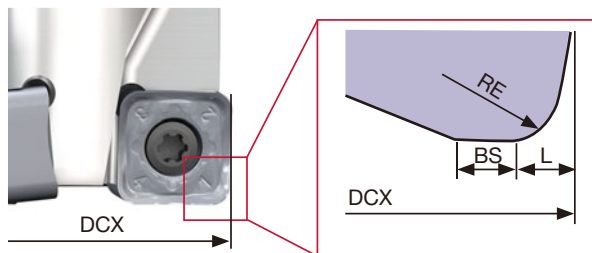


STANDARD CUTTING CONDITIONS

ISO	Workpiece materials	Hardness HB	Selection criteria	Recommended grade	Chip-breaker	Cutting speed Vc (m/min)	Feed per tooth fz (mm/t)
P	Low carbon steels (S15C / C15E4 / C15E, etc.)	- 200 HB	First choice	AH3135	MJ	100 - 250	0.06 - 0.3
		- 200 HB	Priority on wear resistance	T3225	MJ	200 - 350	0.06 - 0.25
	High carbon steels, alloyed steels (S55C / C55, SCM440 / 42CrMo4, etc.)	- 300 HB	First choice	AH3135	MJ	100 - 250	0.06 - 0.3
		- 300 HB	Priority on wear resistance	T3225	MJ	180 - 300	0.06 - 0.25
	Prehardened steel (NAK80, PX5, etc.)	30 - 40 HRC	First choice	AH3135	MJ	100 - 200	0.06 - 0.25
		30 - 40 HRC	Priority on wear resistance	T3225	MJ	150 - 250	0.06 - 0.2
M	Austenitic stainless steel (SUS304 / X5CrNi18-9, SUS316 / X5CrNiMo17-12-3, etc.)	- 200 HB	First choice	AH3135	MJ	100 - 200	0.06 - 0.25
		- 200 HB	Priority on wear resistance	T3225	MJ	100 - 250	0.06 - 0.2
	Stainless cast steel (SCH20XNb / 1.4849 etc.)	-	First choice	T3225	MJ	60 - 120	0.06 - 0.2
		-	Priority on fracture resistance	AH3135	MJ	60 - 120	0.06 - 0.2
K	Grey cast iron (FC250 / 250 / GG25, etc.)	150 - 250 HB	First choice	T1215	MJ	100 - 350	0.06 - 0.3
		150 - 250 HB	Priority on fracture resistance	AH120	MJ	100 - 250	0.06 - 0.3
	Ductile cast iron (FCD600 / 600-3 / GGG60, etc.)	150 - 250 HB	First choice	T1215	MJ	100 - 350	0.06 - 0.25
		150 - 250 HB	Priority on fracture resistance	AH120	MJ	80 - 200	0.06 - 0.3
S	Titanium alloy (Ti-6Al-4V, etc.)	- 40 HRC	First choice	AH3135	MJ	30 - 60	0.06 - 0.2
	Heat resistant alloy (Inconel718, etc.)	- 40 HRC	First choice	AH120	MJ	10 - 40	0.04 - 0.16
H	Hardened steel (SKD61 / X40CrMoV5-1)	40 - 50 HRC	First choice	AH3135	MJ	80 - 130	0.04 - 0.16
	Hardened steel (SKD11 / X153CrMoV12, etc.)	50 - 60 HRC	First choice	AH120	MJ	50 - 70	0.02 - 0.08

Tool offset

To eliminate uncut amount in face milling operation, adjust the programming according to the offset (L) listed below.



Designation	RE	BS	L
SNMU120608HNEN-MM	0.8	1.4	1.3
SNMU120612EN-MM	1.2	-	1.7
SNMU120620EN-MM	2	-	2.5

The following table shows the amount left over cut (t) when the cutter is considered as a shoulder milling cutter.

Designation / ap (mm)	1	2	3	4	5	6	7	8	9	9.5
SNMU120608HNEN-MM	0.01	0.04	0.05	0.05	0.07	0.09	0.14	0.2	0.27	0.27
SNMU120612EN-MM	-	0	0	0.01	0.02	0.05	0.09	0.15	0.22	0.25
SNMU120620EN-MM	-	0	0	0	0.02	0.05	0.09	0.15	0.22	0.25