

Speed & Feed

6/26/18 1:30 PM

Medium / fine



ISO	Werkstoff / Material / Materiale	Mittlere Bearbeitung Medium machining Media asportazione			Schrupp-Bearbeitung Rough machining Sgrossatura		
		v_c [m/min]	f_z [mm]	a_p [mm]	v_c [m/min]	f_z [mm]	a_p [mm]
P	Stahl/Steel/Acciaio	150-350	0,1-0,25	1-3	60-150	0,1-0,4	3-5
M	Rostfreier Stahl/Stainless steel/Acciaio inossidabile	130-240	0,1-0,25	1-3	60-150	0,1-0,4	3-5
K	Guss/Cast iron/Ghisa	150-400	0,1-0,25	1-3	150-350	0,1-0,4	3-5
N	NE-Metalle/Non ferrous materials/Materiali non ferrosi	< 2000	0,1-0,15	1-3	< 2000	0,1-0,2	3-5
S	Hochwarmfest/High temperature resistant alloys/Leghe resistenti al calore	25-75	0,1-0,25	1-3	25-75	0,1-0,25	3-5

Die Tabellenwerte sind Richtwerte. Es kann notwendig sein, die Werte den jeweiligen Bearbeitungsumständen anzupassen.

The data given is only approximate values. It can be necessary to adjust this data to the individual machining operation.

$$n = \frac{v_c \times 1000}{D \times \pi} = \frac{600 \times 1000}{50 \times \pi} = 3821 \text{ rpm} \leftarrow \text{speed}$$

v_c [m/min] → 600
 D [mm] → 50
 π → 3.14
 n [rpm] → 3821

Feed:

$$v_f = f_z \times Z_n \times n = 0.1 \times 6 \times 3821 = 2292.6 \text{ mm/min}$$

f_z [mm] → 0.1
 Z_n (number of teeth) → 6
 n [rev/min] → 3821
 v_f [mm/min] → 2292.6