

ENGINEERING DATA

TAPS & DIES

Tap Recommendations for Classes of Thread

Unified and American National Screw Threads

Nominal Size	T.P.I. NC UNC	T.P.I. NF UNF	RECOMMENDED TAP FOR CLASS OF THREAD				PITCH DIAMETER LIMITS FOR CLASS OF THREAD				
			Class 2	Class 3	Class 2B	Class 3B	Min. All Classes (Basic)	Max. Class 2	Max. Class 3	Max. Class 2B	Max. Class 3B
0	—	80	GH1	GH1	GH2	GH1	.0519	.0536	.0532	.0542	.0536
1	64	—	GH1	GH1	GH2	GH1	.0629	.0648	.0643	.0655	.0648
1	—	72	GH1	GH1	GH2	GH1	.0640	.0658	.0653	.0665	.0659
2	56	—	GH1	GH1	GH2	GH1	.0744	.0764	.0759	.0772	.0765
2	—	64	GH1	GH1	GH2	GH1	.0759	.0778	.0773	.0786	.0779
3	48	—	GH1	GH1	GH2	GH1	.0855	.0877	.0871	.0885	.0877
3	—	56	GH1	GH1	GH2	GH1	.0874	.0894	.0889	.0902	.0895
4	40	—	GH2	GH1	GH2	GH2	.0958	.0982	.0975	.0991	.0982
4	—	48	GH1	GH1	GH2	GH1	.0985	.1007	.1001	.1016	.1008
5	40	—	GH2	GH1	GH2	GH2	.1088	.1112	.1105	.1121	.1113
5	—	44	GH1	GH1	GH2	GH1	.1102	.1125	.1118	.1134	.1126
6	32	—	GH2	GH1	GH3	GH2	.1177	.1204	.1196	.1214	.1204
6	—	40	GH2	GH1	GH2	GH2	.1218	.1242	.1235	.1252	.1243
8	32	—	GH2	GH1	GH3	GH2	.1437	.1464	.1456	.1475	.1465
8	—	36	GH2	GH1	GH2	GH2	.1460	.1485	.1478	.1496	.1487
10	24	—	GH3	GH1	GH3	GH3	.1629	.1662	.1653	.1672	.1661
10	—	32	GH2	GH1	GH3	GH2	.1697	.1724	.1716	.1736	.1726
12	24	—	GH3	GH1	GH3	GH3	.1889	.1922	.1913	.1933	.1922
12	—	28	GH3	GH1	GH3	GH3	.1928	.1959	.1950	.1970	.1959
1/4	20	—	GH3	GH2	GH5	GH3	.2175	.2211	.2201	.2223	.2211
1/4	—	28	GH3	GH1	GH4	GH3	.2268	.2299	.2290	.2311	.2300
5/16	18	—	GH3	GH2	GH5	GH3	.2764	.2805	.2794	.2817	.2803
5/16	—	24	GH3	GH1	GH4	GH3	.2854	.2887	.2878	.2902	.2890
3/8	16	—	GH3	GH2	GH5	GH3	.3344	.3389	.3376	.3401	.3387
3/8	—	24	GH3	GH1	GH4	GH3	.3479	.3512	.3503	.3528	.3516
7/16	14	—	GH5	GH3	GH5	GH3	.3911	.3960	.3947	.3972	.3957
7/16	—	20	GH3	GH1	GH5	GH3	.4050	.4086	.4076	.4104	.4091
1/2	13	—	GH5	GH3	GH5	GH3	.4500	.4552	.4537	.4565	.4548
1/2	—	20	GH3	GH1	GH5	GH3	.4675	.4711	.4701	.4731	.4717
9/16	12	—	GH5	GH3	GH5	GH3	.5084	.5140	.5124	.5152	.5135
9/16	—	18	GH3	GH2	GH5	GH3	.5264	.5305	.5294	.5323	.5308
5/8	11	—	GH5	GH3	GH5	GH3	.5660	.5719	.5702	.5732	.5714
5/8	—	18	GH3	GH2	GH5	GH3	.5889	.5930	.5919	.5949	.5934
3/4	10	—	GH5	GH3	GH5	GH5	.6850	.6914	.6895	.6927	.6907
3/4	—	16	GH3	GH2	GH5	GH3	.7094	.7139	.7126	.7159	.7143
7/8	9	—	GH6	GH4	GH6	GH4	.8028	.8098	.8077	.8110	.8089
7/8	—	14	GH4	GH2	GH6	GH4	.8286	.8335	.8322	.8356	.8339
1	8	—	GH6	GH4	GH6	GH4	.9188	.9264	.9242	.9276	.9254
1	—	12	GH4	GH2	GH6	GH4	.9459	.9515	.9499	.9535	.9516
1	—	14*	GH4	GH2	GH6	GH4	.9536	.9585	.9572	.9609	.9590
1 1/8	7	—	GH8	GH4	GH8	GH4	1.0322	1.0407	1.0381	1.0416	1.0393
1 1/8	—	12	GH4	GH4	GH6	GH4	1.0709	1.0765	1.0749	1.0787	1.0768
1 1/4	7	—	GH8	GH4	GH8	GH4	1.1572	1.1657	1.1631	1.1668	1.1644
1 1/4	—	12	GH4	GH4	GH6	GH4	1.1959	1.2015	1.1999	1.2039	1.2019
1 3/8	6	—	GH8	GH4	GH8	GH4	1.2667	1.2768	1.2738	1.2771	1.2745
1 3/8	—	12	GH4	GH4	GH6	GH4	1.3209	1.3265	1.3249	1.3291	1.3270
1 1/2	6	—	GH8	GH4	GH8	GH4	1.3917	1.4018	1.3988	1.4022	1.3996
1 1/2	—	12	GH4	GH4	GH6	GH4	1.4459	1.4515	1.4499	1.4542	1.4522

*UN

These are general tap recommendations to produce the Class of Thread indicated in average materials when used with reasonable care. However, if the tap specified does not give a satisfactory gage fit in the work, please consult the factory.