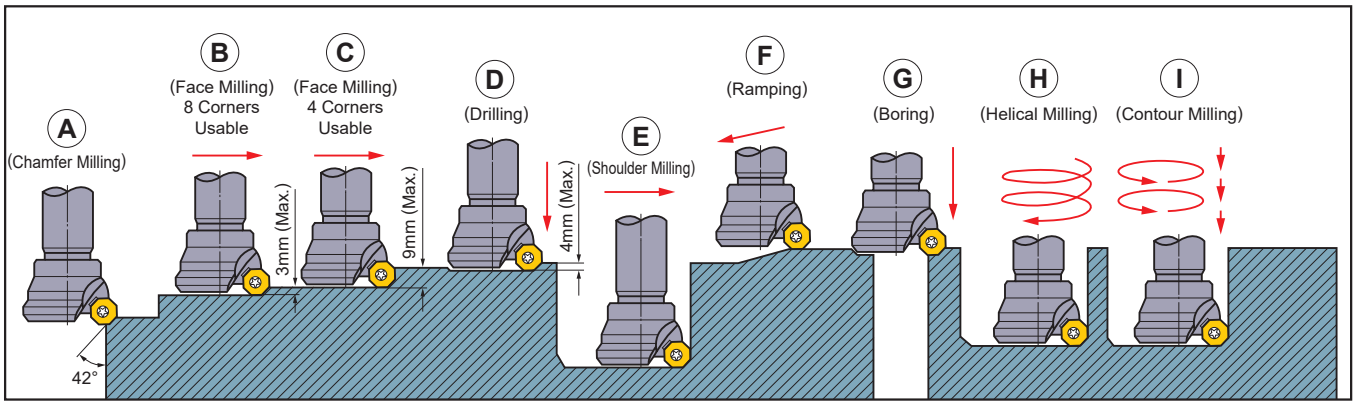
RECOMMENDED CUTTING CONDITIONS



This list of recommended cutting conditions is for cutters with diameter≤ϕ80. For cutters with diameter greater than ϕ80 increase cutting speed by around 10%.
Above sizes are for OEMX1705□□□□.

	Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Cutting Mode	Feed per Tooth (mm/t)
P	Mild Steel	≤180HB	**F7030**	240 (180—300)	A	0.2 (0.15—0.25)
					B	0.2 (0.15—0.25)
			VP15TF	180 (100—250)	C,E,F	0.2 (0.15—0.25)
					D,G,H,I	0.075 (0.05—0.1)
	Carbon Steel Alloy Steel	180—280HB	**F7030**	200 (140—240)	A	0.2 (0.15—0.25)
					B	0.2 (0.15—0.25)
			VP15TF	180 (100—250)	C,E,F	0.2 (0.15—0.25)
					D,G,H,I	0.075 (0.05—0.1)
		280—380HB	**F7030**	150 (100—170)	A	0.2 (0.15—0.25)
					B	0.2 (0.15—0.25)
			VP15TF	120 (80—160)	C,E,F	0.2 (0.15—0.25)
					D,G,H,I	0.075 (0.05—0.1)
	Pre-Hardened Steel	35—45HRC	**F7030**	130 (90—160)	A	0.15 (0.1—0.2)
					B	0.15 (0.1—0.2)
			VP15TF	120 (80—160)	C,E,F	0.1 (0.05—0.15)
					D,G,H,I	0.05 (0.025—0.075)
	High Alloy Steel	≤300HB	**F7030**	150 (100—170)	A	0.15 (0.1—0.2)
					B	0.15 (0.1—0.2)
			VP15TF	120 (80—160)	C,E,F	0.1 (0.05—0.15)
					D,G,H,I	0.05 (0.025—0.075)
M	Stainless Steel	≤270HB	**F7030**	200 (140—240)	A	0.15 (0.1—0.2)
					B	0.15 (0.1—0.2)
			VP15TF	150 (100—200)	C,E,F	0.1 (0.05—0.15)
					D,G,H,I	0.075 (0.05—0.1)

● Revolution (min^{-1})=(1000 x Cutting Speed)÷(3.14 x DC)
● Table Feed (mm/min)=Feed per Tooth x Number of Teeth x Cutter Revolution
Note 1) This list of recommended cutting conditions is for flank wear of 0.3mm in 30 min. cutting time.
Note 2) More than 50mm shank length should be clamped in the milling chuck.
Note 3) Use step cutting when driling (0.5 mm steps are recommended).
Note 4) If chatter occurs, adjust the cutting speed.
Note 5) When using round inserts, make sure that the flat portion of the flank surface is secure against the insert seat wall.

	Workpiece Material	Hardness	Grade	Cutting Speed (m/min)	Cutting Mode	Feed per Tooth (mm/t)
K	Gray Cast Iron	Tensile Strength ≤350MPa	**VP15TF**	160 (100—220)	A	0.3 (0.25—0.35)
					B	0.25 (0.2—0.3)
					C,E,F	0.15 (0.1—0.2)
					D,G,H,I	0.075 (0.05—0.1)
			MB730	1500 (1000—3000)	B (D.O.C 0.1—0.5mm)	0.15 (0.1—0.2)
	Ductile Cast Iron	Tensile Strength 360—500MPa	**VP15TF**	160 (100—220)	A	0.25 (0.2—0.3)
					B	0.2 (0.15—0.25)
					C,E,F	0.1 (0.05—0.15)
					D,G,H,I	0.05 (0.025—0.075)
	Ductile Cast Iron	Tensile Strength 500—800MPa	**VP15TF**	140 (90—190)	A	0.25 (0.2—0.3)
					B	0.2 (0.15—0.25)
					C,E,F	0.1 (0.05—0.15)
					D,G,H,I	0.05 (0.025—0.075)
H	Hardened Steel	45—60HRC	**VP15TF**	80 (50—100)	A	0.15 (0.1—0.2)
					B	0.15 (0.1—0.2)
					C,E,F	0.1 (0.05—0.12)
					D,G,H,I	0.05 (0.025—0.06)
			MB730	150 (100—200)	B (D.O.C 0.1—0.3mm)	0.15 (0.1—0.2)

● Revolution (min^{-1})=(1000 x Cutting Speed)÷(3.14 x DC)
● Table Feed (mm/min)=Feed per Tooth x Number of Teeth x Cutter Revolution
Note 1) This list of recommended cutting conditions is for flank wear of 0.3mm in 30 min. cutting time.
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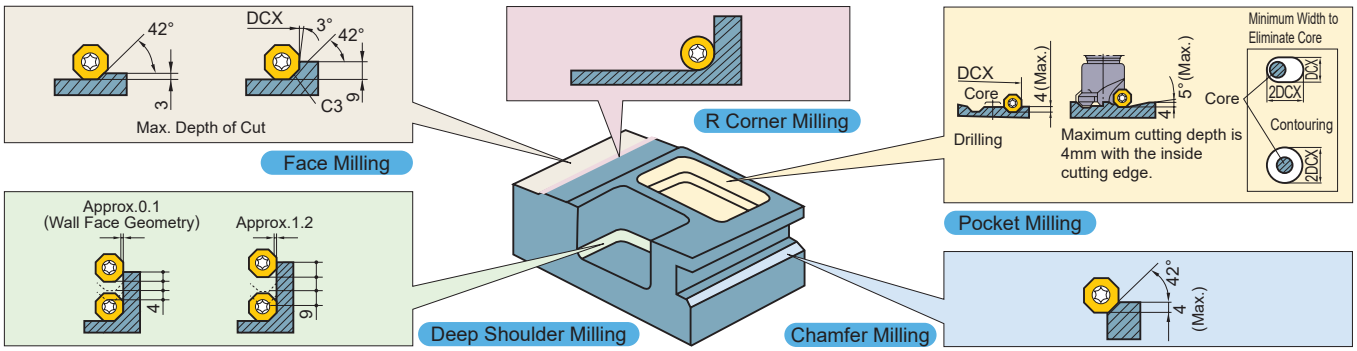
Note 4) If chatter occurs, adjust the cutting speed.
Note 5) When using round inserts, make sure that the flat portion of the flank surface is secure against the insert seat wall.

APPLICATION



Above sizes are for OEMX1705○○○○.