

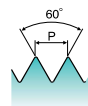
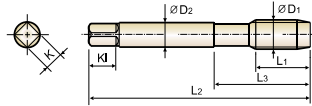
YG TAP STEEL

D3/ E0 SERIES

Spiral Flute Tap Modified Bottoming Style for Steels



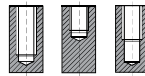
ANSI



A variety of H Limit

Material groups: **VG** HSS-E UNC UNF USCTI 302A 2P-3P Steam Oxide Hardslick R45 p.B148

Thread Depth / Hole Type 2.5xD



Unit : Inch

Size	T.P.I	EDP No.		Limit	Overall Length L2	Thread Length L1	Neck Length L3	Shank Diameter D2	Square Size K	Square Length KI	No. of Flute
		Steam Oxide	Hardslick								
#2 - 56UNC		D3082	E0082	H2	1.752	.157	.433	.141	.110	.190	2
#3 - 48UNC		D3122	E0122	H2	1.811	.197	.492	.141	.110	.190	2
#4 - 40UNC		D3162	E0162	H2	1.874	.236	.563	.141	.110	.190	2
#4 - 40UNC		D3163	E0163	H3	1.874	.236	.563	.141	.110	.190	2
#4 - 40UNC		D3164	E0164	H4	1.874	.236	.563	.141	.110	.190	2
#4 - 40UNC		D3165	E0165	H5	1.874	.236	.563	.141	.110	.190	2
#4 - 48UNF		D3182	E0182	H2	1.874	.236	.563	.141	.110	.190	2
#5 - 40UNC		D3202	E0202	H2	1.937	.236	.626	.141	.110	.190	3
#6 - 32UNC		D3242	E0242	H2	2.000	.276	.689	.141	.110	.190	3
#6 - 32UNC		D3243	E0243	H3	2.000	.276	.689	.141	.110	.190	3
#6 - 32UNC		D3245	E0245	H5	2.000	.276	.689	.141	.110	.190	3
#6 - 32UNC		D3247	E0247	H7	2.000	.276	.689	.141	.110	.190	3
#6 - 32UNC		D324A	E024A	H11	2.000	.276	.689	.141	.110	.190	3
#6 - 40UNF		D3262	E0262	H2	2.000	.276	.689	.141	.110	.190	3
#8 - 32UNC		D3282	E0282	H2	2.126	.276	.752	.168	.131	.250	3
#8 - 32UNC		D3283	E0283	H3	2.126	.276	.752	.168	.131	.250	3
#8 - 32UNC		D3285	E0285	H5	2.126	.276	.752	.168	.131	.250	3
#8 - 32UNC		D3287	E0287	H7	2.126	.276	.752	.168	.131	.250	3
#8 - 32UNC		D328A	E028A	H11	2.126	.276	.752	.168	.131	.250	3
#10 - 24UNC		D3323	E0323	H3	2.374	.354	.906	.194	.152	.250	3
#10 - 24UNC		D3325	E0325	H5	2.374	.354	.906	.194	.152	.250	3
#10 - 24UNC		D332A	E032A	H11	2.374	.354	.906	.194	.152	.250	3
#10 - 32UNF		D3342	E0342	H2	2.374	.276	.906	.194	.152	.250	3
#10 - 32UNF		D3343	E0343	H3	2.374	.276	.906	.194	.152	.250	3
#10 - 32UNF		D3345	E0345	H5	2.374	.276	.906	.194	.152	.250	3
#10 - 32UNF		D3347	E0347	H7	2.374	.276	.906	.194	.152	.250	3

▶ Bright Finish Available: D4 Series

▶ NEXT PAGE

◎ : Excellent ○ : Good

ISO	P										M					K					H																								
	Non-alloy steel					Low alloy steel					High alloyed steel and tool steel					Stainless steel		Grey cast iron			Nodular cast iron		Malleable cast iron																						
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
HRC	13	25	28	32	32	10	29	32	38	15	35	15	23	10	10	26	3	25	18	21	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230					
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

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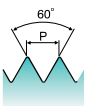
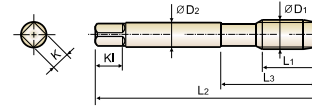
YG TAP STEEL

D3/ E0 SERIES

Spiral Flute Tap Modified Bottoming Style for Steels



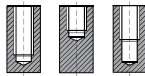
ANSI



A variety of H Limit

Material groups: **VG** HSS-E UNC UNF USCTI 302A 2P-3P Steam Oxide Hardslick R45 p.B148

Thread Depth / Hole Type 2.5xD



Unit : Inch

Size	T.P.I	EDP No.		Limit	Overall Length L2	Thread Length L1	Neck Length L3	Shank Diameter D2	Square Size K	Square Length KI	No. of Flute
		Steam Oxide	Hardslick								
#10 - 32UNF		D334A	E034A	H11	2.374	.276	.906	.194	.152	.250	3
#12 - 24UNC		D3363	E0363	H3	2.374	.354	.906	.220	.165	.280	3
#12 - 28UNF		D3383	E0383	H3	2.374	.276	.906	.220	.165	.280	3
1/4 - 20UNC		D3402	E0402	H2	2.500	.433	1.000	.255	.191	.310	3
1/4 - 20UNC		D3403	E0403	H3	2.500	.433	1.000	.255	.191	.310	3
1/4 - 20UNC		D3405	E0405	H5	2.500	.433	1.000	.255	.191	.310	3
1/4 - 20UNC		D3407	E0407	H7	2.500	.433	1.000	.255	.191	.310	3
1/4 - 20UNC		D340A	E040A	H11	2.500	.433	1.000	.255	.191	.310	3
1/4 - 28UNF		D3422	E0422	H2	2.500	.354	1.000	.255	.191	.310	3
1/4 - 28UNF		D3423	E0423	H3	2.500	.354	1.000	.255	.191	.310	3
1/4 - 28UNF		D3424	E0424	H4	2.500	.354	1.000	.255	.191	.310	3
1/4 - 28UNF		D3425	E0425	H5	2.500	.354	1.000	.255	.191	.310	3
1/4 - 28UNF		D3427	E0427	H7	2.500	.354	1.000	.255	.191	.310	3
1/4 - 28UNF		D342A	E042A	H11	2.500	.354	1.000	.255	.191	.310	3
5/16 - 18UNC		D3442	E0442	H2	2.720	.472	1.126	.318	.238	.380	3
5/16 - 18UNC		D3443	E0443	H3	2.720	.472	1.126	.318	.238	.380	3
5/16 - 18UNC		D3445	E0445	H5	2.720	.472	1.126	.318	.238	.380	3
5/16 - 18UNC		D3447	E0447	H7	2.720	.472	1.126	.318	.238	.380	3
5/16 - 18UNC		D344A	E044A	H11	2.720	.472	1.126	.318	.238	.380	3
5/16 - 24UNF		D3462	E0462	H2	2.720	.394	1.126	.318	.238	.380	3
5/16 - 24UNF		D3463	E0463	H3	2.720	.394	1.126	.318	.238	.380	3
5/16 - 24UNF		D3464	E0464	H4	2.720	.394	1.126	.318	.238	.380	3
5/16 - 24UNF		D3465	E0465	H5	2.720	.394	1.126	.318	.238	.380	3
5/16 - 24UNF		D3466	E0466	H6	2.720	.394	1.126	.318	.238	.380	3
5/16 - 24UNF		D3467	E0467	H7	2.720	.394	1.126	.318	.238	.380	3
5/16 - 24UNF		D346A	E046A	H11	2.720	.394	1.126	.318	.238	.380	3

▶ Bright Finish Available: D4 Series

▶ NEXT PAGE

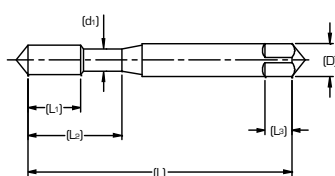
◎ : Excellent ○ : Good

ISO	P										M					K					H																								
	Non-alloy steel					Low alloy steel					High alloyed steel and tool steel					Stainless steel		Grey cast iron			Nodular cast iron		Malleable cast iron																						
Material Description	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
HRC	13	25	28	32	32	10	29	32	38	15	35	15	23	10	10	26	3	25	18	21	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230					
Recommended	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

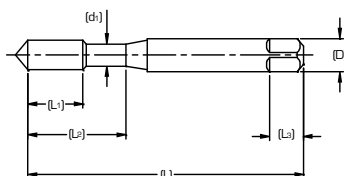
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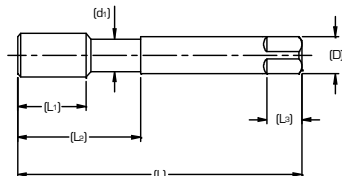
2 MODI TAP BLANK DIMENSION



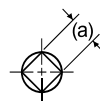
Blank Design (1)



Blank Design (2)



Blank Design (3)



Unified Tap Blank

Nominal Size	Overall Length (L)	Thread Length (L ₁)		Length to neck (L ₂)		Shank Diameter (D)	Neck Diameter (d ₁)	Square Length (L ₃)	Square Size (a)	Blank Design No.
		SF	SP	SF	SP					
#2	1.75	.157	.256	.433		.141	.061	.19	.110	1
#3	1.81	.197	.295	.492		.141	.069	.19	.110	1
#4	1.88	.236	.335	.563		.141	.077	.19	.110	1
#5	1.94	.236	.374	.626		.141	.090	.19	.110	1
#6	2.00	.276	.413	.689		.141	.094	.19	.110	1
#8	2.13	.276	.453	.752		.168	.120	.25	.131	1
#10-24	2.38	.354	.531	.906		.194	.131	.25	.152	1
#10-32		.276					.146			1
#12-24	2.38	.354	.571	.906		.220	.157	.28	.165	1
#12-28		.276					.166			1
1/4-20	2.50	.433	.591	1.000		.255	.180	.31	.191	2
1/4-28		.354					.200			2
5/16-18	2.72	.472	.669	1.126		.318	.234	.38	.238	2
5/16-24		.394					.254			2
3/8-16	2.94	.551	.748	1.252		.381	.287	.44	.286	2
3/8-24		.394					.316			2
7/16-14	3.16	.591	.866	1.850	1.437	.323	.311	.41	.242	3
7/16-20		.472								.323
1/2-13	3.38	.630	.984	2.067	1.657	.367	.354	.44	.275	3
1/2-20		.472								.367
9/16-12	3.59	.709	.984	2.067	1.657	.429	.417	.50	.322	3
9/16-18		.512								.429
5/8-11	3.81	.748	1.083	2.205	1.811	.480	.469	.56	.360	3
5/8-18		.512								.480
3/4-10	4.25	.827	1.201	2.480	2.000	.590	.577	.69	.442	3
3/4-10		.591								.590
7/8-9	4.69	.827	1.339	2.815	2.220	.697	.685	.75	.523	3
7/8-14		.709								.697
1-8	5.13	.984	1.496	3.091	2.500	.800	.787	.81	.600	3
1-12		.709								.800
1-1/8-7	5.44	1.024	1.535	3.15	2.563	.896	.878	.88	.672	3
1-1/8-12		.787								.896
1-1/4-7	5.75	1.024	1.535	3.15	2.563	1.021	1.002	1.00	.766	3
1-1/4-12		.787								1.021
1-3/8-6	6.06	1.181	1.791	3.583	3.000	1.108	1.089	1.06	.831	3
1-3/8-12		.866								1.108
1-1/2-6	6.38	1.181	1.791	3.583	3.000	1.233	1.213	1.13	.925	3
1-1/2-12		.866								1.233

*SF : Spiral Fluted Taps

*SP : Spiral Pointed Taps



TAP RECOMMENDATIONS FOR CLASSES OF THREAD - INCH

Internal Screw Thread Classes and Tap Recommendations

Size	Threads per Inch		Recommended Tap for Class of Thread				Pitch Diameter Limits for Class of Thread				
	UNC	UNF	Unified Class of Thread		American National Class of Thread		Min. All Class (Basic)	Unified Class of Thread		American National Class of Thread	
			Class 2	Class 3	Class 2B	Class 3B		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	.8890	.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	GH3	.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

The above recommended taps normally 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, a choice of some other limit tap will be necessary.

15 TAP DRILL SIZES - UNIFIED THREAD

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
#0	-	80	-	-	.0465	.0514	.0514	.0470	.0478	.0486	.0494	.0503
#1	64	-	-	-	.0561	.0623	.0623	.0568	.0578	.0588	.0598	.0608
	-	72	-	-	.0580	.0635	.0635	.0586	.0595	.0604	.0613	.0622
#2	56	-	-	-	.0667	.0737	.0737	.0674	.0686	.0698	.0709	.0721
	-	64	-	-	.0691	.0753	.0753	.0698	.0708	.0718	.0728	.0738
#3	48	-	-	-	.0764	.0845	.0845	.0774	.0787	.0801	.0814	.0828
	-	56	-	-	.0797	.0865	.0865	.0804	.0816	.0828	.0839	.0851
#4	40	-	-	-	.0849	.0939	.0939	.0860	.0876	.0893	.0909	.0925
	-	48	-	-	.0894	.0968	.0968	.0904	.0917	.0931	.0944	.0958
#5	40	-	-	-	.0979	.1062	.1062	.0990	.1006	.1023	.1039	.1055
	-	44	-	-	.1004	.1079	.1079	.1014	.1029	.1043	.1058	.1073
#6	32	-	-	-	.1040	.1140	.1140	.1055	.1076	.1096	.1116	.1136
	-	40	-	-	.1110	.1190	.1186	.1120	.1136	.1153	.1169	.1185
#8	32	-	-	-	.1300	.1390	.1389	.1315	.1336	.1356	.1376	.1396
	-	36	-	-	.1340	.1420	.1416	.1351	.1369	.1387	.1405	.1424
#10	24	-	-	-	.1450	.1560	.1555	.1467	.1494	.1521	.1548	.1575
	-	32	-	-	.1560	.1640	.1641	.1575	.1596	.1616	.1636	.1656
#12	24	-	-	-	.1710	.1810	.1807	.1727	.1754	.1781	.1808	.1835
	-	28	-	-	.1770	.1860	.1857	.1789	.1812	.1835	.1858	.1882
1/4	-	-	32	-	.1820	.1900	.1895	.1835	.1856	.1876	.1896	.1916
	20	-	-	-	.1960	.2070	.2067	.1980	.2013	.2045	.2078	.2110
	-	28	-	-	.2110	.2200	.2190	.2129	.2152	.2175	.2198	.2222
5/16	-	-	32	-	.2160	.2240	.2229	.2175	.2196	.2216	.2236	.2256
	18	-	-	-	.2520	.2650	.2630	.2548	.2584	.2620	.2656	.2692
	-	-	-	20	.2580	.2700	.2680	.2605	.2638	.2670	.2703	.2735
	-	24	-	-	.2670	.2770	.2754	.2692	.2719	.2746	.2773	.2800
	-	-	-	28	.2740	.2820	.2807	.2754	.2777	.2800	.2823	.2847
3/8	-	-	32	-	.2790	.2860	.2847	.2800	.2821	.2841	.2861	.2881
	16	-	-	-	.3070	.3210	.3182	.3101	.3141	.3182	.3222	.3263
	-	-	-	20	.3210	.3320	.3297	.3230	.3263	.3295	.3328	.3360
	-	24	-	-	.3300	.3400	.3372	.3317	.3344	.3371	.3398	.3425
	-	-	-	28	.3360	.3450	.3426	.3379	.3402	.3425	.3448	.3472
7/16	-	-	32	-	.3410	.3490	.3469	.3425	.3446	.3466	.3486	.3506
	14	-	-	-	.3600	.3760	.3717	.3633	.3679	.3726	.3772	.3818
	-	-	-	16	.3700	.3840	.3800	.3726	.3766	.3807	.3847	.3888
	-	20	-	-	.3830	.3950	.3916	.3855	.3888	.3920	.3953	.3985
	-	-	28	-	.3990	.4070	.4051	.4004	.4027	.4050	.4073	.4097
1/2	-	-	-	32	.4040	.4110	.4094	.4050	.4071	.4091	.4111	.4131
	13	-	-	-	.4170	.4340	.4284	.4201	.4251	.4301	.4351	.4400
	-	-	-	16	.4320	.4460	.4419	.4351	.4391	.4432	.4472	.4513
	-	20	-	-	.4460	.4570	.4537	.4480	.4513	.4545	.4578	.4610
	-	-	28	-	.4610	.4700	.4676	.4629	.4652	.4675	.4698	.4722
9/16	-	-	-	32	.4660	.4740	.4719	.4675	.4696	.4716	.4736	.4756
	12	-	-	-	.4720	.4900	.4843	.4759	.4813	.4867	.4921	.4976
	-	-	-	16	.4950	.5090	.5040	.4976	.5016	.5057	.5097	.5138
	-	18	-	-	.5020	.5150	.5106	.5048	.5084	.5120	.5156	.5192
	-	-	-	20	.5080	.5200	.5162	.5105	.5138	.5170	.5203	.5235
	-	-	24	-	.5170	.5270	.5244	.5192	.5219	.5246	.5273	.5300
	-	-	-	28	.5240	.5320	.5301	.5254	.5277	.5300	.5323	.5347
5/8	11	-	-	.5290	.5360	.5344	.5300	.5321	.5341	.5361	.5381	
					.5270	.5460	.5391	.5305	.5364	.5423	.5482	.5541



TECHNICAL DATA

THREAD MILLS

COMBO TAPS

SPIRAL FLUTE TAPS

SPIRAL POINT TAPS

STRAIGHT FLUTE TAPS

FORMING TAPS

SCREW THREAD INSERT TAPS

PIPE TAPS

TECHNICAL DATA

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
5/8	-	-	-	12	.5350	.5530	.5463	.5384	.5438	.5492	.5546	.5601
	-	-	-	16	.5570	.5710	.5662	.5601	.5641	.5682	.5722	.5763
	-	18	-	-	.5650	.5780	.5730	.5673	.5709	.5745	.5781	.5817
	-	-	-	20	.5710	.5820	.5787	.5730	.5763	.5795	.5828	.5860
	-	-	24	-	.5800	.5900	.5869	.5817	.5844	.5871	.5898	.5925
	-	-	-	28	.5860	.5950	.5926	.5879	.5902	.5925	.5948	.5972
11/16	-	-	-	32	.5910	.5980	.5969	.5925	.5946	.5966	.5986	.6006
	-	-	-	12	.5970	.6150	.6085	.6009	.6063	.6117	.6171	.6226
	-	-	-	16	.6200	.6340	.6284	.6226	.6266	.6307	.6347	.6388
	-	-	-	20	.6330	.6450	.6412	.6355	.6388	.6420	.6453	.6485
	-	-	24	-	.6420	.6520	.6494	.6442	.6469	.6496	.6523	.6550
	-	-	-	28	.6490	.6570	.6551	.6504	.6527	.6550	.6573	.6597
3/4	-	-	-	32	.6540	.6610	.6594	.6550	.6571	.6591	.6611	.6631
	10	-	-	-	.6420	.6630	.6545	.6461	.6526	.6591	.6656	.6721
	-	-	-	12	.6600	.6780	.6707	.6634	.6688	.6742	.6796	.6851
	-	16	-	-	.6820	.6960	.6908	.6851	.6891	.6932	.6972	.7013
	-	-	20	-	.6960	.7070	.7037	.6980	.7013	.7045	.7078	.7110
	-	-	-	28	.7110	.7200	.7176	.7129	.7152	.7175	.7198	.7222
13/16	-	-	-	32	.7160	.7240	.7219	.7175	.7196	.7216	.7236	.7256
	-	-	-	12	.7220	.7400	.7329	.7259	.7313	.7367	.7421	.7476
	-	-	-	16	.7450	.7590	.7533	.7476	.7516	.7557	.7597	.7638
	-	-	20	-	.7580	.7700	.7662	.7605	.7638	.7670	.7703	.7735
	-	-	-	28	.7740	.7820	.7801	.7754	.7777	.7800	.7823	.7847
	-	-	-	32	.7790	.7860	.7844	.7800	.7821	.7841	.7861	.7881
7/8	9	-	-	-	.7550	.7780	.7681	.7595	.7668	.7740	.7812	.7884
	-	-	-	12	.7850	.8030	.7948	.7884	.7938	.7992	.8046	.8101
	-	14	-	-	.7980	.8140	.8068	.8008	.8054	.8101	.8147	.8193
	-	-	-	16	.8070	.8210	.8158	.8101	.8141	.8182	.8222	.8263
	-	-	20	-	.8210	.8320	.8287	.8230	.8263	.8295	.8328	.8360
	-	-	-	28	.8360	.8450	.8426	.8379	.8402	.8425	.8448	.8472
15/16	-	-	-	32	.8410	.8490	.8469	.8425	.8446	.8466	.8486	.8506
	-	-	-	12	.8470	.8650	.8575	.8509	.8563	.8617	.8671	.8726
	-	-	-	16	.8700	.8840	.8783	.8726	.8766	.8807	.8847	.8888
	-	-	20	-	.8830	.8950	.8912	.8855	.8888	.8920	.8953	.8985
	-	-	-	28	.8990	.9070	.9051	.9004	.9027	.9050	.9073	.9097
	-	-	-	32	.9040	.9110	.9094	.9050	.9071	.9091	.9111	.9131
1	8	-	-	-	.8650	.8900	.8797	.8701	.8782	.8863	.8945	.9026
	-	12	-	-	.9100	.9280	.9198	.9134	.9188	.9242	.9296	.9351
	-	-	-	16	.9320	.9460	.9408	.9351	.9391	.9432	.9472	.9513
	-	-	20	-	.9460	.9570	.9537	.9480	.9513	.9545	.9578	.9610
	-	-	-	28	.9610	.9700	.9676	.9629	.9652	.9675	.9698	.9722
	-	-	-	32	.9660	.9740	.9719	.9675	.9696	.9716	.9736	.9756
1-1/16	-	-	-	8	.9270	.9520	.9422	.9326	.9407	.9488	.9570	.9651
	-	-	-	12	.9720	.9900	.9823	.9759	.9813	.9867	.9921	.9976
	-	-	-	16	.9950	1.0090	1.0033	.9976	1.0016	1.0057	1.0097	1.0138
	-	-	18	-	1.0020	1.0150	1.0105	1.0048	1.0084	1.0120	1.0156	1.0192
	-	-	-	20	1.0080	1.0200	1.0162	1.0105	1.0138	1.0170	1.0203	1.0235
	-	-	-	28	1.0240	1.0320	1.0301	1.0254	1.0277	1.0300	1.0323	1.0347
1-1/8	7	-	-	-	.9700	.9980	.9875	.9765	.9858	.9951	1.0044	1.0137
	-	-	-	8	.9900	1.0150	1.0047	.9951	1.0032	1.0113	1.0195	1.0276
	-	12	-	-	1.0350	1.0530	1.0448	1.0384	1.0438	1.0492	1.0546	1.0601
	-	-	-	16	1.0570	1.0710	1.0658	1.0601	1.0641	1.0682	1.0722	1.0763
	-	-	18	-	1.0650	1.0780	1.0730	1.0673	1.0709	1.0745	1.0781	1.0817
	-	-	-	20	1.0710	1.0820	1.0787	1.0730	1.0763	1.0795	1.0828	1.0860

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
1-1/8	-	-	-	28	1.0860	1.0950	1.0926	1.0879	1.0902	1.0925	1.0948	1.0972
1-3/16	-	-	-	8	1.0520	1.0770	1.0672	1.0576	1.0657	1.0738	1.0820	1.0901
	-	-	-	12	1.0970	1.1150	1.1073	1.1009	1.1063	1.1117	1.1171	1.1226
	-	-	-	16	1.1200	1.1340	1.1283	1.1226	1.1266	1.1307	1.1347	1.1388
	-	-	18	-	1.1270	1.1400	1.1355	1.1298	1.1334	1.1370	1.1406	1.1442
	-	-	-	20	1.1330	1.1450	1.1412	1.1355	1.1388	1.1420	1.1453	1.1485
	-	-	-	28	1.1490	1.1570	1.1551	1.1504	1.1527	1.1550	1.1573	1.1597
1-1/4	7	-	-	-	1.0950	1.1230	1.1125	1.1015	1.1108	1.1201	1.1294	1.1387
	-	-	-	8	1.1150	1.1400	1.1297	1.1201	1.1282	1.1363	1.1445	1.1526
	-	12	-	-	1.1600	1.1780	1.1698	1.1634	1.1688	1.1742	1.1796	1.1851
	-	-	-	16	1.1820	1.1960	1.1908	1.1851	1.1891	1.1932	1.1972	1.2013
	-	-	18	-	1.1900	1.2030	1.1980	1.1923	1.1959	1.1995	1.2031	1.2067
	-	-	-	20	1.1960	1.2070	1.2037	1.1980	1.2013	1.2045	1.2078	1.2110
1-5/16	-	-	-	28	1.2110	1.2200	1.2176	1.2129	1.2152	1.2175	1.2198	1.2222
	-	-	-	8	1.1770	1.2020	1.2176	1.1826	1.1907	1.1988	1.2070	1.2151
	-	-	-	12	1.2220	1.2400	1.2323	1.2259	1.2313	1.2367	1.2421	1.2476
	-	-	-	16	1.2450	1.2590	1.2533	1.2476	1.2516	1.2557	1.2597	1.2638
	-	-	18	-	1.2520	1.2650	1.2605	1.2548	1.2584	1.2620	1.2656	1.2692
	-	-	-	20	1.2580	1.2700	1.2662	1.2605	1.2638	1.2670	1.2703	1.2735
1-3/8	-	-	-	28	1.2740	1.2820	1.2801	1.2754	1.2777	1.2800	1.2823	1.2847
	6	-	-	-	1.1950	1.2250	1.2146	1.2018	1.2126	1.2235	1.2343	1.2451
	-	-	-	8	1.2400	1.2650	1.2547	1.2451	1.2532	1.2613	1.2695	1.2776
	-	12	-	-	1.2850	1.3030	1.2948	1.2884	1.2938	1.2992	1.3046	1.3101
	-	-	-	16	1.3070	1.3210	1.3158	1.3101	1.3141	1.3182	1.3222	1.3263
	-	-	18	-	1.3150	1.3280	1.3230	1.3173	1.3209	1.3245	1.3281	1.3317
1-7/16	-	-	-	20	1.3210	1.3320	1.3287	1.3230	1.3263	1.3295	1.3328	1.3360
	-	-	-	28	1.3360	1.3450	1.3426	1.3379	1.3402	1.3425	1.3448	1.3472
	-	-	-	6	1.2570	1.2880	1.2770	1.2643	1.2751	1.2860	1.2968	1.3076
	-	-	-	8	1.3020	1.3270	1.3172	1.3076	1.3157	1.3238	1.3320	1.3401
	-	-	-	12	1.3470	1.3650	1.3573	1.3509	1.3563	1.3617	1.3671	1.3726
	-	-	-	16	1.3700	1.3840	1.3783	1.3726	1.3766	1.3807	1.3847	1.3888
1-1/2	-	-	18	-	1.3770	1.3900	1.3855	1.3798	1.3834	1.3870	1.3906	1.3942
	-	-	-	20	1.3830	1.3950	1.3912	1.3855	1.3888	1.3920	1.3953	1.3985
	-	-	-	28	1.3990	1.4070	1.4051	1.4004	1.4027	1.4050	1.4073	1.4097
	6	-	-	-	1.3200	1.3500	1.3396	1.3268	1.3376	1.3485	1.3593	1.3701
	-	-	-	8	1.3650	1.3900	1.3797	1.3701	1.3782	1.3863	1.3945	1.4026
	-	12	-	-	1.4100	1.4280	1.4198	1.4134	1.4188	1.4242	1.4296	1.4351
1-9/16	-	-	-	16	1.4320	1.4460	1.4408	1.4351	1.4391	1.4432	1.4472	1.4513
	-	-	18	-	1.4400	1.4520	1.4480	1.4423	1.4459	1.4495	1.4531	1.4567
	-	-	-	20	1.4460	1.4570	1.4537	1.4480	1.4513	1.4545	1.4578	1.4610
	-	-	-	28	1.4610	1.4700	1.4676	1.4629	1.4652	1.4675	1.4698	1.4722
	-	-	-	6	1.3820	1.4130	1.4021	1.3893	1.4001	1.4110	1.4218	1.4326
	-	-	-	8	1.4270	1.4520	1.4422	1.4326	1.4407	1.4488	1.4570	1.4651
1-5/8	-	-	-	12	1.4720	1.4900	1.4823	1.4759	1.4813	1.4867	1.4921	1.4976
	-	-	-	16	1.4950	1.5090	1.5033	1.4976	1.5016	1.5057	1.5097	1.5138
	-	-	18	-	1.5020	1.5150	1.5105	1.5048	1.5084	1.5120	1.5156	1.5192
	-	-	-	20	1.5080	1.5200	1.5162	1.5105	1.5138	1.5170	1.5203	1.5235
	-	-	-	6	1.4450	1.4750	1.4646	1.4518	1.4626	1.4735	1.4843	1.4951
	-	-	-	8	1.4900	1.5150	1.5047	1.4951	1.5032	1.5113	1.5195	1.5276
1-11/16	-	-	-	12	1.5350	1.5530	1.5448	1.5384	1.5438	1.5492	1.5546	1.5601
	-	-	-	16	1.5570	1.5710	1.5658	1.5601	1.5641	1.5682	1.5722	1.5763
	-	-	18	-	1.5650	1.5780	1.5730	1.5673	1.5709	1.5745	1.5781	1.5817
	-	-	-	20	1.5710	1.5820	1.5787	1.5730	1.5763	1.5795	1.5828	1.5860
1-11/16	-	-	6	1.5070	1.5380	1.5271	1.5143	1.5251	1.5360	1.5468	1.5576	



TECHNICAL DATA

THREAD MILLS

COMBO TAPS

SPIRAL FLUTE TAPS

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STRAIGHT FLUTE TAPS

FORMING TAPS

SCREW THREAD INSERT TAPS

PIPE TAPS

TECHNICAL DATA

Size	Threads Per Inch				Minor Diameter			Tap Drill Diameter (Cutting Tap)				
	UNC	UNF	UNEF	UN	Min. 2B&3B	Max. 2B	Max. 3B	80% Thread	75% Thread	70% Thread	65% Thread	60% Thread
1-11/16	-	-	-	8	1.5520	1.5770	1.5672	1.5576	1.5657	1.5738	1.5820	1.5901
	-	-	-	12	1.5970	1.6150	1.6073	1.6009	1.6063	1.6117	1.6171	1.6226
	-	-	-	16	1.6200	1.6340	1.6283	1.6226	1.6266	1.6307	1.6347	1.6388
	-	-	18	-	1.6270	1.6400	1.6355	1.6298	1.6334	1.6370	1.6406	1.6442
	-	-	-	20	1.6330	1.6450	1.6412	1.6355	1.6388	1.6420	1.6453	1.6485
1-3/4	5	-	-	-	1.5340	1.5680	1.5575	1.5422	1.5552	1.5681	1.5811	1.5941
	-	-	-	6	1.5700	1.6000	1.5896	1.5768	1.5876	1.5985	1.6093	1.6201
	-	-	-	8	1.6150	1.6400	1.6297	1.6201	1.6282	1.6363	1.6445	1.6526
	-	-	-	12	1.6600	1.6780	1.6698	1.6634	1.6688	1.6742	1.6796	1.6851
	-	-	-	16	1.6820	1.6960	1.6908	1.6851	1.6891	1.6932	1.6972	1.7013
1-13/16	-	-	-	20	1.6960	1.7070	1.7037	1.6980	1.7013	1.7045	1.7078	1.7110
	-	-	-	6	1.6320	1.6630	1.6521	1.6393	1.6501	1.6610	1.6718	1.6826
	-	-	-	8	1.6770	1.7020	1.6922	1.6826	1.6907	1.6988	1.7070	1.7151
	-	-	-	12	1.7220	1.7400	1.7323	1.7259	1.7313	1.7367	1.7421	1.7476
	-	-	-	16	1.7450	1.7590	1.7533	1.7476	1.7516	1.7557	1.7597	1.7638
1-7/8	-	-	-	20	1.7580	1.7700	1.7662	1.7605	1.7638	1.7670	1.7703	1.7735
	-	-	-	6	1.6950	1.7250	1.7146	1.7018	1.7126	1.7235	1.7343	1.7451
	-	-	-	8	1.7400	1.7650	1.7547	1.7451	1.7532	1.7613	1.7695	1.7776
	-	-	-	12	1.7850	1.8030	1.7948	1.7884	1.7938	1.7992	1.8046	1.8101
	-	-	-	16	1.8070	1.8210	1.8158	1.8101	1.8141	1.8182	1.8222	1.8263
1-15/16	-	-	-	20	1.8210	1.8320	1.8287	1.8230	1.8263	1.8295	1.8328	1.8360
	-	-	-	6	1.7570	1.7880	1.7771	1.7643	1.7751	1.7860	1.7968	1.8076
	-	-	-	8	1.8020	1.8270	1.8172	1.8076	1.8157	1.8238	1.8320	1.8401
	-	-	-	12	1.8470	1.8650	1.8573	1.8509	1.8563	1.8617	1.8671	1.8726
	-	-	-	16	1.8700	1.8840	1.8783	1.8726	1.8766	1.8807	1.8847	1.8888
2	-	-	-	20	1.8830	1.8950	1.8912	1.8855	1.8888	1.8920	1.8953	1.8985
	4 1/2	-	-	-	1.7590	1.7950	1.7861	1.7691	1.7835	1.7979	1.8124	1.8268
	-	-	-	6	1.8200	1.8500	1.8396	1.8268	1.8376	1.8485	1.8593	1.8701
	-	-	-	8	1.8650	1.8900	1.8797	1.8701	1.8782	1.8863	1.8945	1.9026
	-	-	-	12	1.9100	1.9280	1.9198	1.9134	1.9188	1.9242	1.9296	1.9351
2-1/8	-	-	-	16	1.9320	1.9460	1.9408	1.9351	1.9391	1.9432	1.9472	1.9513
	-	-	-	20	1.9460	1.9570	1.9537	1.9480	1.9513	1.9545	1.9578	1.9610
	-	-	-	6	1.9450	1.9750	1.9646	1.9518	1.9626	1.9735	1.9843	1.9951
	-	-	-	8	1.9900	2.0150	2.0047	1.9951	2.0032	2.0113	2.0195	2.0276
	-	-	-	12	2.0350	2.0530	2.0448	2.0384	2.0438	2.0492	2.0546	2.0601
2-1/4	-	-	-	16	2.0570	2.0710	2.0658	2.0601	2.0641	2.0682	2.0722	2.0763
	-	-	-	20	2.0710	2.0820	2.0787	2.0730	2.0763	2.0795	2.0828	2.0860
	4 1/2	-	-	-	2.0090	2.0450	2.0361	2.0191	2.0335	2.0479	2.0624	2.0768
	-	-	-	6	2.0700	2.1000	2.0896	2.0768	2.0876	2.0985	2.1093	2.1201
	-	-	-	8	2.1150	2.1400	2.1297	2.1201	2.1282	2.1363	2.1445	2.1526
2-3/8	-	-	-	12	2.1600	2.1780	2.1698	2.1634	2.1688	2.1742	2.1796	2.1851
	-	-	-	16	2.1820	2.1960	2.1908	2.1851	2.1891	2.1932	2.1972	2.2013
	-	-	-	20	2.1960	2.2070	2.2037	2.1980	2.2013	2.2045	2.2078	2.2110
	-	-	-	6	2.1950	2.2260	2.2146	2.2018	2.2126	2.2235	2.2343	2.2451
	-	-	-	8	2.2400	2.2650	2.2547	2.2451	2.2532	2.2613	2.2695	2.2776
2-1/2	-	-	-	12	2.2850	2.3030	2.2948	2.2884	2.2938	2.2992	2.3046	2.3101
	-	-	-	16	2.3070	2.3210	2.3158	2.3101	2.3141	2.3182	2.3222	2.3263
	-	-	-	20	2.3210	2.3320	2.3287	2.3230	2.3263	2.3295	2.3328	2.3360
	4	-	-	-	2.2290	2.2670	2.2594	2.2402	2.2564	2.2727	2.2889	2.3052
	-	-	-	6	2.3200	2.3500	2.3396	2.3268	2.3376	2.3485	2.3593	2.3701
2-1/2	-	-	-	8	2.3650	2.3900	2.3797	2.3701	2.3782	2.3863	2.3945	2.4026
	-	-	-	12	2.4100	2.4280	2.4198	2.4134	2.4188	2.4242	2.4296	2.4351
	-	-	-	16	2.4320	2.4460	2.4408	2.4351	2.4391	2.4432	2.4472	2.4513
	-	-	-	20	2.4460	2.4570	2.4537	2.4480	2.4513	2.4545	2.4578	2.4610