

ADS/ADSL

Work Materials	Carbon steels		Alloy Steels		Prehardened Steels Tool Steels Die Steels		Stainless Steels Austenitic		Stainless Steels Martensitic Ferritic	
	1010, 1018, 1035, 1045, 1065		4140, 4340		30~38HRC		304, 316		420, 440, 430	
Drill Diameter (mm)	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR
Ø0.30~0.59	12,000~10,000	0.0002~0.0004	10,000~9500	0.00012~0.0004	8,500~7,600	0.00008~0.00032	5,300	0.00002~0.00004	8,000~6,300	0.00002~0.00004
Ø0.60~1.09	10,000~9,500	0.0004~0.0008	8,000~6,400	0.00028~0.0006	6,400~4,800	0.00012~0.0004	5,300~4,800	0.00004~0.0002	6,300~5,300	0.00004~0.0002
Ø1.10~2.09	7,200~6,400	0.0008~0.0024	5,800~3,200	0.0004~0.0008	4,400~3,200	0.0004~0.0006	4,300~3,200	0.0002~0.0008	5,300~4,700	0.0002~0.0008
Ø2.10~2.99	6,100~4,400	0.0024~0.0032	3,000~2,800	0.0008~0.0016	3,000~2,800	0.0006~0.0008	3,000~2,200	0.0008~0.0012	4,500~3,300	0.0008~0.0012
Ø3.00~5.99	4,300~2,600	0.0032~0.004	2,700~2,000	0.0016~0.0032	2,700~1,900	0.0008~0.0016	2,100~1,300	0.0012~0.002	3,200~1,900	0.0012~0.002
Ø6.00~8.90	2,200~1,900	0.004~0.005	1,600~1,400	0.002~0.004	1,600~1,400	0.0008~0.0024	1,100~800	0.002~0.004	1,600~1,200	0.002~0.004
Ø9.00~13.00	1,600~1,200	0.004~0.005	1,300~1,000	0.002~0.004	1,200~900	0.0016~0.0032	700~500	0.002~0.004	1,100~750	0.002~0.004

Work Materials	Cast Iron		Aluminum Alloys		Copper Alloys	
			6061, 7075			
Drill Diameter (mm)	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR
Ø0.30~0.59	12,000~10,000	0.0004~0.0008	20,000~16,000	0.0008~0.0002	20,000~16,000	0.0008~0.002
Ø0.60~1.09	10,000~9,500	0.0004~0.0016	20,000~16,000	0.0024~0.006	20,000~16,000	0.0024~0.006
Ø1.10~2.09	8,700~7,200	0.0024~0.006	16,000~13,000	0.004~0.008	16,000~13,000	0.004~0.008
Ø2.10~2.99	6,800~4,900	0.0024~0.006	13,000~10,000	0.004~0.008	13,000~10,000	0.004~0.008
Ø3.00~5.99	4,800~3,200	0.004~0.008	8,500~6,400	0.004~0.008	8,500~6,400	0.004~0.008
Ø6.00~8.90	2,600~2,000	0.006~0.01	5,300~4,000	0.008~0.012	5,300~4,000	0.008~0.012
Ø9.00~13.00	1,800~1,500	0.008~0.016	3,000~2,500	0.016~0.02	3,000~2,500	0.016~0.02

Drill Diameter	Pecking Distance
Ø0.30~Ø0.49	10% of drill diameter
Ø0.50~Ø1.00	20% of drill diameter
Above Ø1.00	*25-50% of drill diameter

*Start at 25% and increase if needed, to 50%

Remarks:

- 1) It is recommended to start with the lowest speed and feed shown in the table. They may be gradually increased in order to obtain the most appropriate condition.
- 2) To prevent vibration, overhanging of the tool from the chuck should be minimized.
- 3) If your machine cannot meet the recommended rotation speed, please use the higher speed and adjust the feed rate appropriately.