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## **Roll Thread Blank Reference Chart**

TRI helps design our customers blanks to accommodate rolled threads. Please consult this chart for general guidelines. For specific requirements or sizes not shown, contact TRI for a pre-roll thread drawing.

Fine Thread			<u>Blank</u>	Coarse Thread		
Thread Size	Blank Diameter (± .001)	Recommended Chamfer Diameter (± .010 (U.O.S.))	Final pre-roll thread diameter will be developed and centerless ground to the final close tolerance dimension. 37° angle will be approximately 45° after rolling. If the 45° is critical and a compound angle is not feasible, the chamfer may require	Thread Size	Blank Diameter (± .001)	Recommended Chamfer Diameter (± .010 (U.O.S.))
0 (.060)-80	.056	.038±.005	machining after roll threading. Unless otherwise specified, thread lengths given will be assumed to be minimum required full threads.	1 (.073)-64	.067	.045±.005
1 (.073)-72	.068	$.050 \pm .005$		2 (.086)-56	.079	.057±.005
2 (.086)-64	.080	$.058 \pm .005$		3 (.099)-48	.090	.065±.005
3 (.099) -56	.092	$.068 \pm .005$	MINUS .005 MAX (SEE CHART FOR SIZE)	4 (.112)-40	.100	.072±.005
4 (.112)-48	.103	.077±.005	37°-2° ECOMMENDED CHAMFER DIAMETER (SEE CHART FOR SIZE) FULL THREAD REQUIREMENT	, , ,		
5 (.125)-44	.114	.087±.005	1.5 PITCHES MIN	5 (.125)-40	.113	.085±.005
6 (.138)-40	.126	.095±.005	MINOR DIAMETER	6 (.138)-32	.122	.087±.007
8 (.164)-36	.150	.122±.007	1 37:2'	8 (.164)-32	.148	.112±.007
10 (.190)-32	.174	.140±.007	FULL & IMPERFECT	10 (.190)-24	.167	.125±.007
12 (.216)-28	.197	.160	2 MAX IMPERFECT	12 (.216)-24	.193	.150±.007
.2500-28	.231	.190	BLANK DIAMETER	.2500-20	.222	.170
.3125-24	.290	.245	(SEE CHART FOR SIZE)	.3125-18	.281	.220
.3750-24	.352	.310	FULL & IMPERFECT	.3750-16	.339	.275
.4375-20	.409	.355	THREAD LENGTH 2 MAX IMPERFECT	.4375-14	.395	.328
.5000-20	.472	.420		.5000-13	.454	.375
.5625-18	.531	.470	(SEE CHART FOR SIZE)	.5625-12	.513	.425
.6250-18	.594	.530	30° ±2* RECOMMENDED CHAMFER DIAMETER (SEC CHART FOR SIZE)			
.7500-16	.714	.650	FULL X IMPERFECT THREAD LENGTH 2 MAX FULL THREAD REQUIREMENT	.6250-11	.570	.470
.8750-14	.833	.755	THREADS	.7500-10	.689	.585
1.000-14	.958	.880	PRE-ROLL THREAD DIAMETER DIAMETER 37 <sup>+</sup> 2 <sup>+</sup>	.8750-9	.807	.685
1.000-12	.950	.865	THIS DIMENSION TO BE DETERMINED BY A T.R.L. REPRESENTATIVE FOR ROLL THREAD ONLY	1.000-8	.924	.815

For use with standard thread series including: UNC, UNF, UNR, UNJ, UNS

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