



THREADING THEORY.

SIZE	Equivalent, tomm	B S W			B S F			U N C			U N F		
		TPI	INCH	METRIC	TPI	Inch	Metric	TPI	Inch	Metric	TPI	Inch	Metric
NO.1	1.854	--	--	--	--	--	--	64	0.016	0.397	72	0.014	0.353
NO.2	2.184	--	--	--	--	--	--	56	0.018	0.464	64	0.016	0.397
NO.3	2.515	--	--	--	--	--	--	48	0.021	0.529	56	0.018	0.454
NO.4	2.845	--	--	--	--	--	--	40	0.025	0.635	48	0.021	0.529
NO.5	3.175	--	--	--	--	--	--	40	0.025	0.635	44	0.023	0.577
NO.6	3.505	--	--	--	--	--	--	32	0.031	0.794	40	0.025	0.635
NO.8	4.144	--	--	--	--	--	--	32	0.031	0.794	36	0.028	0.706
NO.10	4.824	--	--	--	--	--	--	24	0.041	1.068	32	0.031	0.794
NO.12	5.484	--	--	--	--	--	--	24	0.041	1.068	28	0.036	0.907
1/8"	3.175	40	0.025	0.635	--	--	--	--	--	--	--	--	--
3/16"	4.762	24	0.041	1.058	32	0.031	0.794	--	--	--	--	--	--
1/4"	6.350	20	0.050	1.270	26	0.038	0.977	20	0.050	1.270	28	0.036	0.907
5/16"	7.938	18	0.055	1.411	22	0.045	1.164	18	0.055	1.411	24	0.041	1.058
3/8"	9.525	16	0.062	1.588	20	0.050	1.270	16	0.062	1.588	24	0.041	1.058
7/16"	11.112	14	0.071	1.814	18	0.055	1.411	14	0.071	1.814	20	0.050	1.270
1/2"	12.700	12	0.083	2.117	16	0.062	1.588	13	0.077	1.964	20	0.050	1.270
9/16"	14.288	12	0.083	2.117	16	0.062	1.588	12	0.083	2.117	18	0.055	1.411
5/8"	15.875	11	0.091	2.309	14	0.071	1.814	11	0.091	2.309	18	0.055	1.411
11/16"	17.462	11	0.091	2.309	14	0.071	1.814	--	--	--	--	--	--
3/4"	19.050	10	0.100	2.540	12	0.083	2.117	10	0.100	2.540	14	0.062	1.588
7/8"	22.225	9	0.111	2.822	11	0.091	2.309	9	0.111	2.822	14	0.071	1.814
1"	25.400	8	0.125	3.175	10	0.100	2.540	8	0.125	3.175	12	0.083	2.117
1.1/8"	28.875	7	0.143	3.629	9	0.111	2.872	7	0.143	3.629	12	0.083	2.117
1.1/4"	31.750	7	0.143	3.629	9	0.111	2.872	7	0.143	3.629	12	0.083	2.117
1.3/8"	34.925	6	0.166	4.233	8	0.125	3.175	6	0.166	4.233	12	0.083	2.117
1.1/2"	38.100	6	0.166	4.233	8	0.125	3.175	6	0.166	4.233	12	0.083	2.117
1.5/8"	41.275	5	0.200	5.080	8	0.125	3.175	--	--	--	--	--	--
1.3/4"	44.450	5	0.200	5.080	7	0.143	3.629	5	0.200	5.080	--	--	--
2"	50.800	4.5	0.222	5.644	7	0.143	3.629	4.5	0.222	5.644	--	--	--
2.1/4"	57.150	4	0.250	6.350	6	0.166	4.233	4.5	0.222	5.644	--	--	--
2.1/2"	63.500	4	0.250	6.350	6	0.166	4.233	4	0.250	6.350	--	--	--
2.3/4"	69.850	3.5	0.285	7.257	6	0.166	4.233	4	0.250	6.350	--	--	--
3"	76.200	3.5	0.285	7.257	5	0.200	5.080	4	0.250	6.350	--	--	--
3.1/2"	88.900	3.25	0.308	7.832	--	--	--	--	--	--	--	--	--
4"	101.600	3	0.333	8.468	--	--	--	--	--	--	--	--	--
5"	127.000	2.75	0.363	9.220	--	--	--	--	--	--	--	--	--
6"	152.400	2.5	0.400	10.160	--	--	--	--	--	--	--	--	--

All Metric Dimensions are in Millimeters. No. 1 to No. 12 are American NC & NF Thread.

As per ANSI Specification, TPI for Dia 1/4" to 7/8" remains same as UNC TPI, where as TPI for 1" to 4" Dia sizes Start/Not to all 8 UN.

THREADING THEORY		IN PITCH & TPI 1mm TO 64 mm Dia				
Basic dia	Pitch	TPI	Basic dia	Pitch	TPI	
1 mm	0.25	101.6	27 mm	3	8.4	
1.4 mm	0.3	84.6	30 mm	3.5	7.2	
1.6 mm	0.35	72.6	33 mm	3.5	7.2	
1.8 mm	0.35	72.6	36 mm	4	6.3	
2	0.4	63.5	39 mm	4	6.3	
2.2 mm	0.45	56.4	42 mm	4.5	5.6	
2.3 mm	0.45	56.4	45 mm	4.5	5.6	
2.5 mm	0.45	56.4	48 mm	5	5.1	
2.6 mm	0.45	56.4	52 mm	5	5.1	
3 mm	0.5	50.8	56 mm	5.5	4.6	
3.5 mm	0.6	42.3	60 mm	5.5	4.6	
4 mm	0.7	36.2	64 mm	6	4.2	
4.5 mm	0.75	33.8				
5 mm	0.8	31.7				
6 mm	1	25.4				
7 mm	1	25.4				
8 mm	1.25	20.3				
9 mm	1.25	20.3				
10 mm	1.5	16.9				
11 mm	1.5	16.9				
12 mm	1.75	14.5				
14 mm	2	12.7				
16 mm	2	12.7				
18 mm	2.5	10.1				
20 mm	2.5	10.1				
22 mm	2.5	10.1				
24 mm	3	8.4				
25 mm	3	8.4				