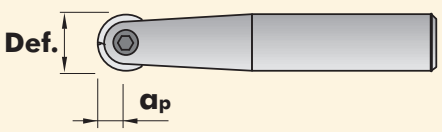
Recommended cutting conditions

Material	m/min Cutting speed	mm/tooth Feed rate	⌀8		⌀10		⌀12			
			min^{-1}	mm/min	min^{-1}	mm/min	min^{-1}	mm/min		
Carbon Steels Alloy Steels (30 HRC)	100-200	0,2-0,3	6370	2550	5090	2040	4240	1700		
			Vc=160m/min fz=0,2mm/tooth ap=0,025D ae=0,1D							
Carbon Steels Alloy Steels (30-40 HRC)	80-150	0,2-0,3	4770	1910	3820	1530	3180	1270		
			Vc=120m/min fz=0,2mm/tooth ap=0,025D ae=0,1D							
Die Tool Steels Pre-Harden Steels (30-40 HRC)	70-100	0,1-0,15	3180	640	2550	510	2120	420		
			Vc=80m/min fz=0,1mm/tooth ap=0,025D ae=0,1D							
Hardened Steels (55-65 HRC)	200-250	0,2-0,4	9150	3660	7320	2930	6100	2440		
			Vc=230m/min fz=0,2mm/tooth ap=0,01D ae=0,02D							
Cast Iron	100-200	0,3-0,4	6730	3820	5090	3050	4240	2550		
			Vc=160m/min fz=0,3mm/tooth ap=0,025D ae=0,1D							

Material	m/min Cutting speed	mm/tooth Feed rate	⌀16		⌀20		⌀25		⌀30(32)	
			min^{-1}	mm/min	min^{-1}	mm/min	min^{-1}	mm/min	min^{-1}	mm/min
Carbon Steels Alloy Steels (30 HRC)	100-200	0,2-0,3	2400	1600	2550	1300	2050	1030	1700	850
			Vc=160m/min fz=0,25mm/tooth ap=0,05D ae=0,1D							
Carbon Steels Alloy Steels (30-40 HRC)	80-150	0,2-0,3	1600	1200	1910	955	1530	765	1280	640
			Vc=120m/min fz=0,25mm/tooth ap=0,05D ae=0,1D							
Die Tool Steels Pre-Harden Steels (30-40 HRC)	70-100	0,1-0,15	3200	385	1280	310	1020	245	850	205
			Vc=80m/min fz=0,12mm/tooth ap=0,05D ae=0,1D							
Hardened Steels (55-65 HRC)	200-250	0,2-0,4	4575	2740	3660	2200	2930	1760	2440	1460
			Vc=230m/min fz=0,3mm/tooth ap=0,01D ae=0,02D							
Cast Iron	100-200	0,3-0,4	3200	2240	2550	1790	2050	1440	1700	1190
			Vc=160m/min fz=0,35mm/tooth ap=0,05D ae=0,1D							

Note
- According to the machining situation, refer to the table above to determine the cutting conditions.
- Be sure to practice safety instructions and precaucions such as wearing glasses and safety shoes, and placing safety covers when you use this tool. Because this tool can be broken during machining so failure to follow these instructions may cause personal injury.
- Never attempt to modify the carbide shank holder. Use the value for the depth of cut (ap) when the carbide shank holder is used.
  Mill diameters D=8~12mm:ap<=0,2mm.
  Mill diameters D=16~32mm:ap<=0,3mm.

$$n = \frac{Vc \cdot 1000}{\pi \cdot Def.} \text{ (Rev/min)}$$



N = Spindle speed (Rev/min.)

Vc = Cutting speed

Def. = Effective cutting diameter

a_p = Max. Depth of cut (mm)