

LAKESHORE CARBIDE DRILL SPEED/FEED CHART

FOR STANDARD JOBBER AND SCREW LENGTH, SOLID CARBIDE DRILL BITS

STARTING PARAMETERS BASED ON GOOD WORK PIECE RIGIDITY & MACHINE RIGIDITY, SPINDLE CONCENTRICITY,
MINIMAL TOOL "STICK OUT" FROM COLLET, AND ADEQUATE COOLANT AT POINT OF CONTACT

MATERIAL	SFM	DRILL FEED (INCHES PER TOOTH)								
		1/16	3/32	1/8	3/16	1/4	5/16	3/8	7/16	1/2
Aluminum	250-650	.0008	.0019	.003	.005	.007	.0083	.0095	.0108	.012
Aluminum > 10%	100-400	.0008	.0014	.002	.004	.006	.007	.008	.009	.010
Brass	250-450	.0007	.0014	.002	.0025	.003	.0033	.0035	.0038	.004
Bronze	150-250	.0007	.0014	.002	.0025	.003	.0033	.0035	.0038	.004
Cast Irons										
Soft	150-300	.001	.002	.003	.004	.005	.0063	.0075	.0088	.010
Medium	125-250	.001	.002	.003	.004	.005	.0058	.0065	.0073	.008
Ductile	80-200	.0005	.0013	.002	.003	.004	.0045	.005	.0056	.006
Malleable	65-200	.0005	.0013	.002	.003	.004	.0048	.0055	.0063	.007
Copper	150-300	.001	.002	.003	.005	.007	.0083	.0095	.0108	.012
Magnesium	300-600	.001	.002	.003	.005	.007	.0083	.0095	.0108	.012
Monel & High Nickel Steel	75-200	.001	.002	.003	.004	.005	.006	.007	.008	.009
Plastics	150-450	.001	.0015	.002	.003	.004	.0043	.0045	.0048	.005
Stainless Stl (Soft)	80-300	.001	.002	.003	.004	.005	.0058	.0065	.0073	.008
Stainless Stl (Hard)	40-100	.0005	.0013	.002	.003	.004	.0045	.005	.0055	.006
Steels										
Low Carbon	150-300	.001	.0015	.002	.003	.004	.0048	.0055	.0063	.007
Med Carbon	100-200	.001	.0015	.002	.0025	.003	.0038	.0045	.0053	.006
High Tensile (35-40 Rc)	75-150	.001	.0015	.002	.0025	.003	.0033	.0035	.0038	.004
High Tensile (40-45 Rc)	50-100	.0007	.0009	.001	.0015	.002	.0023	.0025	.0028	.003
High Tensile (46 Rc+)	25-75	.0005	.0006	.0007	.0009	.001	.0013	.0015	.0018	.002
Mold Steel	60-130	.0005	.0008	.001	.002	.003	.0035	.004	.0045	.005
Tool Steel	40-100	.001	.0013	.0015	.0023	.003	.0035	.004	.0045	.005
Titanium										
Soft	80-350	.001	.0015	.002	.003	.004	.0045	.005	.0055	.006
Hard	40-100	.0007	.0009	.001	.0015	.002	.0028	.0035	.0043	.005