

Shape machining (roughing) TEFF**N4...

ISO	Workpiece material	Vc (m/min)	fz (mm/t)		
			ø6 - ø8	ø10 - ø12	ø16 - ø20
P	Carbon steel	140 - 180	0.25 - 0.48	0.35 - 0.67	0.52 - 0.9
	Alloy steel (30-40HRC)	120 - 130	0.2 - 0.28	0.3 - 0.38	0.43 - 0.57
M	Stainless steel	120	0.25 - 0.3	0.35 - 0.43	0.52 - 0.6
K	Cast iron	160 - 180	0.3 - 0.45	0.45 - 0.6	0.6 - 0.8
H	Hardened steel (-49HRC)	100	0.16 - 0.2	0.25 - 0.33	0.4 - 0.48
	Hardened steel (50-60HRC)	60 - 80	0.1 - 0.16	0.16 - 0.3	0.2 - 0.45

- Please be aware that the maximum depth of cut (apmax) and the feed (fz) will depend on each tool diameter.
- While air blow is recommended, water-soluble coolant will be good for stainless steel, titanium alloy, and heat-resistant alloy.
- When chattering occurs with low rigid machines or settings, reduce cutting speed and feed at an equal rate.
- When chattering occurs with long tool overhang, reduce cutting speed and feed by 20 to 40%.

Shape machining (roughing) TCFF**A3...

ISO	Workpiece material	Vc (m/min)	fz (mm/t)		
			ø6 - ø8	ø10 - ø12	ø16 - ø20
K	Cast iron	250 - 1000	0.1 - 0.15	0.17 - 0.19	0.23 - 0.25
	Nodular cast iron	250 - 1000	0.1 - 0.15	0.17 - 0.19	0.23 - 0.25
	Malleable cast iron	250 - 1000	0.1 - 0.15	0.17 - 0.19	0.23 - 0.25
N	Non-ferrous metal / Graphite	500 - 1500	0.1 - 0.15	0.17 - 0.19	0.23 - 0.25
S	Nickel based alloy	250 - 1000	0.1 - 0.13	0.15 - 0.18	0.20 - 0.22

*Dry cutting at the cutting speed more than 250m/min is recommended for machining nickel based alloy.