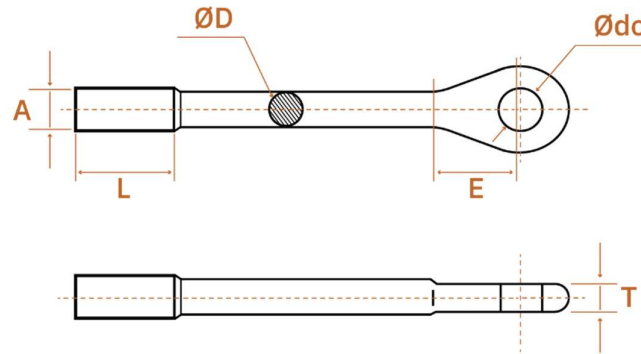




STEEL TIE RODS – FORGED END DIMENSIONS



Upset Thread		Rod Shaft Nominal Dia. (mm)	Forged Eye		
Size A	Length L (mm)		Hole Diameter d0 (mm)	Depth E (mm)	Thickness T (mm)
M24X3	65	20			
M30X3.5	75	25			
M36X4	85	30			
M42X4.5	100	35			
M48X5	105	40			
M56X5.5	105	45			
M60X5.5	125	50	52	97	42
M68X6	140	55	57	105	45
M72X6	145	60	62	113	50
M76X6	165	65	67	120	55
M85X6	170	70	72	133	60
M90X6	190	75	77	141	65
M95X6	210	80	82	148	70
M100X6	230	85	87	161	70
M105X6	250	90	92	170	75
M110X6	270	95	97	178	80
M115X6	285	100	102	186	85
Tr125X10	290	105	107	193	90
Tr130X10	300	110	112	200	95
Tr135X10	310	115	117	209	95
Tr140X10	320	120	122	225	100
Tr150X12	325	125	127	232	105
Tr155X12	330	130	132	246	110
Tr160X12	335	135	137	253	115
Tr165X12	340	140	142	260	120
Tr170X14	345	145	147	269	125
Tr175X14	350	150	152	278	130
Tr180X14	355	155	157	294	130
Tr185x14	360	160	162	303	135
Tr195X16	365	165	167	311	135
Tr200X16	370	170	172	320	140
Tr205X16	375	175	177	331	140
Tr210X16	380	180	182	341	140
Tr220X16	385	185	187	357	140
Tr225X16	390	190	192	368	140
Tr230x18	395	195	197	378	145
Tr235X18	400	200	202	385	150
Tr240X18	405	205	207	392	155
Tr245X18	410	210	212	400	160

* Bar / Rod properties are representative of manufacturers data and may be subject to minor variation or change, additional order specific detail can be provided.

** If you have a specified diameter or combination of shaft and upset thread dimensions that do not appear in this list please contact us, we can provide other combinations for you.



STEEL TIE RODS – LOAD CAPACITY

Theoretical Capacity (kN) For Plain (straight bar) & Forged Threaded End Tie Rods								
Nominal Dia of Shaft	Strength Grade							
	345 MPa		460 MPa		550 MPa		650 MPa	
	Plain	Forged	Plain	Forged	Plain	Forged	Plain	Forged
20	84	108	113	144	135	173	159	204
25	122	169	162	226	194	270	229	319
30	193	244	258	325	308	389	364	459
35	239	332	319	442	381	529	451	625
40	336	433	449	578	536	691	634	816
45	450	548	600	731	718	874	848	1033
50	508	677	677	903	810	1079	957	1276
55	606	819	808	1092	966	1306	1142	1544
60	700	975	933	1300	1116	1554	1319	1837
65	923	1144	1230	1526	1471	1824	1738	2156
70	1054	1327	1405	1769	1680	2116	1935	2500
75	1193	1523	1591	2031	1902	2429	2248	2870
80	1341	1733	1788	2311	2138	2763	2527	3266
85	1498	1957	1997	2609	2388	3119	2822	3687
90	1706	2194	2275	2925	2720	3497	3214	4133
95	1928	2444	2570	3259	3073	3897	3632	4605
100	2163	2708	2884	3611	3448	4318	4075	5103
105	2412	2986	3216	3981	3845	4760	4544	5626
110	2674	3277	3566	4369	4263	5224	5038	6174
115	2950	3582	3934	4776	4703	5710	5558	6748
120	3240	3900	4319	5200	5165	6217	6104	7348
125	3314	4232	4419	5642	5283	6746	6244	7973
130	3620	4577	4827	6103	5771	7297	6821	8623
135	3940	4936	5154	6581	6281	7869	7423	9299
140	4284	5308	6598	7078	6813	8462	8052	10001
145	4621	5694	6161	7592	7366	9078	8705	10728
150	8444	6094	6459	8125	7723	9714	9127	11481
155	5213	6507	5951	8675	8311	10373	9822	12259
160	5596	6933	7461	9244	8921	11053	10543	13062
165	5992	7373	7989	9831	9552	11754	11289	13892
170	6401	7827	8535	10436	10205	12478	12060	14746
175	6664	8294	8885	11059	10624	13222	12556	15626
180	7096	8775	9461	11700	11312	13989	13369	16532
185	7541	9269	10054	12359	12022	14777	14208	17463
190	8000	9777	10666	13036	12753	15586	15072	18420
195	8293	10298	11057	13731	13220	16417	15624	19402
200	8774	10833	11698	14444	13987	17270	16530	20410
205	9268	11381	12357	15175	14775	18144	17461	21443
210	9776	11943	13034	15925	15584	19040	18418	22502

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Tie rods are also available in 750MPa, 850MPa and 1100MPa high yield grade steels, and Stainless steel grades.