

# CTS® Hot Rolled Thread Bar Technical Data:

## Grade 60, 75, 80 (Left Hand Thread) ASTM A615/16

(Shown figures are for Grade 80 data)

Size #	Nominal Diameter		Maximum OD		Area		Weight		Yield Load		Ultimate Strength		Elongation %
	in	mm	in	mm	sq.in	mm <sup>2</sup>	lbs./ft	kg/m	kips	kN	kips	kN	
6	3/4"	19	0.882	22.40	0.44	284	1.60	2.23	35	156	46	200	9
7	7/8"	22	0.980	24.90	0.60	387	2.04	3.04	48	213	63	280	9
8	1"	25	1.106	28.10	0.79	510	2.60	3.97	63	280	83	359	9
9	1-1/8"	28	1.236	31.40	1.00	645	3.25	5.06	80	355	105	467	8
10	1-1/4"	32	1.413	35.90	1.27	819	4.25	6.40	102	452	133	590	8
11	1-3/8"	36	1.587	40.30	1.56	1006	5.37	8.00	125	553	163	690	8
14	1-3/4"	43	1.886	47.90	2.25	1452	7.65	11.38	180	798	236	1019	8
18	2-1/4"	57	2.465	62.60	4.00	2581	13.60	20.24	320	1420	420	1860	8
20	2-1/2"	63.5	2.717	69.00	4.91	3168	16.71	24.65	393	1748	515	2230	8
24	3"	75	3.209	81.50	6.85	4418	23.27	34.68	548	2429	719	3090	8
28	3-1/2"	90	3.880	98.60	9.61	6200	32.70	48.65	769	3420	1009	4488	8
32	4"	100	4.290	109.00	12.17	7852	41.40	61.60	974	4331	1278	5684	8

## Grade 100 (Right Hand Thread) ASTM A615/16

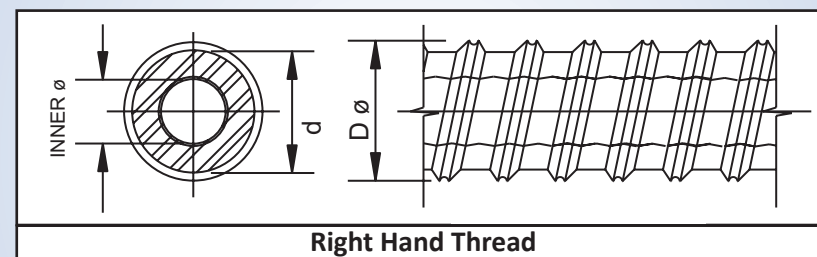
Size #	Nominal Diameter		Maximum OD		Area		Weight		Yield Load		Ultimate Strength		Elongation %
	in	mm	in	mm	sq.in	mm <sup>2</sup>	lbs./ft	kg/m	kips	kN	kips	kN	
7	7/8"	22	0.953	24.20	0.59	380	2.00	2.98	59	255	68	304	8
8	1"	25	1.083	27.50	0.76	491	2.59	3.85	76	329	88	393	8
9	1-1/8"	28	1.228	31.20	0.95	616	3.25	4.83	95	413	111	493	8
10	1-1/4"	30	1.319	33.50	1.10	707	3.73	5.55	110	474	127	565	8
11	1-3/8"	35	1.543	39.20	1.49	962	5.07	7.55	149	645	173	770	8
14	1-3/4"	43	1.886	47.90	2.25	1452	7.66	11.4	225	973	261	1162	8
18	2-1/4"	57	2.472	62.80	4.00	2581	14.08	20.95	400	1740	467	2077	8
20	2-1/2"	63.5	2.717	69.00	4.91	3167	16.68	24.86	491	2122	570	2534	6
24	3"	75	3.209	81.50	6.85	4418	23.27	34.68	685	2960	795	3535	6

Bars in compliance with ASTM A706 are also available.

# CTS® Hollow Bar Technical Data:

### KEY FEATURES:

- Used as access tubes for CSL and TIP testing; as well as replacement of solid bars.
- Utilization of a CTS®/TITAN IBO® Hollow Bar as the reinforcing Bar. From the static point of view, a hollow bar is superior to a solid rod of the same cross sectional area with respect to bending moment, shear resistance and surface bond/friction.
- The CTS®/TITAN IBO® Hollow Bar is manufactured from high yield micro alloy, high quality structural steel offering high notch toughness > 40J @ -20 Celsius. This steel is not affected by hydrogen embrittlement or by stress crack corrosion. It has at least the mechanical properties and chemical compositions of ASTM A-706.
- The threads on the CTS®/TITAN IBO® Hollow Bar are formed much like the ribs on a reinforcing bar fabricated according to ASTM-A-706. The deep TITAN threads result in 2.4 times higher bond friction compared to standard drill steel rope-threads.
- Continuous threads guarantee that the CTS®/TITAN IBO® Hollow Bar can be cut or coupled anywhere along its length. A thread pitch of 6 degrees eliminates the need for locking nuts at each coupling.
- Certified to ISO 9001.



Bar Size	Nominal Diameter		Effective Cross-Section	Load Capacity		Weight	Left Hand / Right Hand
	Inside	Outside		Ultimate	Yield		
D Ø / INNER Ø	in	in	in <sup>2</sup>	G.U.T.S. kips	kN	lbs./ft.	Thread
mm	mm	mm	mm <sup>2</sup>	kN	kN	kg/m	
73/53	2.08	2.87	2.50	260.8	218.1	8.9	RIGHT
	53	73	1615	1160	970	13.2	
73/45	1.77	2.87	3.50	356.3	285.5	12.0	RIGHT
	45	73	2260	1585	1270	17.8	
Please contact us for availability of the following sizes:							
73/35	1.38	2.87	4.20	419.3	321.5	14.2	RIGHT
	35	73	2710	1865	1430	21.2	
73/56	2.20	2.87	2.11	232.7	186.6	7.3	RIGHT
	56	73	1360	1035	830	10.8	

For the most current technical information please go to our website: [www.contechsystems.com](http://www.contechsystems.com)