

# DXAS – RECOMMENDED CUTTING CONDITIONS

Material	DC	Hole depth (L/D)	Vc	n	Vf
Mild steel DIN St37-2 etc.	18.0	1.5-8	110 ( 80 – 170 )	1900	0.30 ( 0.20 – 0.45 )
	19.0	1.5-8	110 ( 80 – 170 )	1800	0.30 ( 0.20 – 0.45 )
	20.0	1.5-8	110 ( 80 – 170 )	1800	0.30 ( 0.20 – 0.45 )
	21.0	1.5-8	110 ( 80 – 170 )	1700	0.30 ( 0.20 – 0.45 )
	22.0	1.5-8	110 ( 80 – 170 )	1600	0.30 ( 0.20 – 0.45 )
	23.0	1.5-8	110 ( 80 – 170 )	1500	0.30 ( 0.20 – 0.45 )
	24.0	1.5-8	110 ( 80 – 170 )	1500	0.30 ( 0.20 – 0.45 )
	25.0	1.5-8	110 ( 80 – 170 )	1400	0.35 ( 0.25 – 0.45 )
	26.0	1.5-8	110 ( 80 – 170 )	1300	0.35 ( 0.25 – 0.45 )
	27.0	1.5-8	110 ( 80 – 170 )	1300	0.35 ( 0.25 – 0.45 )
	28.0	1.5-8	110 ( 80 – 170 )	1300	0.35 ( 0.25 – 0.45 )
	29.0	1.5-8	110 ( 80 – 170 )	1200	0.35 ( 0.25 – 0.45 )
30.0	1.5-8	110 ( 80 – 170 )	1200	0.35 ( 0.25 – 0.45 )	
Carbon steel DIN CK50 etc.	18.0	1.5-8	100 ( 70 – 170 )	1800	0.30 ( 0.20 – 0.45 )
	19.0	1.5-8	100 ( 70 – 170 )	1700	0.30 ( 0.20 – 0.45 )
	20.0	1.5-8	100 ( 70 – 170 )	1600	0.30 ( 0.20 – 0.45 )
	21.0	1.5-8	100 ( 70 – 170 )	1500	0.30 ( 0.20 – 0.45 )
	22.0	1.5-8	100 ( 70 – 170 )	1400	0.30 ( 0.20 – 0.45 )
	23.0	1.5-8	100 ( 70 – 170 )	1400	0.30 ( 0.20 – 0.45 )
	24.0	1.5-8	100 ( 70 – 170 )	1300	0.30 ( 0.20 – 0.45 )
	25.0	1.5-8	100 ( 70 – 170 )	1300	0.35 ( 0.25 – 0.45 )
	26.0	1.5-8	100 ( 70 – 170 )	1200	0.35 ( 0.25 – 0.45 )
	27.0	1.5-8	100 ( 70 – 170 )	1200	0.35 ( 0.25 – 0.45 )
	28.0	1.5-8	100 ( 70 – 170 )	1100	0.35 ( 0.25 – 0.45 )
	29.0	1.5-8	100 ( 70 – 170 )	1100	0.35 ( 0.25 – 0.45 )
30.0	1.5-8	100 ( 70 – 170 )	1100	0.35 ( 0.25 – 0.45 )	
Alloy steel DIN 41CrMo4, DIN 20Cr4 etc.	18.0	1.5-8	100 ( 70 – 140 )	1800	0.30 ( 0.20 – 0.45 )
	19.0	1.5-8	100 ( 70 – 140 )	1700	0.30 ( 0.20 – 0.45 )
	20.0	1.5-8	100 ( 70 – 140 )	1600	0.30 ( 0.20 – 0.45 )
	21.0	1.5-8	100 ( 70 – 140 )	1500	0.30 ( 0.20 – 0.45 )
	22.0	1.5-8	100 ( 70 – 140 )	1400	0.30 ( 0.20 – 0.45 )
	23.0	1.5-8	100 ( 70 – 140 )	1400	0.30 ( 0.20 – 0.45 )
	24.0	1.5-8	100 ( 70 – 140 )	1300	0.30 ( 0.20 – 0.45 )
	25.0	1.5-8	100 ( 70 – 140 )	1300	0.35 ( 0.25 – 0.45 )
	26.0	1.5-8	100 ( 70 – 140 )	1200	0.35 ( 0.25 – 0.45 )
	27.0	1.5-8	100 ( 70 – 140 )	1200	0.35 ( 0.25 – 0.45 )
	28.0	1.5-8	100 ( 70 – 140 )	1100	0.35 ( 0.25 – 0.45 )
	29.0	1.5-8	100 ( 70 – 140 )	1100	0.35 ( 0.25 – 0.45 )
30.0	1.5-8	100 ( 70 – 140 )	1100	0.35 ( 0.25 – 0.45 )	
Cast iron DIN GG30, DIN GGG45 etc.	18.0	1.5-8	100 ( 70 – 170 )	1800	0.30 ( 0.20 – 0.45 )
	19.0	1.5-8	100 ( 70 – 170 )	1700	0.30 ( 0.20 – 0.45 )
	20.0	1.5-8	100 ( 70 – 170 )	1600	0.30 ( 0.20 – 0.45 )
	21.0	1.5-8	100 ( 70 – 170 )	1500	0.30 ( 0.20 – 0.45 )
	22.0	1.5-8	100 ( 70 – 170 )	1400	0.30 ( 0.20 – 0.45 )
	23.0	1.5-8	100 ( 70 – 170 )	1400	0.30 ( 0.20 – 0.45 )
	24.0	1.5-8	100 ( 70 – 170 )	1300	0.30 ( 0.20 – 0.45 )
	25.0	1.5-8	100 ( 70 – 170 )	1300	0.35 ( 0.25 – 0.45 )
	26.0	1.5-8	100 ( 70 – 170 )	1200	0.35 ( 0.25 – 0.45 )
	27.0	1.5-8	100 ( 70 – 170 )	1200	0.35 ( 0.25 – 0.45 )
	28.0	1.5-8	100 ( 70 – 170 )	1100	0.35 ( 0.25 – 0.45 )
	29.0	1.5-8	100 ( 70 – 170 )	1100	0.35 ( 0.25 – 0.45 )
30.0	1.5-8	100 ( 70 – 170 )	1100	0.35 ( 0.25 – 0.45 )	

1. Refer to the table above for more details on how to set the cutting conditions according to the usage.
2. When using non-water-soluble cutting fluid, reduce the cutting speed to 80 % to 90 %.
3. When using L/D=8, the maximum feed rate should be 0.4 mm/rev.