

VOX400 (Extra fine pitch)

Work Material	Tensile Strength	Insert Grade	Cutting Speed (m/min)	φ63			φ80		
				Radial Depth of Cut ae (mm)	Depth of Cut ap (mm)	Feed per Tooth fz (mm/tooth)	Radial Depth of Cut ae (mm)	Depth of Cut ap (mm)	Feed per Tooth fz (mm/tooth)
K	Gray Cast Iron	MC5020	300(250—350)	≤D1	≤10	0.4(0.3—0.5)	≤D1	≤10	0.4(0.3—0.5)
			250(200—300)	≤D1	≤10	0.4(0.3—0.5)	≤D1	≤10	0.4(0.3—0.5)
		VP15TF	220(150—300)	≤D1	≤10	0.3(0.2—0.4)	≤D1	≤10	0.3(0.2—0.4)
			200(150—300)	≤D1	≤10	0.3(0.2—0.4)	≤D1	≤10	0.3(0.2—0.4)
	Ductile Cast Iron	MC5020	200(150—250)	≤0.6D1	≤10	0.3(0.2—0.4)	≤0.5D1	≤10	0.3(0.2—0.4)
			170(150—200)	≤0.6D1	≤10	0.3(0.2—0.4)	≤0.5D1	≤10	0.3(0.2—0.4)
		MC5020	170(150—200)	≤0.6D1	≤10	0.2(0.1—0.3)	≤0.5D1	≤10	0.2(0.1—0.3)
			150(100—200)	≤0.6D1	≤10	0.2(0.1—0.3)	≤0.5D1	≤10	0.2(0.1—0.3)

Work Material	Tensile Strength	Insert Grade	Cutting Speed (m/min)	φ100			φ125		
				Radial Depth of Cut ae (mm)	Depth of Cut ap (mm)	Feed per Tooth fz (mm/tooth)	Radial Depth of Cut ae (mm)	Depth of Cut ap (mm)	Feed per Tooth fz (mm/tooth)
K	Gray Cast Iron	MC5020	300(250—350)	≤D1	≤10	0.4(0.3—0.5)	≤D1	≤10	0.4(0.3—0.5)
			250(200—300)	≤D1	≤10	0.4(0.3—0.5)	≤D1	≤10	0.4(0.3—0.5)
		VP15TF	220(150—300)	≤D1	≤10	0.3(0.2—0.4)	≤D1	≤10	0.3(0.2—0.4)
			200(150—300)	≤D1	≤10	0.3(0.2—0.4)	≤D1	≤10	0.3(0.2—0.4)
	Ductile Cast Iron	MC5020	200(150—250)	≤0.4D1	≤10	0.3(0.2—0.4)	≤0.3D1	≤10	0.3(0.2—0.4)
			170(150—200)	≤0.4D1	≤10	0.3(0.2—0.4)	≤0.3D1	≤10	0.3(0.2—0.4)
		MC5020	170(150—200)	≤0.4D1	≤10	0.2(0.1—0.3)	≤0.3D1	≤10	0.2(0.1—0.3)
			150(100—200)	≤0.4D1	≤10	0.2(0.1—0.3)	≤0.3D1	≤10	0.2(0.1—0.3)

Work Material	Tensile Strength	Insert Grade	Cutting Speed (m/min)	φ160			φ200—φ250		
				Radial Depth of Cut ae (mm)	Depth of Cut ap (mm)	Feed per Tooth fz (mm/tooth)	Radial Depth of Cut ae (mm)	Depth of Cut ap (mm)	Feed per Tooth fz (mm/tooth)
K	Gray Cast Iron	MC5020	300(250—350)	≤D1	≤10	0.4(0.3—0.5)	≤D1	≤10	0.4(0.3—0.5)
			250(200—300)	≤D1	≤10	0.4(0.3—0.5)	≤D1	≤10	0.4(0.3—0.5)
		VP15TF	220(150—300)	≤D1	≤10	0.3(0.2—0.4)	≤D1	≤10	0.3(0.2—0.4)
			200(150—300)	≤D1	≤10	0.3(0.2—0.4)	≤D1	≤10	0.3(0.2—0.4)
	Ductile Cast Iron	MC5020	200(150—250)	≤0.25D1	≤10	0.3(0.2—0.4)	≤0.15D1	≤10	0.3(0.2—0.4)
			170(150—200)	≤0.25D1	≤10	0.3(0.2—0.4)	≤0.15D1	≤10	0.3(0.2—0.4)
		MC5020	170(150—200)	≤0.25D1	≤10	0.2(0.1—0.3)	≤0.15D1	≤10	0.2(0.1—0.3)
			150(100—200)	≤0.25D1	≤10	0.2(0.1—0.3)	≤0.15D1	≤10	0.2(0.1—0.3)

(Note 1) D1 is cutter diameter.

(Note 2) When using wiper insert, please reduce the feed per tooth to half the normal rate.

Usable cutting edge width of wiper inserts

The width of the wiper insert itself is 5.5mm, however the actual functioning cutting edge width after installation to the body is 4.5mm, as shown in the diagram.

With one wiper insert, it is possible to machine up to $fr=4mm$ feed per revolution. When exceeding $fr=4mm$, use two or more wiper inserts. Note that there is a possibility to exceed $fr=4mm$ when using a holder with more than 24 inserts.

