CAPS, ZANCOS & HOLDERS

ANGULO PARA CONOS MORSE

TABLA 1

CONO MORSE	CONO 1/X
MT # 0	1 / 19.212
MT # 1	1 / 20.047
MT # 2	1 / 20.020
MT # 3	1 / 19.922
MT # 4	1 / 19.254

ANGULO PARA OTROS CONOS COMUNES

CONO 1/X
1 / 5
1 / 9.6
1 / 9.7
1 / 10
1 / 11.45
1 / 15
1 / 16
1 / 20

NPT - SIZE TABLE

Nominal pipe size	Threads per inch	Thread pitch		Pipe outside diameter, OD	
		(mm)	(in)	(mm)	(inch)
1/16	27	0.941	0.037	7.95	0.313
1/8	27	0.941	0.037	10.287	0.405
1/4	18	1.411	0.056	13.716	0.54
3/8	18	1.411	0.056	17.145	0.675
1/2	14	1.814	0.071	21.336	0.84
3/4	14	1.814	0.071	26.67	1.05
1	11 1/2	2.209	0.087	33.401	1.315
1 1/4	11 1/2	2.209	0.087	42.164	1.66
1 1/2	11 1/2	2.209	0.087	48.26	1.9
2	11 1/2	2.209	0.087	60.325	2.375
2 1/2	8	3.175	0.125	73.025	2.875
3	8	3.175	0.125	88.9	3.5
3 1/2	8	3.175	0.125	101.6	4
4	8	3.175	0.125	114.3	4.5
4 1/2	8	3.175	0.125	127	5
5	8	3.175	0.125	141.3002	5.563
6	8	3.175	0.125	168.275	6.625
8	8	3.175	0.125	219.075	8.625
10	8	3.175	0.125	273.05	10.75
12	8	3.175	0.125	323.85	12.75
14	8	3.175	0.125	355.6	14
16	8	3.175	0.125	406.4	16
18	8	3.175	0.125	457.2	18
20	8	3.175	0.125	508	20
24	8	3.175	0.125	609.6	24

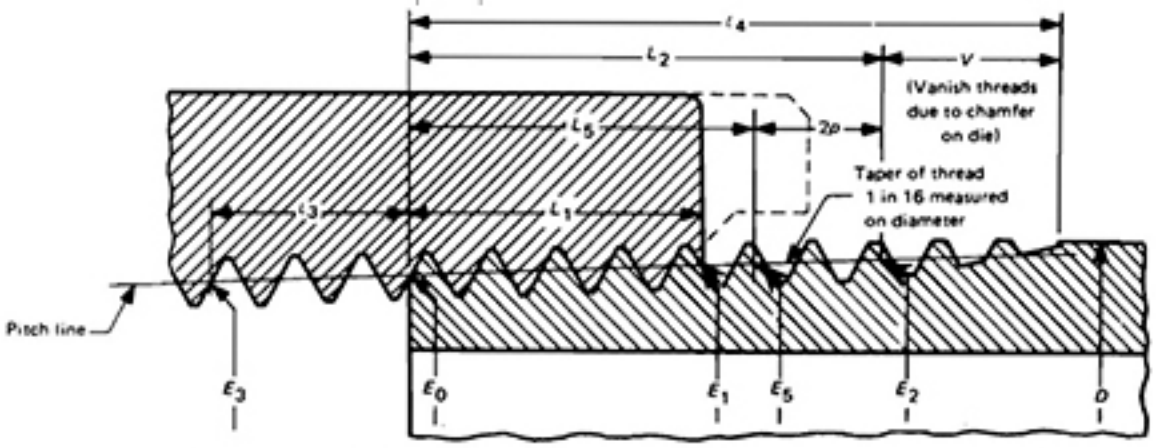

TABLE 2 BASIC DIMENSIONS OF AMERICAN NATIONAL STANDARD TAPER PIPE THREAD, NPT[1] (CONT'D)

Nominal Pipe Size	Length, L_1 Plane to L_2 Plane External Thread ($L_2 - L_1$)		Wrench Makeup Length for Internal Thread[7]			Vanish Thread (V)		Overall[8] Length External Thread (L_4)	Nominal Complete External Threads[5]		Height of Thread (h)	Increase in Diam./ Thread (0.0625/n)	Basic[6] Minor Diam. at Small End of Pipe (K_0)
			Length (L_3)		Diam. (E_3)				Length (L_5)	Diam. (E_5)			
	in.	Thread	in.	Thread		in.	Thread						
1	12	13	14	15	16	17	18	19	20	21	22	23	24
1/16	0.1011	2.73	0.1111	3	0.26424	0.1285	3.47	0.3896	0.1870	0.28287	0.02963	0.00231	0.2416
1/8	0.1024	2.76	0.1111	3	0.35656	0.1285	3.47	0.3924	0.1898	0.37537	0.02963	0.00231	0.3339
1/4	0.1740	3.13	0.1667	3	0.46697	0.1928	3.47	0.5946	0.2907	0.49556	0.04444	0.00347	0.4329
3/8	0.1678	3.02	0.1667	3	0.60160	0.1928	3.47	0.6006	0.2967	0.63056	0.04444	0.00347	0.5676
1/2	0.2137	2.99	0.2143	3	0.74504	0.2478	3.47	0.7815	0.3909	0.78286	0.05714	0.00446	0.7013
3/4	0.2067	2.89	0.2143	3	0.95429	0.2478	3.47	0.7935	0.4029	0.99286	0.05714	0.00446	0.9105
1	0.2828	3.25	0.2609	3	1.19733	0.3017	3.47	0.9845	0.5089	1.24543	0.06957	0.00543	1.1441
1 1/4	0.2868	3.30	0.2609	3	1.54083	0.3017	3.47	1.0085	0.5329	1.59043	0.06957	0.00543	1.4876
1 1/2	0.3035	3.49	0.2609	3	1.77978	0.3017	3.47	1.0252	0.5496	1.83043	0.06957	0.00543	1.7265
2	0.3205	3.69	0.2609	3	2.25272	0.3017	3.47	1.0582	0.5826	2.30543	0.06957	0.00543	2.1995
2 1/2	0.4555	3.64	0.2500	2	2.70391	0.4337	3.47	1.5712	0.8875	2.77500	0.100000	0.00781	2.6195
3	0.4340	3.47	0.2500	2	3.32500	0.4337	3.47	1.6337	0.9500	3.40000	0.100000	0.00781	3.2406
3 1/2	0.4290	3.43	0.2500	2	3.82188	0.4337	3.47	1.6837	1.0000	3.90000	0.100000	0.00781	3.7375
4	0.4560	3.65	0.2500	2	4.31875	0.4337	3.47	1.7337	1.0500	4.40000	0.100000	0.00781	4.2344
5	0.4693	3.75	0.2500	2	5.37511	0.4337	3.47	1.8400	1.1563	5.46300	0.100000	0.00781	5.2907
6	0.5545	4.44	0.2500	2	6.43047	0.4337	3.47	1.9462	1.2625	6.52500	0.100000	0.00781	6.3461
8	0.6495	5.20	0.2500	2	8.41797	0.4337	3.47	2.1462	1.4625	8.52500	0.100000	0.00781	8.3336
10	0.7150	5.72	0.2500	2	10.52969	0.4337	3.47	2.3587	1.6750	10.65000	0.100000	0.00781	10.4453
12	0.7650	6.12	0.2500	2	12.51719	0.4337	3.47	2.5587	1.8750	12.65000	0.100000	0.00781	12.4328
14 O.D.	0.6880	5.50	0.2500	2	13.75938	0.4337	3.47	2.6837	2.0000	13.90000	0.100000	0.00781	13.6750
16 O.D.	0.6380	5.10	0.2500	2	15.74688	0.4337	3.47	2.8837	2.2000	15.90000	0.100000	0.00781	15.6625
18 O.D.	0.6500	5.20	0.2500	2	17.73438	0.4337	3.47	3.0837	2.4000	17.90000	0.100000	0.00781	17.6500
20 O.D.	0.7250	5.80	0.2500	2	19.72188	0.4337	3.47	3.2837	2.6000	19.90000	0.100000	0.00781	19.6375
24 O.D.	0.8750	7.00	0.2500	2	23.69688	0.4337	3.47	3.6837	3.0000	23.90000	0.100000	0.00781	23.6125

(5) The length L_5 from the end of the pipe determines the plane beyond which the thread form is incomplete at the crest. The next two threads are complete at the root. At this plane the cone formed by the crests of the thread intersects the cylinder forming the external surface of the pipe. $L_5 = L_2 - 2p$.

(6) Given as information for use in selecting tap drills. (See Appendix).

(7) Military Specification MIL-P-7105 gives the wrench makeup as three threads for sizes 3 and smaller. The E_3 dimensions are as follows: Nominal pipe size 2½ = 2.69609 and size 3 = 3.31719; sizes 2 and smaller same as above, col. 16.

(8) Reference dimension.