

CONDIÇÕES DE CORTE RECOMENDADAS

Material	Método da Usinagem	Quebra-cavacos	Recomendação	Classe	Velocidade de Corte (m/min)	l/d ≤ 3 (Haste de aço) l/d ≤ 6 (Haste de metal duro)		l/d = 4-5 (Haste de aço) l/d = 7-8 (Haste de metal duro)		
						Avanço (mm/rot)	Prof. de Corte (mm)	Avanço (mm/rot)	Prof. de Corte (mm)	
P Aço Médio ≤180HB	Acabamento	FV	①	NX2525	170 (120-220)	0.10 (0.05-0.15)	-0.5	0.10 (0.05-0.15)	-0.5	
			②	NX3035	150 (100-200)	0.20 (0.10-0.25)	-1.0	0.15 (0.05-0.20)	-1.0	
	Leve	SV	①	NX2525	160 (110-210)	0.20 (0.10-0.25)	-1.0	0.15 (0.05-0.20)	-1.0	
			②	NX3035	140 (90-190)	0.25 (0.15-0.35)	-2.0	0.20 (0.15-0.25)	-1.5	
	Média	MV	①	NX2525	150 (100-200)	0.25 (0.15-0.35)	-2.0	0.20 (0.15-0.25)	-1.5	
			②	NX3035	140 (90-190)	0.10 (0.05-0.15)	-0.5	0.10 (0.05-0.15)	-0.5	
	Aço Carbono Aço Liga 180-350HB	Acabamento	FV	①	VP15TF	140 (90-190)	0.10 (0.05-0.15)	-0.5	0.10 (0.05-0.15)	-0.5
				②	NX2525	130 (80-180)	0.10 (0.05-0.15)	-0.5	0.10 (0.05-0.15)	-0.5
Leve		SV	①	UE6020	140 (90-190)	0.20 (0.10-0.25)	-1.0	0.15 (0.05-0.20)	-1.0	
			②	NX3035	110 (60-160)	0.20 (0.10-0.25)	-1.0	0.15 (0.05-0.20)	-1.0	
Média		MV	①	UE6020	130 (80-180)	0.25 (0.15-0.35)	-2.0	0.20 (0.15-0.25)	-1.5	
			②	NX3035	100 (60-150)	0.25 (0.15-0.35)	-2.0	0.20 (0.15-0.25)	-1.5	
M Aço Inoxidável ≤200HB	Acabamento	FV	①	VP15TF	150 (110-190)	0.10 (0.05-0.15)	-0.5	0.10 (0.05-0.15)	-0.5	
			②	US735	125 (85-165)	0.20 (0.10-0.25)	-1.0	0.15 (0.05-0.20)	-1.0	
	Leve	SV	①	VP15TF	130 (90-170)	0.20 (0.10-0.25)	-1.0	0.15 (0.05-0.20)	-1.0	
			②	US735	105 (70-135)	0.20 (0.15-0.25)	-2.0	0.20 (0.15-0.25)	-1.0	
	Média	MV	①	US735	120 (80-160)	0.20 (0.15-0.25)	-2.0	0.20 (0.15-0.25)	-1.0	
②			VP15TF	120 (80-160)	0.20 (0.15-0.25)	-2.0	0.20 (0.15-0.25)	-1.0		
K Ferro Fundido Cinzento Resistência à Tração ≤350MPa	Acabamento	F, FS	①	HTi10	130 (90-160)	0.15 (0.10-0.20)	-0.5	0.15 (0.10-0.20)	-0.5	
			②	VP15TF	90 (60-120)	0.20 (0.15-0.25)	-2.0	0.20 (0.15-0.25)	-1.5	
N Ligas de Alumínio	Acabamento	F, FS	①	HTi10	300 (200-400)	0.10 (0.05-0.15)	-0.5	0.10 (0.05-0.15)	-0.5	
			②	Face Plana	MD220	200 (150-250)	0.10 (0.05-0.15)	-2.0	0.10 (0.05-0.15)	-1.0
H Aço Temperado 35-65HRC	Acabamento	Face Plana	①	MB825	100 (80-200)	0.10 (0.05-0.15)	-0.15	0.10 (0.05-0.15)	-0.1	

(Nota 1) Quando ocorrer vibrações, reduza a velocidade de corte em 30%.

(Nota 2) A profundidade de corte precisa ser menor do que o raio da ponta quando utilizar o tipo FSVJ.