

SELECTION GUIDE



THREADING TOOLS

**HSS-E & HSS
YG TAP
GENERAL**

- For General Purpose Through and Blind Hole Applications



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for material search

◎ : Excellent ○ : Good

SELECTION GUIDE

YG

THREADING TOOLS

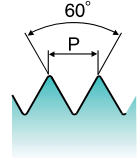
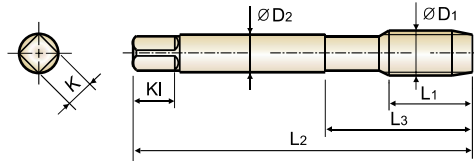
HSS-E & HSS
YG TAP
GENERAL

- For General Purpose Through
and Blind Hole Applications

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T7216 / T6216 / T8216 SERIES

Spiral Point Tap Plug Style for General Purpose



HSS

UNC
UNFUSCTI
302

4P~5P

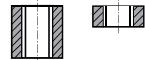
Bright

Steam
Oxide

TiN



p.B224

**Thread Depth /
Hole Type**
3.0xD


Unit : Inch

Size	T.P.I	EDP No.			Limit	Overall Length	Thread Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute
D1		Bright	Steam Oxide	TiN		L2	L1	L3	D2	K	KI	
#0	- 80UNF	T7216021	T6216021	T8216021	H1	1.634	.315	.512	.141	.110	.190	2
#0	- 80UNF	T7216022	T6216022	T8216022	H2	1.634	.315	.512	.141	.110	.190	2
#0	- 80UNF	T7216023	T6216023	T8216023	H3	1.634	.315	.512	.141	.110	.190	2
#1	- 64UNC	T7216041	T6216041	T8216041	H1	1.693	.374	.571	.141	.110	.190	2
#1	- 64UNC	T7216042	T6216042	T8216042	H2	1.693	.374	.571	.141	.110	.190	2
#1	- 72UNF	T7216061	T6216061	T8216061	H1	1.693	.374	.571	.141	.110	.190	2
#1	- 72UNF	T7216062	T6216062	T8216062	H2	1.693	.374	.571	.141	.110	.190	2
#2	- 56UNC	T7216081	T6216081	T8216081	H1	1.752	.433	.650	.141	.110	.190	2
#2	- 56UNC	T7216082	T6216082	T8216082	H2	1.752	.433	.650	.141	.110	.190	2
#2	- 56UNC	T7216083	T6216083	T8216083	H3	1.752	.433	.650	.141	.110	.190	2
#2	- 56UNC	T7216085	T6216085	T8216085	H5	1.752	.433	.650	.141	.110	.190	2
#2	- 64UNF	T7216101	T6216101	T8216101	H1	1.752	.433	.650	.141	.110	.190	2
#2	- 64UNF	T7216102	T6216102	T8216102	H2	1.752	.433	.650	.141	.110	.190	2
#3	- 48UNC	T7216121	T6216121	T8216121	H1	1.811	.492	.728	.141	.110	.190	2
#3	- 48UNC	T7216122	T6216122	T8216122	H2	1.811	.492	.728	.141	.110	.190	2
#3	- 48UNC	T7216123	T6216123	T8216123	H3	1.811	.492	.728	.141	.110	.190	2
#3	- 48UNC	T7216125	T6216125	T8216125	H5	1.811	.492	.728	.141	.110	.190	2
#3	- 56UNF	T7216141	T6216141	T8216141	H1	1.811	.492	.728	.141	.110	.190	2
#3	- 56UNF	T7216142	T6216142	T8216142	H2	1.811	.492	.728	.141	.110	.190	2
#4	- 40UNC	T7216161	T6216161	T8216161	H1	1.874	.563	.799	.141	.110	.190	2
#4	- 40UNC	T7216162	T6216162	T8216162	H2	1.874	.563	.799	.141	.110	.190	2
#4	- 40UNC	T7216163	T6216163	T8216163	H3	1.874	.563	.799	.141	.110	.190	2
#4	- 40UNC	T7216165	T6216165	T8216165	H5	1.874	.563	.799	.141	.110	.190	2
#4	- 40UNC	T7216167	T6216167	T8216167	H7	1.874	.563	.799	.141	.110	.190	2
#4	- 48UNF	T7216181	T6216181	T8216181	H1	1.874	.563	.799	.141	.110	.190	2
#4	- 48UNF	T7216182	T6216182	T8216182	H2	1.874	.563	.799	.141	.110	.190	2

▶ Steam Oxide is not recommended for Aluminum and Aluminum alloys.

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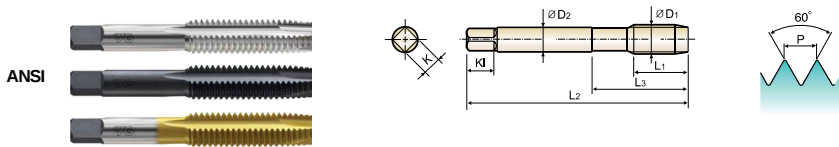
◎ : Excellent ○ : Good

ISO	P										M				K						
Material Description	Non-alloy steel					Low alloy steel				High alloyed steel, and tool steel		Stainless steel			Grey cast iron		Nodular cast iron		Malleable cast iron		
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
HRC																					
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230	
Recommended	◎	◎	◎	○	○	◎	○	○	○			○	○	○			○	○			
ISO	N										S						H				
Material Description	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)				Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel		Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRC																					
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended			○	○		○	○														



T7216/T6216/T8216 SERIES
T7C16/T6C16/T8C16 SERIES

Spiral Point Tap Plug Style for General Purpose



Unit : Inch													
Size	T.P.I	EDP No.			Limit	Overall Length	Thread Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	
D1		Bright	Steam Oxide	TiN		L2	L1	L3	D2	K	KI		
5/16 - 18UNC	T7216441	T6216441	T8216441	H1	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 18UNC	T7216442	T6216442	T8216442	H2	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 18UNC	T7216443	T6216443	T8216443	H3	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 18UNC	T7C16443	T6C16443	T8C16443	H3	2.720	1.126	1.500	.318	.238	.380	3		
5/16 - 18UNC	T7216445	T6216445	T8216445	H5	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 18UNC	T7C16445	T6C16445	T8C16445	H5	2.720	1.126	1.500	.318	.238	.380	3		
5/16 - 24UNF	T7216461	T6216461	T8216461	H1	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 24UNF	T7216462	T6216462	T8216462	H2	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 24UNF	T7C16462	T6C16462	T8C16462	H2	2.720	1.126	1.500	.318	.238	.380	3		
5/16 - 24UNF	T7216463	T6216463	T8216463	H3	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 24UNF	T7216464	T6216464	T8216464	H4	2.720	1.126	1.500	.318	.238	.380	2		
5/16 - 24UNF	T7C16464	T6C16464	T8C16464	H4	2.720	1.126	1.500	.318	.238	.380	3		
3/8 - 16UNC	T7216481	T6216481	T8216481	H1	2.937	1.252	1.646	.381	.286	.440	3		
3/8 - 16UNC	T7216482	T6216482	T8216482	H2	2.937	1.252	1.646	.381	.286	.440	3		
3/8 - 16UNC	T7216483	T6216483	T8216483	H3	2.937	1.252	1.646	.381	.286	.440	3		
3/8 - 16UNC	T7216485	T6216485	T8216485	H5	2.937	1.252	1.646	.381	.286	.440	3		
3/8 - 24UNF	T7216501	T6216501	T8216501	H1	2.937	1.252	1.646	.381	.286	.440	3		
3/8 - 24UNF	T7216502	T6216502	T8216502	H2	2.937	1.252	1.646	.381	.286	.440	3		
3/8 - 24UNF	T7216503	T6216503	T8216503	H3	2.937	1.252	1.646	.381	.286	.440	3		
3/8 - 24UNF	T7216504	T6216504	T8216504	H4	2.937	1.252	1.646	.381	.286	.440	3		
7/16 - 14UNC	T7216522	T6216522	T8216522	H2	3.157	1.437	-	.323	.242	.410	3		
7/16 - 14UNC	T7216523	T6216523	T8216523	H3	3.157	1.437	-	.323	.242	.410	3		
7/16 - 14UNC	T7216525	T6216525	T8216525	H5	3.157	1.437	-	.323	.242	.410	3		
7/16 - 20UNF	T7216542	T6216542	T8216542	H2	3.157	1.437	-	.323	.242	.410	3		
7/16 - 20UNF	T7216543	T6216543	T8216543	H3	3.157	1.437	-	.323	.242	.410	3		
7/16 - 20UNF	T7216545	T6216545	T8216545	H5	3.157	1.437	-	.323	.242	.410	3		

► Steam Oxide is not recommended for Aluminum and Aluminum alloys.

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ISO		P										High alloyed steel, tool steel					M					K																			
		Non-alloy steel					Low alloy 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	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
VDI 3323																																									
HRC		125	130	135	28	32	100	275	32	38	100	15	35	15	23	10	26	3	25	21	230	180	180	250	270	300	320	350	380	400	420	450	480	500							
Recommended		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○							
ISO		N										S										H																			
		Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials					Heat Resistant Super Alloys					Titanium Alloys					Hardened steel					Chilled Cast Iron					Hardened Cast Iron				
Material Description		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	46	47	48	49	50	51	52	53	54						
VDI 3323																																									
HB		60	100		75	90	130		110	90	100		200	280	250	350	320	440	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200						
Recommended		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○						

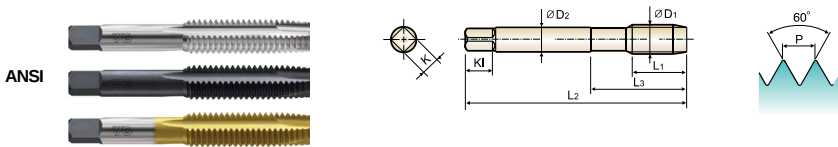
B268 phone:+1-800-765-8665 | Technical Support : 888-868-5988, www.yg1usa.com

YG-1 CO., LTD.



T7216/T6216/T8216 SERIES
T7C16/T6C16/T8C16 SERIES

Spiral Point Tap Plug Style for General Purpose



Unit : Inch													
Size	T.P.I	EDP No.			Limit	Overall Length	Thread Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	
D1		Bright	Steam Oxide	TiN		L2	L1	L3	D2	K	KI		
1/2 - 13UNC	T7216561	T6216561	T8216561	H1	3.374	1.657	-	.367	.275	.440	3		
1/2 - 13UNC	T7216562	T6216562	T8216562	H2	3.374	1.657	-	.367	.275	.440	3		
1/2 - 13UNC	T7216563	T6216563	T8216563	H3	3.374	1.657	-	.367	.275	.440	3		
1/2 - 13UNC	T7216565	T6216565	T8216565	H5	3.374	1.657	-	.367	.275	.440	3		
1/2 - 20UNF	T7216581	T6216581	T8216581	H1	3.374	1.657	-	.367	.275	.440	3		
1/2 - 20UNF	T7216582	T6216582	T8216582	H2	3.374	1.657	-	.367	.275	.440	3		
1/2 - 20UNF	T7216583	T6216583	T8216583	H3	3.374	1.657	-	.367	.275	.440	3		
1/2 - 20UNF	T7216585	T6216585	T8216585	H5	3.374	1.657	-	.367	.275	.440	3		
9/16 - 12UNC	T7216603	T6216603	T8216603	H3	3.594	1.657	-	.429	.322	.500	3		
9/16 - 12UNC	T7216605	T6216605	T8216605	H5	3.594	1.657	-	.429	.322	.500	3		
9/16 - 18UNF	T7216623	T6216623	T8216623	H3	3.594	1.657	-	.429	.322	.500	3		
9/16 - 18UNF	T7216625	T6216625	T8216625	H5	3.594	1.657	-	.429	.322	.500	3		
5/8 - 11UNC	T7216643	T6216643	T8216643	H3	3.811	1.811	-	.480	.360	.560	3		
5/8 - 11UNC	T7216645	T6216645	T8216645	H5	3.811	1.811	-	.480	.360	.560	3		
5/8 - 18UNF	T7216663	T6216663	T8216663	H3	3.811	1.811	-	.480	.360	.560	3		
5/8 - 18UNF	T7216665	T6216665	T8216665	H5	3.811	1.811	-	.480	.360	.560	3		
3/4 - 10UNC	T7216703	T6216703	T8216703	H3	4.252	2.000	-	.590	.442	.690	3		
3/4 - 10UNC	T7216705	T6216705	T8216705	H5	4.252	2.000	-	.590	.442	.690	3		
3/4 - 16UNF	T7216723	T6216723	T8216723	H3	4.252	2.000	-	.590	.442	.690	3		
3/4 - 16UNF	T7216725	T6216725	T8216725	H5	4.252	2.000	-	.590	.442	.690	3		

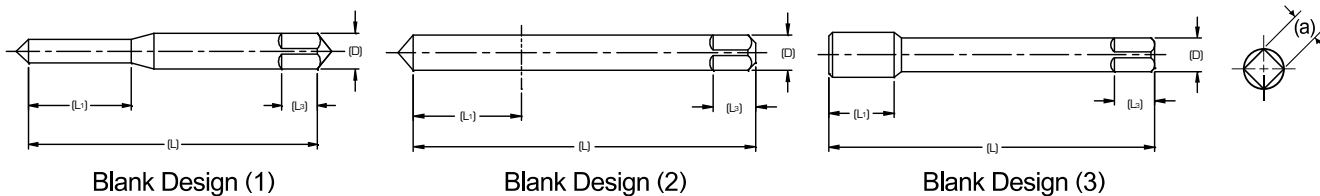
► Steam Oxide is not recommended for Aluminum and Aluminum alloys.

ISO		P										M										K														
Material Description		Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel					Stainless steel					Grey cast iron					Nodular cast iron					Malleable cast iron				
VDI 3323		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20															
HRC		125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	205	210	215	220	125	130	135	140	145	150	155	160	165	170	175	180			
Recommended		Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ				

ISO		N										S										H																			
Material Description		Aluminum-cast, alloyed					Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials					Heat Resistant Super Alloys					Titanium Alloys					Hardened steel					Chilled Cast Iron					Hardened Cast Iron				
VDI 3323		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41																			
HRC		60	100	75	90	130	110	90	100	120	15	20	250	280	250	350	320	400Rm	1050Rm	550	630	400	550																		
Recommended				Ⓢ	Ⓢ		Ⓢ	Ⓢ	Ⓢ	Ⓢ																															



YG-1 USCTI 302 TAP BLANK DIMENSION



Unified Tap Blank

Nominal Size	Overall Length	Thread Length	Shank Diameter	Square Length	Square Size	Blank Design No.
	[L]	[L ₁]	[D]	[L ₂]	[a]	
#0	1.63	.31	.141	.19	.110	1
#1	1.69	.38	.141	.19	.110	1
#2	1.75	.44	.141	.19	.110	1
#3	1.81	.50	.141	.19	.110	1
#4	1.88	.56	.141	.19	.110	1
#5	1.94	.63	.141	.19	.110	1
#6	2.00	.69	.141	.19	.110	1
#8	2.13	.75	.168	.25	.131	1
#10	2.38	.88	.194	.25	.152	1
#12	2.38	.94	.220	.28	.165	1
1/4	2.50	1.00	.255	.31	.191	2
5/16	2.72	1.13	.318	.38	.238	2
3/8	2.94	1.25	.381	.44	.286	2
7/16	3.16	1.44	.323	.41	.242	3
1/2	3.38	1.66	.367	.44	.275	3
9/16	3.59	1.66	.429	.50	.322	3
5/8	3.81	1.81	.480	.56	.360	3
11/16	4.03	1.81	.542	.63	.406	3
3/4	4.25	2.00	.590	.69	.442	3
13/16	4.47	2.00	.652	.69	.489	3
7/8	4.69	2.22	.697	.75	.523	3
15/16	4.91	2.22	.760	.75	.570	3
1	5.13	2.50	.800	.81	.600	3
1-1/8	5.44	2.56	.896	.88	.672	3
1-1/4	5.75	2.56	1.021	1.00	.766	3
1-3/8	6.06	3.00	1.108	1.06	.831	3
1-1/2	6.38	3.00	1.233	1.13	.925	3

Metric Tap Blank

Nominal Size	Overall Length	Thread Length	Shank Diameter	Square Length	Square Size	Blank Design No.
	[L]	[L ₁]	[D]	[L ₂]	[a]	
M1.6	1.63	.310	.141	.19	.110	1
M1.8	1.69	.380	.141	.19	.110	1
M2	1.75	.440	.141	.19	.110	1
M2.5	1.81	.500	.141	.19	.110	1
M3	1.94	.630	.141	.19	.110	1
M3.5	2.00	.690	.141	.19	.110	1
M4	2.13	.750	.168	.25	.131	1
M4.5	2.38	.880	.194	.25	.152	1
M5	2.38	.880	.194	.25	.152	1
M6	2.50	1.00	.255	.31	.191	2
M7	2.72	1.13	.318	.38	.238	2
M8	2.72	1.13	.318	.38	.238	2
M10	2.94	1.25	.381	.44	.286	2
M12	3.38	1.66	.367	.44	.275	3
M14	3.59	1.66	.429	.50	.322	3
M16	3.81	1.81	.480	.56	.360	3
M18	4.03	1.81	.542	.63	.406	3
M20	4.47	2.00	.652	.69	.489	3
M22	4.69	2.22	.697	.75	.523	3
M24	4.91	2.22	.760	.75	.570	3
M30	5.44	2.56	1.021	1.00	.766	3
M33	5.75	2.56	1.108	1.06	.831	3
M36	6.06	3.00	1.233	1.13	.925	3



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.



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

THREAD
MILLSCOMBO
TAPSSPIRAL
FLUTE TAPSSPIRAL
POINT TAPSSTRAIGHT
FLUTE TAPSFORMING
TAPSSCREW
THREAD
INSERT TAPS

PIPE TAPS

TECHNICAL
DATA

HSS

CARBIDE



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
	-	-	-	32	.5910	.5980	.5969	.5925	.5946	.5966	.5986	.6006
11/16	-	-	-	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
	-	-	-	32	.6540	.6610	.6594	.6550	.6571	.6591	.6611	.6631
3/4	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
	-	-	-	32	.7160	.7240	.7219	.7175	.7196	.7216	.7236	.7256
13/16	-	-	-	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
1	-	-	-	32	.9040	.9110	.9094	.9050	.9071	.9091	.9111	.9131
	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
1-1/16	-	-	-	32	.9660	.9740	.9719	.9675	.9696	.9716	.9736	.9756
	-	-	-	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
1-1/8	-	-	-	28	1.0240	1.0320	1.0301	1.0254	1.0277	1.0300	1.0323	1.0347
	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
1-1/8	-	-	-	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



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
2-5/8	-	-	-	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