

List 1200 - EX-SPOT TiN-NC-LDS

List 1250 - EX-SPOT LS-NC-LDS

General Drilling Operations

Work Material	Carbon Steels, Mild Steel 1010, 1050		Alloy Steels 4140, 4130		Stainless Steels 300SS, 400SS, 17-4PH		Cast Iron		Cast Aluminum		Tool Steels, Hardened Steels			
	Hardness										26-30 HRC		30-34 HRC	
Drilling Speed	105-130 SFM		65-85 SFM		25-40 SFM		85-105 SFM		165-325 SFM		30-45 SFM		25-40 SFM	
Drill Dia. mm	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR	Speed RPM	Feed IPR
3	3,850	0.001-0.003	2,400	0.001-0.003	1,060	0.001-0.003	3,100	0.001-0.003	8,000	0.004-0.009	1,220	0.001-0.003	1,060	0.001-0.003
4	2,900	0.002-0.004	1,800	0.002-0.004	800	0.002-0.004	2,400	0.002-0.005	6,000	0.005-0.010	910	0.002-0.004	800	0.002-0.004
6	1,900	0.002-0.005	1,180	0.002-0.005	530	0.002-0.005	1,600	0.002-0.005	4,000	0.005-0.011	610	0.002-0.005	530	0.002-0.005
8	1,400	0.003-0.006	900	0.003-0.006	400	0.003-0.006	1,200	0.003-0.006	3,000	0.007-0.012	450	0.003-0.006	400	0.003-0.006
10	1,120	0.004-0.007	710	0.004-0.007	320	0.004-0.007	950	0.004-0.007	2,400	0.009-0.014	360	0.004-0.007	320	0.004-0.007
12	950	0.005-0.008	600	0.005-0.008	270	0.005-0.008	800	0.005-0.008	2,000	0.010-0.016	300	0.005-0.008	270	0.005-0.008
16	720	0.006-0.011	450	0.006-0.011	200	0.006-0.011	600	0.006-0.011	1,500	0.012-0.019	220	0.006-0.011	200	0.006-0.011
20	560	0.008-0.013	360	0.008-0.013	160	0.008-0.013	480	0.008-0.013	1,200	0.016-0.024	180	0.008-0.013	160	0.008-0.013
25	450	0.010-0.018	290	0.010-0.018	130	0.010-0.018	380	0.010-0.018	960	0.020-0.029	150	0.010-0.018	130	0.010-0.018

1. The indicated speeds and feeds are for drilling with water soluble oil.
2. When using non-water soluble oil, reduce the drilling speed by 20%.
3. When entering on a curved or inclined surface, reduce the feed rate accordingly.
4. When using a coated tool, the drilling speed can be increased by 1.2 times the value in the table.