

RECOMMENDED CUTTING CONDITIONS

Steel Shank					$l/d \leq 3$		$3 < l/d \leq 5$			
Heavy Metal Shank					$l/d \leq 3$		$3 < l/d \leq 6$			
Work Material	Cutting Mode	Breaker	Recom- mendation	Grade	Cutting Speed (SFM)	Feed (IPR)	D.O.C. (inch)	Feed (IPR)	D.O.C. (inch)	
P	Mild Steel <180HB	Finishing	FV	①	NX2525	555 (390–720)	.004 (.002–.006)	–.020	.004 (.002–.006)	–.020
				②	VP45N	460 (295–620)	.008 (.004–.010)	–.040	.006 (.002–.008)	–.040
	Light	SV	①	VP15TF	590 (425–755)	.008 (.004–.010)	–.040	.006 (.002–.008)	–.040	
			②	VP45N	425 (260–590)	.010 (.006–.014)	–.080	.008 (.006–.010)	–.060	
	Medium	MV	①	VP45N	425 (260–590)	.010 (.006–.014)	–.080	.008 (.006–.010)	–.060	
			②	VP15TF	525 (360–690)	.010 (.006–.014)	–.080	.008 (.006–.010)	–.060	
	Carbon Steel Alloy Steel 180–280HB	Finishing	FV	①	VP15TF	460 (295–620)	.004 (.002–.006)	–.020	.004 (.002–.006)	–.020
				②	NX2525	425 (260–590)	.004 (.002–.006)	–.020	.004 (.002–.006)	–.020
Light		SV	①	VP15TF	425 (260–590)	.008 (.004–.010)	–.040	.006 (.002–.008)	–.040	
			②	UE6020	460 (295–620)	.008 (.004–.010)	–.040	.006 (.002–.008)	–.040	
Medium	MV	①	VP15TF	390 (230–555)	.010 (.006–.014)	–.080	.008 (.006–.010)	–.060		
		②	UE6020	425 (260–590)	.010 (.006–.014)	–.080	.008 (.006–.010)	–.060		
M	Stainless Steel 180–280HB	Finishing	FV	①	VP15TF	490 (360–620)	.004 (.002–.006)	–.020	.004 (.002–.006)	–.020
				②	US7020	490 (360–620)	.008 (.004–.010)	–.040	.006 (.002–.008)	–.040
	Light	SV	①	VP15TF	425 (295–555)	.008 (.004–.010)	–.040	.006 (.002–.008)	–.040	
			②	US7020	460 (330–590)	.008 (.006–.010)	–.080	.008 (.006–.010)	–.040	
Medium	MV	①	US7020	460 (330–590)	.008 (.006–.010)	–.080	.008 (.006–.010)	–.040		
		②	VP15TF	390 (260–525)	.008 (.006–.010)	–.080	.008 (.006–.010)	–.040		
K	Cast Iron Tensile Strength<350MPa	Finishing	F/FS	①	HTi10	425 (295–525)	.006 (.004–.008)	–.020	.006 (.004–.008)	–.020
		Medium	MV	①	VP15TF	295 (195–390)	.008 (.006–.010)	–.080	.008 (.006–.010)	–.060
N	Aluminium Alloy	Finishing	F/FS	①	HTi10	985 (655–1310)	.004 (.002–.006)	–.020	.004 (.002–.006)	–.020
			No Breaker	①	MD220	655 (490–820)	.004 (.002–.006)	–.080	.004 (.002–.006)	–.040
H	Heat Treated Steel 35–65HRC	Finishing	No Breaker	①	MB825	330 (260–655)	.004 (.002–.006)	–.006	.004 (.002–.006)	–.004

* If the DIMPLE BAR vibrates, reduce cutting speed to 70% of the above.