D0.3	12000	1500	12000	1500	12000	1500
D0.3	12000	1500	12000	1500	12000	1500
D0.3	11000	1800	11000	1800	11000	1800
D0.3	10000	2200	10000	2200	10000	2200
D0.3	10000	2200	10000	2200	10000	2200
D0.3	9000	2500	9000	2500	9000	2500

Note:
*Decrease both spindle speed and feed rate proportionally when the milling parameters exceed the machine's maximum spindle speed;
*Recommend oil coolant for Stainless Steels and Heat Resistance Alloys;
*Recommend using a non-contact measuring device to avoid damaging the precision tip point;
*Decrease both spindle speed and feed rate proportionally in case of chattering.