

TAPPING SPEED GUIDE

MATERIALS		SPEED FEET PER MINUTE	MATERIALS		SPEED FEET PER MINUTE
Aluminum Alloys		90-100	(Steel, Cont.) Carbon Steel, Plain	Annealed	40-80
Brass		60-100		Tempered	15-40
Bronze		40-60	Cast, Carbon	Annealed	40-50
Copper		40-60		Tempered	30
High Temperature Alloys	Cobalt Base	5-10	Cast, Corrosion Resistant,	Annealed	20-30
	Iron Base	10-15	Heat Resistant,	as Cast	20-25
	Nickel Base	5-10	Low Alloy	Annealed	30-45
Iron	Ductile	Annealed		Tempered	15-25
		as Cast	Precipitation Hardening,	Treated	10-15
		Tempered	Stainless	Annealed	15-45
	Gray,	Annealed		Tempered	15-25
		As Cast	35-60	Free Machining,	Annealed
	Malleable	60	Tool Steels, High Speed	Annealed	15-25
Magnesium Alloys	Heat Treated	25-50	Water Hardening	Annealed	50
	Annealed	175	Ultra High Strength Steels	Annealed	35
Manganese		20		Normalized	20
Molybdenum Alloys	Stress Relieved	50		Tempered	3-7
Monel	Annealed	20	Maraging Steels	Annealed	20-15
Nickel Alloys	Annealed	25		Maraged	5-10
Plastics,	Reinforced	25	Tantalum Alloys, Stress Relieved		3
	Thermoplastics	50	Titanium Alloys, Commercial Pure,	Annealed	40-60
	Thermosetting Plastics	50	Alpha & Alpha Beta Alloys,	Annealed	10-25
	Alloys, Annealed or Cold Drawn	40-60	Tungsten Alloys, Pressed & Sintered		50
Steels,	Quenched & Tempered	15-35	Zinc Alloys	Die Cast	150
	Armor Plate	10			

CONVERSION TABLE, SURFACE FEET PER MINUTE TO REVOLUTIONS PER MINUTE

SPEED FEET PER MINUTE	20	25	30	40	50	60	70	80	90	100	110	120	130	140	150
TAP SIZE	REVOLUTIONS PER MINUTE														
0	1273	1592	1910	2546	3183	3820	4456	5093	5730	6366	7003	7639	8276	8913	9549
1	1047	1308	1570	2093	2617	3140	3663	4186	4710	5233	5756	6279	6808	7326	7849
2	888	1110	1333	1777	2221	2665	3109	3554	3999	4442	4886	5330	5774	6218	6662
3	772	964	1157	1543	1929	2315	2701	3086	3472	3858	4244	4629	5015	5401	5787
4	682	853	1023	1364	1705	2046	2387	2728	3069	3411	3751	4092	4434	4775	5116
5	611	764	917	1222	1528	1833	2139	2445	2750	3056	3361	3667	3973	4278	4584
6	553	691	829	1106	1382	1658	1934	2211	2487	2764	3040	3316	3592	3869	4145
8	466	583	699	932	1165	1398	1631	1864	2097	2330	2563	2796	3029	3262	3495
10	401	502	603	804	1005	1205	1406	1607	1808	2009	2210	2411	2612	2813	3014
12	354	442	531	707	884	1061	1238	1415	1592	1769	1945	2122	2300	2476	2653
1/4	306	382	458	611	764	917	1070	1222	1375	1528	1681	1833	1986	2139	2292
5/16	245	306	367	489	611	733	856	978	1100	1222	1345	1467	1589	1711	1833
3/8	204	255	306	407	509	611	713	815	917	1019	1120	1222	1324	1426	1528
7/16	175	219	262	349	437	524	611	698	786	873	960	1048	1135	1222	1310
1/2	153	191	229	306	382	458	535	611	688	764	840	917	993	1070	1146
9/16	137	172	206	275	344	412	481	550	619	687	756	825	893	963	1031
5/8	122	153	183	244	306	367	428	489	550	611	672	733	794	856	917
3/4	102	128	153	203	255	306	357	407	458	509	560	611	662	713	764
7/8	87	109	131	175	218	262	306	350	392	437	480	524	568	611	655
1	76	96	115	153	191	230	268	306	344	382	420	458	497	535	573

METRIC THREAD FORMING TAPS

LIST 16M

Plug
Bottom

Stocked with Nitride Surface Treatment



TAP SIZE	PITCH DIAMETER LIMIT		16M	
	CLASS 6H FIT	CLASS 4H FIT	PLUG EDP NUMBER	BOTTOM EDP NUMBER
M2X0.4	D5		62611	62612
M2X0.4		D3	62613	62614
M2.5X0.45	D6		62617	62618
M2.5X0.45		D3	62619	62620
M3X0.5	D6		62621	62622
M3X0.5		D3	62623	62624
M3.5X0.6	D7		62627	62628
M3.5X0.6		D4	62629	62630
M4X0.7	D7		62631	62632
M4X0.7		D4	62633	62634
M5X0.8	D8		62637	62638
M5X0.8		D4	62639	62640
M6X1.0	D9		62641	62642
M6X1.0		D5	62643	62644
M8X1.25	D10		62647	62648
M8X1.25		D5	62649	62650
M10X1.5	D11		62651	62652
M10X1.5		D6	62653	62654

METRIC THREAD FORMERS TOLERANCES & HOLE SIZES

TAP SIZE	PITCH DIAMETER LIMIT	PROBABLE DRILL SIZE	TAP SIZE	PITCH DIAMETER LIMIT	PROBABLE DRILL SIZE
	CLASS 6H FIT			CLASS 4H FIT	
M2X0.4	D5	1.85mm	M2X0.4	D3	1.80mm
M2.5X0.45	D6	2.35mm	M2.5X0.45	D3	2.30mm
M3X0.5	D6	2.80mm	M3X0.5	D3	2.75mm
M3.5X0.6	D7	3.25mm	M3.5X0.6	D4	3.20mm
M4X0.7	D7	3.70mm	M4X0.7	D4	#27
M5X0.8	D8	4.70mm	M5X0.8	D4	4.60mm
M6X1.0	D9	5.50mm	M6X1.0	D5	5.50mm
M8X1.25	D10	7.40mm	M8X1.25	D5	7.30mm
M10X1.5	D11	9.25mm	M10X1.5	D6	9.20mm

To convert millimeters to inches, multiply by .03937