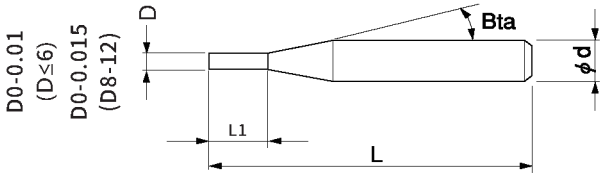
MG | DLC Coating | 30 | SD 0-0.005

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	
Tungsten copper	★
Carbon fiber	
Titanium alloys	
Heat resistant alloys	
Cemented carbide	
Hard brittle (non-metallic)material	

Specialty

* Ultra-fine micro-particles tungsten steel raw materials developed for tungsten copper;
* The special flute design and coating achieve high surface finish and ultra-long life of tungsten copper material.



4 Flutes

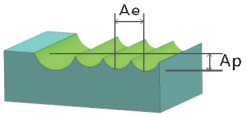
Square

Total 16 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
CGS4-0100300	1	3	–	15°	50	4	4	○
CGS4-0150450	1.5	4.5	–	15°	50	4	4	○
CGS4-0200600	2	6	–	15°	50	4	4	○
CGS4-0300900-3	3	9	–	–	60	4	3	○
CGS4-0300900	3	9	–	15°	50	4	4	○
CGS4-0301200	3	12	–	15°	75	4	4	○
CGS4-0401200	4	12	–	15°	50	4	4	○
CGS4-0401600	4	16	–	15°	75	4	4	○
CGS4-0601600	6	16	–	-	50	4	6	○
CGS4-0601800	6	18	–	-	75	4	6	○
CGS4-0802000	8	20	–	-	60	4	8	○
CGS4-0802500	8	25	–	-	75	4	8	○
CGS4-0803000	8	30	–	-	100	4	8	○
CGS4-1002500	10	25	–	-	75	4	10	○
CGS4-1003000	10	30	–	-	100	4	10	○
CGS4-1204000	12	40	–	-	100	4	12	○

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



Side Milling

Work Material	Tungsten Copper	
(mm) Diameter	(min-1) Speed	(mm/min) Feed
D1.0	8000	150
D1.0	6000	150
D2.0	5000	200
D3.0	5000	200
D3.0	5000	300
D3.0	4000	200
D4.0	5000	400
D4.0	5000	300
D6.0	4000	400
D6.0	4000	300
D8.0	3000	400
D8.0	3000	300
D10.0	2000	300
D10.0	2000	300
D12.0	1800	300

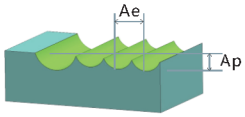
4 Flutes

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 45HRC or below	ae=0.07D ap=2D	ae=0.07D ap=2D
45HRC以上 45HRC or above	ae=0.03D ap=1.5D	ae=0.03D ap=1.5D

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



Contour Milling

Work Material	Tungsten Copper	
(mm) Diameter	(min-1) Speed	(mm/min) Feed
D1.0	13000	1000
D1.5	13000	1200
D2.0	12000	1500
D3.0	12000	1800
D3.0	12000	1800
D3.0	10000	1800
D4.0	10000	2200
D4.0	9000	2200
D6.0	9000	2500
D6.0	8000	2500
D8.0	8000	2500
D8.0	7000	2500
D10.0	7000	2800
D10.0	7000	2800
D12.0	6000	2500

Note:
*Decrease both spindle speed and feed rate proportionally when the milling parameters exceed the machine's maximum spindle speed;
*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.