

HeliCoil® Tapping Data – Inch

The **minimum** tapping depths shown below (Dimension C) are the minimum for countersunk holes and an insert set-down of 1 – 1/2 pitch maximum. The calculation for Dimension "C" is:

C is equal to insert nominal length + 1 Pitch.

The tapped hole must be held within the stated pitch diameter limits for the required class of fit for the installed Heli-Coil insert.

When anodize, Iridite or other finishes are used, all tapped hole dimensions must be met after the finishes are applied.

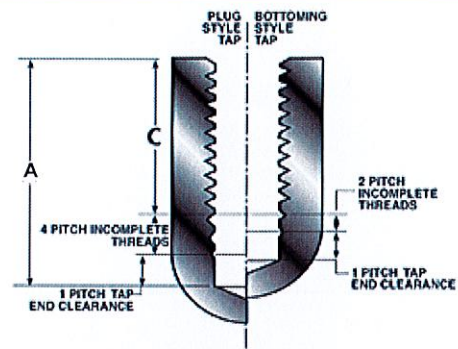


TABLE VII – INCH TAPPED HOLE DIMENSIONS

Nominal Thread Size	Countersink "M" Diameter (120° ±5° included angle)		Pitch Diameter			"C" MINIMUM TAPPING DEPTH					Minor Diameter (after tapping)		Tap Major Dia. Max.	Thread Pitch
	Min.	Max.	Min.	3B Max.	2B Max.	INSERT LENGTH					Min.	Max.		
						1 Dia.	1-1/2 Dia.	2 Dia.	2-1/2 Dia.	3 Dia.				
UNIFIED COARSE THREAD (UNC)														
1 (.073)-64	.085	.10	.0832	.0843	.0850	.090	.125	.160	.200	.235	.0764	.0823	.0958	.01563
2 (.086)-56	.09	.11	.0976	.0989	.0996	.100	.150	.190	.230	.280	.0899	.0961	.1117	.01786
3 (.099)-48	.11	.14	.1126	.1140	.1148	.120	.170	.220	.270	.320	.1036	.1104	.1289	.02083
4 (.112)-40	.14	.17	.1283	.1299	.1308	.140	.190	.250	.310	.360	.1175	.1252	.1473	.02500
5 (.125)-40	.16	.19	.1413	.1430	.1438	.150	.210	.280	.340	.400	.1305	.1373	.1603	.02500
6 (.138)-32	.18	.21	.1583	.1601	.1611	.170	.240	.310	.380	.450	.1448	.1527	.1817	.03125
8 (.164)-32	.20	.23	.1843	.1862	.1872	.200	.280	.360	.440	.520	.1708	.1781	.2077	.03125
10 (.190)-24	.24	.27	.2170	.2192	.2203	.230	.330	.420	.520	.610	.1990	.2080	.2475	.04167
12 (.216)-24	.26	.29	.2430	.2453	.2464	.260	.370	.470	.580	.690	.2250	.2340	.2735	.04167
1/4 (.2500)-20	.31	.34	.2825	.2851	.2864	.300	.430	.550	.680	.800	.2608	.2704	.3187	.05000
5/16 (.3125)-18	.38	.41	.3486	.3515	.3529	.370	.530	.680	.840	.990	.3245	.3342	.3884	.05556
3/8 (.3750)-16	.45	.48	.4156	.4189	.4203	.440	.630	.810	1.000	1.190	.3885	.3987	.4602	.06250
7/16 (.4375)-14	.52	.55	.4839	.4875	.4890	.510	.730	.950	1.170	1.380	.4530	.4639	.5343	.07143
1/2 (.5000)-13	.59	.62	.5499	.5537	.5554	.580	.830	1.080	1.330	1.580	.5166	.5273	.6042	.07692
9/16 (.5625)-12	.66	.69	.6167	.6208	.6225	.650	.930	1.210	1.490	1.770	.5806	.5918	.6751	.08333
5/8 (.6250)-11	.73	.76	.6841	.6885	.6903	.720	1.030	1.340	1.650	1.970	.6447	.6564	.7477	.09091
3/4 (.7500)-10	.87	.90	.8149	.8196	.8216	.850	1.230	1.600	1.980	2.350	.7716	.7838	.8850	.10000
7/8 (.8750)-9	1.00	1.03	.9471	.9522	.9543	.990	1.420	1.860	2.300	2.740	.8990	.9119	1.0247	.11111
1 (1.000)-8	1.14	1.17	1.0812	1.0868	1.0890	1.130	1.630	2.130	2.630	3.130	1.0271	1.0421	1.1681	.12500
1-1/8 (1.1250)-7	1.29	1.32	1.2178	1.2239	1.2262	1.270	1.830	2.390	2.960	3.520	1.1559	1.1730	1.3171	.14286
1-1/4 (1.2500)-7	1.41	1.44	1.3428	1.3490	1.3514	1.390	2.020	2.640	3.270	3.890	1.2809	1.2980	1.4421	.14286
1-3/8 (1.3750)-6	1.56	1.59	1.4832	1.4900	1.4926	1.540	2.230	2.920	3.600	4.290	1.4110	1.4310	1.5982	.16667
1-1/2 (1.5000)-6	1.69	1.72	1.6082	1.6151	1.6177	1.670	2.420	3.170	3.920	4.670	1.5360	1.5560	1.7232	.16667

UNIFIED FINE THREAD (UNF)

2 (.086)-64	.09	.11	.0962	.0974	.0981	.100	.145	.190	.230	.275	.0894	.0947	.1088	.01563
3 (.099)-56	.11	.14	.1106	.1119	.1126	.120	.170	.220	.270	.310	.1029	.1086	.1247	.01786
4 (.112)-48	.14	.17	.1256	.1271	.1279	.130	.190	.240	.300	.360	.1166	.1229	.1419	.02083
6 (.138)-40	.17	.20	.1543	.1560	.1569	.160	.230	.300	.370	.440	.1435	.1503	.1733	.02500
8 (.164)-36	.20	.23	.1821	.1840	.1849	.190	.270	.360	.440	.520	.1701	.1771	.2032	.02778
10 (.190)-32	.23	.26	.2103	.2123	.2133	.220	.320	.410	.510	.600	.1968	.2041	.2337	.03125
1/4 (.2500)-28	.29	.32	.2732	.2754	.2765	.290	.410	.540	.660	.790	.2577	.2646	.2995	.03571
5/16 (.3125)-24	.36	.39	.3395	.3421	.3433	.350	.510	.670	.820	.980	.3215	.3288	.3700	.04167
3/8 (.3750)-24	.42	.45	.4020	.4047	.4059	.420	.600	.790	.980	1.170	.3840	.3910	.4325	.04167
7/16 (.4375)-20	.50	.53	.4700	.4731	.4744	.490	.710	.930	1.140	1.360	.4483	.4561	.5062	.05000
1/2 (.5000)-20	.56	.59	.5325	.5357	.5371	.550	.800	1.050	1.300	1.550	.5108	.5186	.5687	.05000
9/16 (.5625)-18	.63	.66	.5986	.6020	.6035	.620	.900	1.180	1.460	1.740	.5745	.5826	.6384	.05556
5/8 (.6250)-18	.69	.72	.6611	.6646	.6661	.680	.990	1.310	1.620	1.930	.6370	.6451	.7009	.05556
3/4 (.7500)-16	.82	.85	.7906	.7945	.7961	.810	1.190	1.560	1.940	2.310	.7635	.7720	.8352	.06250
7/8 (.8750)-14	.96	.99	.9214	.9257	.9274	.950	1.380	1.820	2.260	2.700	.8905	.8994	.9718	.07143
1 (1.000)-14	1.08	1.11	1.0464	1.0508	1.0527	1.070	1.570	2.070	2.570	3.070	1.0155	1.0243	1.0968	.07143
1 (1.000)-12	1.10	1.13	1.0542	1.0589	1.0608	1.080	1.580	2.080	2.580	3.080	1.0181	1.0281	1.1126	.08333
1-1/8 (1.1250)-12	1.22	1.25	1.1792	1.1841	1.1860	1.210	1.770	2.330	2.900	3.460	1.1431	1.1531	1.2376	.08333
1-1/4 (1.2500)-12	1.35	1.38	1.3042	1.3092	1.3112	1.330	1.960	2.580	3.210	3.830	1.2681	1.2781	1.3626	.08333
1-3/8 (1.3750)-12	1.47	1.50	1.4292	1.4343	1.4364	1.460	2.150	2.830	3.520	4.210	1.3931	1.4031	1.4876	.08333
1-1/2 (1.5000)-12	1.60	1.63	1.5542	1.5595	1.5615	1.580	2.330	3.080	3.830	4.580	1.5181	1.5281	1.6126	.08333

9.87 mm