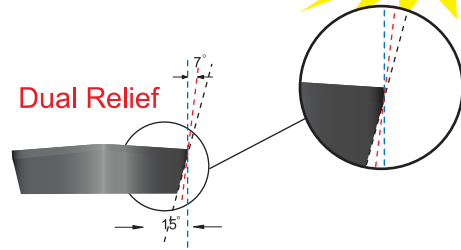


Features:

- Submicron carbide inserts are fully ground, Patented design.
- Special design milling cutter and ground inserts for semi-finishing 3D surface milling for mould industry.
- Series C is developed for replacement of the other milling cutters with ramp feed.



Patented Dual Relief Angle Insert!

- Higher feed rate!
- Higher cutting resistance!

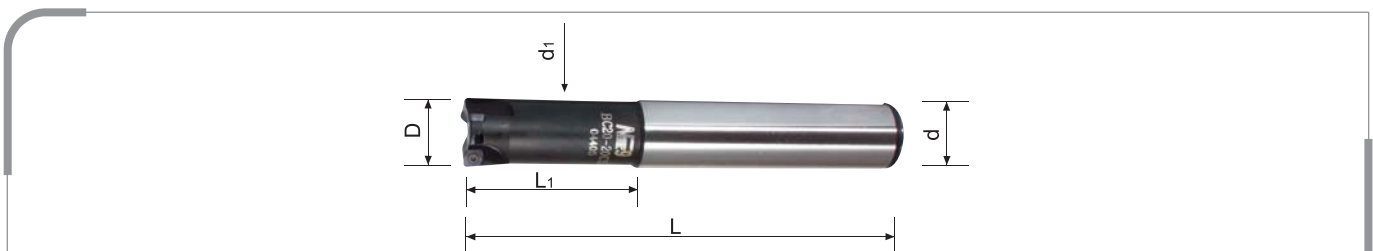


Modular Milling Head (Screw-Fit Type)



Oder No.	Part No.	D	L	M	No. of teeth	Insert	Screw Torque	key
99802-M08-12C5	M08-12C5	12	25	M8x1.25	2	C9MT05T105	NS-20045 0.8 Nm	NK-T6
99802-M08-16C5	M08-16C5	16	25	M8x1.25	3	C9MT05T110		
99802-M10-20C5	M10-20C5	20	30	M10x1.5	3			
99802-M12-25C5	M12-25C5	25	35	M12x1.75	4			

Cylindrical Shank Milling Cutter



Oder No.	Part No.	D	L	L1	d	d1	No. of teeth	Insert	Screw Torque	key
99802-BC12-12C5	BC12-12C5	12	100	30	12	10.5	2	C9MT05T105 C9MT05T110	NS-20045 0.8 Nm	NK-T6
99802-BC16-16C5	BC16-16C5	16	120	40	16	14.5	3			
99802-BC20-20C5	BC20-20C5	20	130	50	20	18	3			
99802-BC25-25C5	BC25-25C5	25	150	60	25	23	4			

See Page: P12 for insert data.



Oder No.	Part No.	$D_{-0.005}^{-0.015}$	L	M	l_1	d
99800-11.5M8-150	BC11.5-M8x150	11.5	150	M8x1.25	-	8.5
99800-15.5M8-150	BC15.5-M8x150	15.5	150	M8x1.25	-	8.5
99800-19M10-200	BC19-M10x200	19	200	M10x1.5	12.8	10.5
99800-24M12-200	BC24-M12x200	24	200	M12x1.75	15.8	12.5
99800-24M12-300	BC24-M12x300	24	300	M12x1.75	15.8	12.5

Collet



Oder No.	Part No.	D	d
99800-C32-11.5	C32-11.5	11.5	32
99800-C32-15.5	C32-15.5	15.5	32
99800-C32-19	C32-19	19	32
99800-C32-24	C32-24	24	32

R Series Insert

Insert		Dimensions	
		lc	S
R9MT0803F-NC30		8	3.17
R9MT0803-NC30		8	3.17

C Series Insert

Insert		Dimensions		
		L	S	Re
C9MT05T105-NC30		5	2.0	0.5
C9MT05T110-NC30		5	2.0	1.0

R Series Insert

ISO	Material	R9MT0803F-NC30 (TiAlN Coated, K10F Positive angle)	R9MT0803-NC30 (TiAlN Coated, K10F)	Cutting Depth Ap /mm
P	Unalloyed	-	Vc = 150~250 fz = 0.4~1.0	0.4~1.0
	Low-alloy <=5% C	-	Vc = 120~180 fz = 0.4~1.0	0.4~1.0
	High-alloy >5% C	Vc = 150~250 fz = 0.3~0.8	Vc = 100~150 fz = 0.4~0.6	0.4~0.6
	Casting Steel	Vc = 120~180 fz = 0.3~0.6	Vc = 100~150 fz = 0.4~0.6	0.3~0.6
M	Stainless Steel		Vc = 100~140 fz = 0.3~0.6	0.3~0.5
	Hard Steel HRC52	Vc = 60~120 fz = 0.2~0.4	-	0.3~0.4
K	Malleable Cast Iron	Vc = 120~180 fz = 0.3~0.8	-	0.4~0.6
	Grey Cast Iron	Vc = 120~180 fz = 0.3~0.8	-	0.4~0.6
	Al.Al.alloy	-	Vc = 200~500 fz = 0.4~1.0	0.4~0.6

$$S = \frac{V_c \times 1000}{\pi \times D} \text{ r.p.m. } F = f_z \times S \times n \text{ mm/min.}$$

S: Spindle Speed (rpm) Vc: Cutting Speed (m/min) F: Feed Rate (mm/min) fz: Feed per Tooth D: Drill Dia. n: No. of Flute

C Series Insert

ISO	Material	C9MT05T105-NC30 / C9MT05T110-NC30 (TiAlN Coated, K10F)	Cutting Depth Ap /mm
P	Unalloyed	Vc = 150~300 fz = 0.2~0.5	0.2~0.5
	Low-alloy <=5% C	Vc = 150~300 fz = 0.2~0.5	0.2~0.5
	High-alloy >5% C	Vc = 120~200 fz = 0.2~0.4	0.2~0.4
	Casting Steel	Vc = 120~200 fz = 0.2~0.4	0.2~0.4
M	Hard Steel HRC52	Vc = 100~150 fz = 0.1~0.3	0.1~0.3
K	Al.Al.alloy	Vc = 200~500 fz = 0.2~0.5	0.2~0.5

$$S = \frac{V_c \times 1000}{\pi \times D} \text{ r.p.m. } F = f_z \times S \times n \text{ mm/min.}$$

S: Spindle Speed (rpm) Vc: Cutting Speed (m/min) F: Feed Rate (mm/min) fz: Feed per Tooth D: Drill Dia. n: No. of Flute