

# TriStar

PLASTICS CORP.

Contributing to customer success through innovative plastic applications.

Plastic Stock Shapes • Plane Bearings • Custom Fabrication  
MASSACHUSETTS • NORTH CAROLINA • CALIFORNIA

## INCH/METRIC TAP DRILL SIZES & DECIMAL EQUIVALENTS

FRACTION OR DRILL SIZE	DECIMAL EQUIVALENT	TAP SIZE	FRACTION OR DRILL SIZE	DECIMAL EQUIVALENT	TAP SIZE	FRACTION OR DRILL SIZE	DECIMAL EQUIVALENT	TAP SIZE	FRACTION OR DRILL SIZE	DECIMAL EQUIVALENT	TAP SIZE	METRIC TAP DRILL SIZES					
												METRIC TAP	TAP DRILL MM	DECIMAL EQUIV. inches			
NUMBER SIZE DRILLS																	
80	.0135		39	.0995		15/64	.2344		19/32	.5938		M1.6x 0.35	1.25	.0492			
79	.0145		38	.1015	5-40	LETTER SIZE DRILLS B	.2380		39/64	.6094		M1.8 x 0.35	1.45	.0571			
1/64	.0156		37	.1040	5-44	C	.2420		41/64	.6406		M2.2 x 0.45	1.75	.0689			
78	.0160		36	.1065	6-32	D	.2460		5/8	.6250							
77	.0180		7/64	.1094		1/4	.2500		21/32	.6562	3/4-10	M2.5 x 0.45	2.05	.0807			
76	.0200		35	.1100		F	.2570	5/16-18	43/64	.6719		M3 x 0.5	2.50	.0984			
75	.0210		34	.1110		G	.2610		11/16	.6875	3/4-16	M3.5 x 0.6	2.90	.1142			
74	.0225		33	.1130	6-40	17/64	.2656		45/64	.7031		M4 x 0.7	3.30	.1299			
73	.0240		32	.1160		H	.2660		47/64	.7188							
72	.0250		31	.1200		I	.2720	5/16-24	32/32	.7344		M4.5 x 0.75	3.70	.1457			
71	.0260		1/8	.1250		J	.2770		3/4	.7500		M5 x 0.8	4.20	.1654			
70	.0280		30	.1285		K	.2810		49/64	.7656	7/8-9	M6 x 1	5.00	.1968			
69	.0292		29	.1360	8-32,36	9/32	.2812		32/32	.7812		M7 x 1	6.00	.2362			
68	.0310		28	.1405		L	.2900		51/64	.7969							
1/32	.0312		9/64	.1406		M	.2950		13/16	.8125	7/8-14	M8 x 1.25	6.70	.2638			
67	.0320		27	.1440		19/64	.2969		53/64	.8281		M8 x 1	7.00	.2756			
66	.0330		26	.1470		N	.3020		32/32	.8438		M10 x 1.5	8.50	.3346			
65	.0350		25	.1495	10-24	5/16	.3125	3/8-16	55/64	.8594		M10 x 1.25	8.70	.3425			
64	.0360		24	.1520		O	.3160		7/8	.8750	1-8						
63	.0370		23	.1540		P	.3230		57/64	.8906		M12 x 1.75	10.20	.4016			
62	.0380		5/32	.1562		21/64	.3281		32/32	.9062		M12 x 1.25	10.80	.4252			
61	.0390		22	.1570		Q	.3320	3/8-24	59/64	.9219	1-14	M14 x 2	12.00	.4724			
60	.0400		21	.1590	10-32	11/32	.3438		15/16	.9375		M14 x 1.5	12.50	.4921			
59	.0410		20	.1610		R	.3390		61/64	.9531							
58	.0420		19	.1660		S	.3480		31/32	.9688		M16 x 2	14.00	.5512			
57	.0430		18	.1695		T	.3580		63/64	.9844	1 1/8-7	M16 x 1.5	14.50	.5709			
56	.0465		11/64	.1719		23/64	.3594		1	1.0000		M18 x 2.5	15.50	.6102			
55	.0469	0-80	17	.1730		U	.3680	7/16-14	1 3/64	1.0469	1 1/8-12	M18 x 1.5	16.50	.6496			
54	.0520		16	.1770	12-24	3/8	.3750		1 7/64	1.1094	1 1/4-7						
53	.0550		15	.1800		V	.3770		1 1/8	1.1250		M20 x 2.5	17.50	.6890			
1/16	.0625	1-64,72	14	.1820	12-28	W	.3860		1 11/64	1.1719	1 1/4-12	M20 x 1.5	18.50	.7283			
52	.0635		13	.1850		25/64	.3906	7/16-20	1 7/32	1.2188	1 3/8-6	M22 x 2.5	19.50	.7677			
51	.0670		3/16	.1875		X	.3970		1 1/4	1.2500		M22 x 1.5	20.50	.8071			
50	.0700	2-56,64	12	.1890		Y	.4040		1 19/64	1.2969	1 3/8-12						
49	.0730		11	.1910		13/32	.4062		1 11/32	1.3438	1 1/2-6	M24 x 3	21.00	.8268			
48	.0760		10	.1935		Z	.4130		1 3/8	1.3750		M24 x 2	22.00	.8661			
5/64	.0781		9	.1960		27/64	.4219	1/2-13	1 27/64	1.4219	1 1/2-12	M27 x 3	24.00	.9449			
47	.0785	3-48	8	.1990		7/16	.4375		1 1/2	1.5000		M27 x 2	25.00	.9843			
46	.0810		7	.2010	1/4-20	29/64	.4531	1/2-20									
45	.0820	3-56	13/64	.2031		15/32	.4688					M30 x 3.5	26.50	1.0433			
44	.0860		6	.2040		31/64	.4844	9/16-12				M30 x 2	28.00	1.1024			
43	.0890	4-40	5	.2055		1/2	.5000					M33 x 3.5	29.50	1.1614			
42	.0935	4-48	4	.2090		33/64	.5156	9/16-18				M33 x 2	31.00	1.2205			
3/32	.0938		3	.2130	1/4-28	17/32	.5312	5/8-11									
41	.0960		7/32	.2188		35/64	.5469					M36 x 4	32.00	1.2598			
40	.0980		2	.2210		9/16	.5625					M36 x 3	33.00	1.2992			
			1	.2280		37/64	.5781	5/8-18				M39 x 4	35.00	1.3780			
			LETTER SIZE DRILLS A	.2340								M39 x 3	36.00	1.4173			

**PIPE THREAD SIZES (NPSC)**

THREAD	DRILL	THREAD	DRILL
1/8-27	11/32	11/2-111/2	13/4
1/4-18	7/16	2-111/2	27/32
3/8-18	37/64	2 1/2-8	221/32
1/2-14	23/32	3-8	31/4
3/4-14	59/64	31/2-8	33/4
1-111/2	15/32	4-8	41/4
11/4-111/2	11/2		

1mm = .0394 inches  
°C = (°F-32) 5/9  
°F = (9/5 x °C) + 32

# GUIDE TO PLASTIC STOCK SHAPES

PLASTIC MATERIAL	SHAPE AVAILABILITY		MACHINABILITY	SERV TEMP	CHARACTERISTICS / ATTRIBUTES
	Rod Dia.	Sheet Thickness	Rating 1-10 1=Easy	Long/Short Degrees F	
ULTRACOMP UC200 ULTRACOMP UC300	Tubing Tubing	1/4 to 3 1/4 to 3	3 2	266/360 266/360	High Load/Impact-Vibration Resistant/Composite Lowest Friction/Chemical Resistant/High Load
ABS ACETAL/DELTRIN ACETRON	3/16 to 8 1/8 to 12 1/4 to 6	1/4 to 4 .010 to 4 1/4 to 2	4 1 1	140/210 195 180	General Purpose/Economical/Machinable Low Cost/Good Wear/FDA/USDA Filled Acetal/Machinable/Good Wear Resistant
ACRYLIC CELAZOLE/PBI CPVC	1/16 to 6 1 to 4-3/4 1/4 to 6	1/32 to 3 3/8 to 2 1/8 to 2	5 8 1	140/200 650/1000 180	Optically Clear/Colors/Machinable/Formable Highest Temp/Chemically Resistant/High PV Chemically Resistant/Weldable/Machinable
DELTRIN AF ERTALYTE/PET FEP	3/16 to 8 3/16 to 8 1/16 to 6	1/32 to 3 1/4 to 4 .005 to 3	1 1 3	185/300 210 400	PTFE Filled Acetal/Low Friction/Brown PET/Economical/Good Wear/FDA/White Fluoropolymer/Excellent Chemical Resistance
FLUOROSINT HALAR/ECTFE HYDEX 202/301	1/2 to 8-3/4 1/16 to 2-1/4 1/2 to 6	1/4 to 3 1/8 to 1 1/4 to 4	3 3 9	500 300 275	Family of Filled PTFE/High Stability/FDA Fluoropolymer/Excellent Chemical Resistance Rigid Urethane/Highest Impact/Low V
HYDEX 4101L HYDEX FGA HYDLAR ZF	1/4 to 6 1/2 to 4 1/4 to 5	3/8 to 2 3/8 to 2 1/4 to 2	1 1 5	245/250 185/300 230/300	PTFE Filled PBT/FDA/USDA/Low Friction/White Teflon Filled Delrin/FDA/USDA/Low Friction Aramid Fiber Filled Nylon/Wear Resistant/USDA/FDA
KYNAR/PVDF MICARTA C & L MICARTA G-10	1/4 to 10 1/32 to 10 1/32 to 5	1/4 to 4 1/32 to 8 005 to 5	2 8 10	122/230 257 284	Fluoropolymer/Excellent Chemical Resistance Phenolic Resin/Cloth Fabric Matrix/Laminate Epoxy Resin/Woven Fiberglass Matrix/Laminate
MICARTA G-11 MICARTA XXX NORYL EN265	1/32 to 3 1/32 to 2 3/8 to 8	.005 to 5 1/32 to 5 1/4 to 4	10 8 2	356 284 195/375	Silicone Resin/Woven Fiberglass Matrix/Laminate Phenolic Resin/Paper Matrix/Laminate PPO & Styrene Alloy/Good Creep Resistance
NYLATRON/EXTRUDED NYLATRON/MOLDED NYLON 66	1/32 to 2 2 to 38 1/32 to 6	.010 to 23 3/16 to 4 .010 to 3	1 1 1	200 200 210	Family of Filled Nylon Type 66/High Impact & Wear Family of Solid Lubricant Filled Nylon Type 6 Shapes Economical/Good Wear/High Impact Strength
PCTFE/KEL-F PEEK PFA/NEOFLOX	1/16 to 6 1/4 to 4 1/16 to 3	.005 to 2 1/4 to 2-1/2 .002 to 3	3 5 3	500 480 500	Chemical Resistant/Heat Resistant/High Temp Autoclavable/Chem & Steam Resistant/FDA/USDA/3A Chemical Resistant/Heat Resistant/High Temp
POLYCARBONATE POLYETHYLENE POLYIMIDE/MELDIN	1/32 to 15 1/32 to 18 1/8 to 4-3/4	1/32 to 4 .002 to 10 1/16 to 2	3 1 7	210/265 140/175 600	Good Machinability/Transparent/High Rigidity General Purpose/Economical/Many Shapes High Temp/Wear Resistance/High PV
POLYPROPYLENE POLYSULFONE/UDEL PTFE/TEFLON TAPE	1/4 to 16 3/16 to 8 1/32 to 12	.010 to 10 1/4 to 4 .001 to .250	1 1 3	160/230 300/340 550	Chemical Resistant/Weldable/General Purpose Autoclavable/Chemically Resistant/Heat Resistant Unfilled Teflon/Inert/High Temp/Insulator/White
PVC REXOLITE RULON 123	1/4 to 13-3/4 1/16 to 9 3/16 to 13	3/32 to 4 1/32 to 6 .010 to 2	1 3 3	150/165 212 550	Weldable/Economical/Formable/Machinable Crosslinked Polystyrene/High Frequency Dielectric Filled PTFE/FDA/USDA/High V/Inert/Black
RULON 142 RULON 488 RULON 641	N/A 3/16 to 12 3/16 to 12	.015 to 1/4 .015 to 1 .015 to 1	1 3 3	550 550 550	Slideways/Machine Ways/Expansion Supports Filled PTFE/High V/Inert/Dryer Bearings/Green Filled PTFE/FDA/USDA/High V/Inert/White
RULON J RULON LR/AR SILICONE TUBING	3/16 to 13 3/16 to 13 .025 to 4	.010 to 4 .010 to 4 N/A	3 5 N/A	550 550 350	Filled PTFE/Low Friction/Non Abrasive/Gold Filled PTFE/Good Strength/High V/Inert/Maroon FDA/High Purity/Vacuum/Chemical Resistance
TECHTRON PPS TEFLON/EXTRUDED TEFLON/GLASS FILLED	1/4 to 3 1/4 to 3 1/4 to 12	1/4 to 2 .001 to 1/4 1/4 to 4	4 3 5	425 550 550	Chemical Resistant/High Temp/High Strength Unfilled Teflon/Inert/High Temp/Insulator Filled PTFE/High V/High Temp/Chemical Resistant
TEFLON/MOLDED TEFLON/SHRINK TUBING TEFLON/TUBING	1 to 38 .034 to 12 .034 to 12	1/4 to 8 N/A N/A	3 N/A N/A	550 550 550	Unfilled Teflon/Inert/Large Shapes/High Temp Unfilled Teflon/Shrinkable/Roll Covers/Inert Unfilled Teflon/Spaghetti Tubing/Wire Gauge Sizes
TEFZEL/ETFE TFM TORLON 4203	1/16 to 3-3/4 1 to 12 3/32 to 2	.030 to 3 .010 to 4 3/16 to 1	3 3 5	300/350 500 500	Fluoropolymer/Excellent Chemical Resistance Fluoropolymer/Low Porosity/High Temperature High Temp/High Strength/Electrical Grade
TORLON 4301 UHMW UHMW/GLASS FILLED	1/4 to 2 1/4 to 10 1/2 to 4	3/16 to 1 .005 to 7 1/16 to 2	5 5 3	500 180 180	High Temp/High Strength/Bearing Grade High Abrasion Resistance/Low Friction/FDA Low Friction/Highest Abrasion Resistance
UHMW/OIL FILLED ULTEM 1000 ULTEM 2300 VHMW	1/4 to 8 1/32 to 8 1/4 to 8 N/A	1/8 to 2 .002 to 4 3/8 to 4 1/8 to 3/4	3 5 8 5	180 340 340 160	Lowest Friction/High Abrasion Resistance High Strength/Autoclavable/Chemical Resistance High Strength/Rigid/Autoclavable/Thermally Stable Low Friction/Abrasion Resistance/Economical