



Suggested Cutting Speeds with High Speed Steel (HSS) Cutting Tools

Table No. 1

800-871-5022

More information can be found at
www.HQ-Drill.com.

MATERIAL	BRINELL (BHN)	DRILLS S.F.M.	TAPS-S.F.M. THREADS PER INCH			
			3-7 1/2	8-15	16-24	25 UP
Aluminum	99-101	200-250	50	100	150	200
Aluminum Bronze	170-187	60	12	25	45	60
Bakelite	-	80	50	100	150	200
Brass	192-202	200-250	50	100	150	200
Bronze, Common	166-183	200-250	40	80	100	150
Bronze, Phos.; 1/2 Hard	187-202	175-180	25	40	50	80
Bronze, Phos.; Soft	149-163	200-250	40	80	100	150
Celluloid	-	100	50	100	150	200
Copper	80-85	70	40	80	100	150
Copper, Mang.; 30% Min.	134	15	-	-	-	-
Duralumin	90-104	200	50	100	150	200
Everdur	179-207	60	20	30	40	50
Iron, Cast; Soft	126	140-150	30	60	90	140
Iron, Cast; Med. Soft	196	80-110	25	40	50	80
Iron, Cast; Hard	293-302	45-50	10	20	30	40
Iron, Cast; Chilled	402	15	5	5	10	10
Iron Malleable	112-126	85-90	20	30	40	50
Monel	149-170	50	8	10	15	20
Nickel, Pure	187-202	75	25	40	50	80
Nickel Steel; 3 1/2%	196-241	60	8	10	15	20
Rubber, Hard	-	100	50	100	150	200
Screw Stock; C.R.	170-196	110	20	30	40	50
Steel, Carbon	175-225	70	30	40	50	50
Steel, Drop Forged	170-196	60	12	25	45	60
Steel, Machinery	170-196	110	35	50	60	85
Steel, Magnet; Soft	241-302	35-40	20	40	50	75
Steel, Magnet; Hard	321-512	15	5	10	15	25
Steel, Mang.; 7-13%	187-217	15	15	20	25	30
Steel, Mild; .20-.30C	170-202	110-120	40	55	70	90
Steel, Molybdenum	196-235	55	20	30	35	45



Suggested Cutting Speeds with High Speed Steel (HSS) Cutting Tools

800-871-5022

More information can be found at
www.HQ-Drill.com.

Table No. 1

MATERIAL	BRINELL (BHN)	DRILLS S.F.M.	TAPS-S.F.M. THREADS PER INCH			
			3-7 1/2	8-15	16-24	25 UP
Steel, Spring	402	20	10	10	15	15
Steel, Stainless	150-225	50	8	10	15	20
Steel, Stainless	460-520	20	8	10	15	20
Steel, .40-.50C	170-196	80	20	30	40	50
Steel, Structural; A-36	160	110	40	55	70	90
Steel, Tool; S.A.E. and Forging	149	75	25	35	45	55
Steel, Tool; S.A.E. and Forging	241	50	15	15	25	25
Steel, Tool; S.A.E. and Forging	402	15	8	10	15	20
Zinc, Alloy	112-126	200-250	50	100	150	200

Note: 1) HSS reaming tools should be at approximately 2/3 of Drill RPM. 2) Carbide tools should be at approximately double

You can also see the following chart for more information: http://www.drill-hq.com/?page_id=785