RECOMMENDED CUTTING CONDITIONS

Work material	Carbon steel, Alloy steel (−30HRC) Cast iron		Alloy steel, Tool steel, Pre-hardened steel (30−45HRC)		Stainless steel		Hardened steel (45−55HRC)	
Dia. (mm)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)
1	40000	900	32000	700	27000	510	24000	210
1.5	30000	1020	21000	675	18000	510	15000	210
2	22500	1020	15000	675	13500	510	12000	210
3	15000	1020	10500	675	9000	510	7500	210
4	11250	1020	7800	675	6800	510	6000	210
5	9000	1020	6300	675	5400	510	4800	210
6	7500	1020	5250	675	4500	510	4050	210
8	6000	840	4200	585	3400	410	3000	180
10	4800	765	3300	510	2700	370	2400	165
12	4050	765	2850	465	2300	330	1950	135
Depth of cut	≤0.1D (D≤ϕ3) ≤0.2D (D>ϕ3) ≤1.5D D ≤0.1D (D<ϕ2) ≤0.2D (D≥ϕ2)				≤0.05D ≤1D D ≤0.05D (D≤ϕ2) ≤0.1D (D>ϕ2)			

D:Dia.

Work material	Titanium		High Nickel Inconel	
Dia. (mm)	Revolution (min^{-1})	Feed rate (mm/min)	Revolution (min^{-1})	Feed rate (mm/min)
1	20000	380	10000	90
1.5	12800	360	6400	121
2	10000	360	5000	90
3	6400	360	3000	90
4	5000	360	2400	90
5	4000	360	2000	90
6	3100	360	1600	90
8	2400	290	1200	70
10	1900	260	1000	70
12	1600	230	800	109
Depth of cut	≤0.1D (D≤ϕ3) ≤0.2D (D>ϕ3) ≤1.5D D ≤0.1D (D<ϕ2) ≤0.2D (D≥ϕ2)			

D:Dia.

1) When using high efficiency conditions, the surface speeds/feeds can be increased by 2-3 times the above values.