

ADPF30

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
Ø0.02~0.09	10,000→20,000	0.00004~0.00006	10,000→20,000	0.00004~0.00006	10,000→20,000	0.00004	10,000→20,000	0.00002~0.00004	10,000→20,000	0.00004~0.00008
Ø0.10~0.29	15,000~10,000	0.00006~0.00028	15,000~10,000	0.00006~0.00028	13,000~8,800	0.00004~0.00016	10,000~5,000	0.00004~0.00012	13,000~8,800	0.00002~0.00004
Ø0.30~0.45	10,000~9,500	0.00028~0.0004	10,000~9,500	0.00028~0.0004	8,800~6,500	0.00012~0.0002	5,000~4,500	0.00004~0.0002	8,800~6,500	0.00004~0.0002
Ø0.50~0.95	9,500~7,700	0.0004~0.0008	9,500~7,700	0.0004~0.0008	6,500~4,800	0.0002~0.0004	4,500~3,200	0.0002~0.0004	6,500~4,800	0.0002~0.0004
Ø1.00~1.90	7,700~5,100	0.0008~0.002	7,700~5,100	0.0008~0.002	3,100~2,400	0.00012~0.0002	3,200~2,400	0.0004~0.0012	4,800~3,200	0.0004~0.0012
Ø2.00~3.00	5,100~4,200	0.0024	5,100~4,200	0.0024	2,400~1,600	0.0008~0.0016	2,400~1,800	0.0012~0.002	3,200~2,100	0.0012~0.002

ADPN30

Work Materials	Aluminum Alloys		Copper Alloys		Resin	
	6061, 7075					
Drill Diameter (mm)	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR
Ø0.02~0.09	10,000→20,000	0.00008~0.0002	10,000→20,000	0.00008~0.0002	10,000→20,000	0.00008~0.0002
Ø0.10~0.29	18,000~13,000	0.0002~0.0008	16,000~11,000	0.00008~0.00032	18,000~13,000	0.0002~0.0008
Ø0.30~0.45	13,000~10,000	0.0008~0.0012	11,000~11,500	0.00032~0.0006	13,000~10,000	0.0008~0.0012
Ø0.50~0.95	10,000	0.0012	11,500~9,600	0.0006~0.0016	10,000	0.0012
Ø1.00~1.90	10,000~5,100	0.0012~0.0016	9,600~4,800	0.0016~0.0032	10,000~5,100	0.0012~0.0016
Ø2.00~3.00	5,100~4,200	0.0016	4,800~4,200	0.0032~0.006	5,100~4,200	0.0016

Drill Diameter	Pecking Distance
Ø0.02~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:

- Runout (with drill in spindle) should be less than 0.003mm (0.00012").
- If your machine cannot meet the recommended rotation speed, please use the higher speed and adjust the feed rate appropriately.
- For drills under Ø0.5mm (0.0197"), set machine/spindle at the most stable speed rather than following the recommended conditions shown in table.
- For drills under Ø0.1mm (0.0039"), it is recommended to start with the lowest rotation speed indicated on the table.
Reference: 10,000→20,000 should be started from 10,000.