

RECOMMENDED CUTTING CONDITIONS

	Workpiece material	Characteristics	Grade	Cutting Speed vc (m/min)	Depth of Cut		Feed per Tooth fz (mm/t)	Cutting Mode
					ae (mm)	ap (mm)		
K	Gray Cast Irons	Tensile Strength ≤350MPa	MB4120	1000 (700—1300)	≤ 0.8 DC	≤ 0.5	0.07 (0.05—0.15)	Dry Cutting
N	Aluminium Alloys	Content Si < 5%	MD2030 MD220	2500 (2000—3000)	≤ 0.2 DC	≤ 3.0 (0.5—3.0)	0.08 (0.05—0.2)	Wet Cutting
					≤ 0.5 DC	≤ 2.5 (0.5—2.5)		
					≤ 0.8 DC	≤ 2.0 (0.5—2.0)		
		Content 5% ≤ Si ≤ 10%	MD2030 MD220	2500 (2000—3000)	≤ 0.2 DC	≤ 3.0 (0.5—3.0)	0.08 (0.05—0.2)	Wet Cutting
					≤ 0.5 DC	≤ 2.5 (0.5—2.5)		
					≤ 0.8 DC	≤ 2.0 (0.5—2.0)		
		Content 10% < Si < 15%	MD220 MD2030	600 (400—800)	≤ 0.2 DC	≤ 3.0 (0.5—3.0)	0.08 (0.05—0.2)	Wet Cutting
					≤ 0.5 DC	≤ 2.5 (0.5—2.5)		
					≤ 0.8 DC	≤ 2.0 (0.5—2.0)		
		Content Si ≥ 15%	MD220 MD2030	600 (400—800)	≤ 0.2 DC	≤ 3.0 (0.5—3.0)	0.08 (0.05—0.2)	Wet Cutting
					≤ 0.5 DC	≤ 2.5 (0.5—2.5)		
					≤ 0.8 DC	≤ 2.0 (0.5—2.0)		

Note 1) Please adjust the depth of cut (ap) depending on the width of cut (ae).

Note 2) When using the long edge insert, please select the conditions depending on depths of cut (ap) excluding the length of the gate.