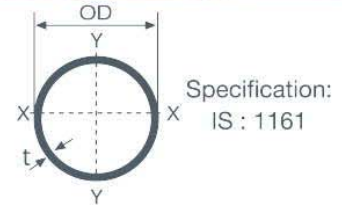




# Section Properties



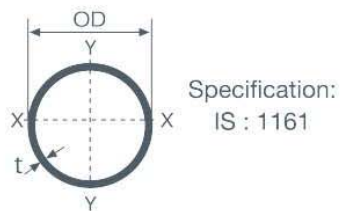
## Properties of Tata Structura (Circular Hollow Sections)

YST 310 Grade

Nominal Bore	Outside Diameter	Thickness	Weight	Area of Cross Section	Outer Surface Area/m	Moment of Inertia	Section Modulus	Radius of Gyration
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>2</sup> /m	cm <sup>4</sup>	cm <sup>3</sup>	cm
15	21.3	2.00	0.95	1.21		0.57	0.54	0.69
		2.60	1.21	1.53	669	0.69	0.64	0.66
		3.20	1.44	1.82		0.75	0.70	0.65
20	26.9	2.30	1.38	1.78		1.36	1.01	0.87
		2.60	1.56	1.98	845	1.48	1.10	0.86
		3.20	1.87	2.38		1.70	1.26	0.84
25	33.7	2.60	1.98	2.54		3.09	1.83	1.10
		3.20	2.41	3.06	1059	3.61	2.14	1.08
		4.00	2.93	3.73		4.19	2.48	1.05
32	42.4	2.60	2.54	3.25		6.47	3.05	1.41
		3.20	3.01	3.94	1332	7.62	3.59	1.39
		4.00	3.79	4.82		8.99	4.24	1.36
40	48.3	2.90	3.23	4.13		10.70	4.43	1.61
		3.20	3.56	4.53	1517	11.59	4.80	1.59
		4.00	4.37	5.56		13.77	5.70	1.57
50	60.3	2.90	4.08	5.23		21.59	7.16	2.03
		3.60	5.03	6.41	1895	25.88	8.59	2.00
		4.50	6.19	7.88		30.90	10.20	1.98
65	76.1	3.20	5.71	7.32		48.79	12.82	2.58
		3.60	6.42	8.20	2391	54.02	14.20	2.57
		4.50	7.93	10.10		65.12	17.10	2.54
80	88.9	3.20	6.72	8.61		79.23	17.82	3.03
		4.00	8.36	10.70	2793	96.36	21.68	3.00
		4.80	9.90	12.70		112.52	25.31	2.98
100	114.3	3.60	9.75	12.50		192.03	33.60	3.92
		4.50	12.20	15.50	3591	234.30	41.00	3.89
		5.40	14.50	18.50		274.50	48.00	3.85
125	139.7	4.50	15.00	19.10		437.20	62.60	4.78
		4.80	15.90	20.30	4389	463.44	66.35	4.77
		5.40	17.90	22.80		514.50	73.70	4.75
150	165.1	4.50	17.80	22.70		732.60	88.74	5.68
		4.80	18.90	24.20	5187	777.32	94.16	5.67
		5.40	21.30	27.10		864.70	105.00	5.65
200	219.1	4.80	25.38	32.33		1856.78	169.49	7.58
		6.00	31.51	40.17		2281.95	208.30	7.54
		8.00	41.67	53.08	6886	2960.82	270.27	7.47
		10.00	51.59	65.72		3599.89	328.61	7.40
		12.00	61.32	78.11		4201.57	383.53	7.33
250	273	6.00	39.51	50.30		4487.08	328.72	9.44
		8.00	52.30	66.63	8580	5854.07	428.87	9.37
		10.00	64.89	82.66		7156.97	524.32	9.31
		12.00	77.27	98.43		8399.52	615.35	9.24
300	323.9	6.30	49.36	62.88		7932.09	489.79	11.23
		8.00	62.35	79.43	10180	9914.07	612.17	11.17
		10.00	77.44	98.65		12163.24	751.05	11.10
350	355.6	12.00	92.34	117.63		14325.32	884.55	11.04
		8.00	68.61	87.40		13206.69	742.78	12.29
		10.00	85.27	108.62	11176	16230.03	912.83	12.22
		12.00	101.73	129.59		19147.18	1076.89	12.16

\* For availability of size/thickness please refer to page 13.


# Product Range Availability



## Product Range: Circular Hollow Sections (CHS)

		Wall Thickness (mm) = t																	
		NB	OD	2.0	2.3	2.6	2.9	3.2	3.6	4.0	4.5	4.8	5.4	6.0	6.3	8.0	10.0	12.0	
Nominal Bore/Outside Diameter (mm)	15	21.3																	
	20	26.9																	
	25	33.7																	
	32	42.4																	
	40	48.3																	
	50	60.3																	
	65	76.1																	
	80	88.9																	
	100	114.3																	
	125	139.7																	
	150	165.1																	
	200	219.1																	
	250	273																	
	300	323.9																	
	350	355.6																	

 - Indicates presently rolled section

 - Under development, please confirm availability before adoption in design