

EN 10219 Properties cold formed square and rectangular hollow sections																
Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
20	20	1,5	0.826	1.05	0.583	0.583	0.744	0.744	0.583	0.583	0.715	0.715	0.985	0.884	0.075	1211
20	20	2	1.05	1.34	0.692	0.692	0.720	0.720	0.692	0.692	0.877	0.877	1.21	1.06	0.073	953
20	20	2,5	1.25	1.59	0.766	0.766	0.694	0.694	0.766	0.766	1.00	1.00	1.39	1.19	0.071	802
25	25	1,5	1.06	1.35	1.22	1.22	0.949	0.949	0.973	0.973	1.17	1.17	2.01	1.47	0.095	942
25	25	2	1.36	1.74	1.48	1.48	0.924	0.924	1.19	1.19	1.47	1.47	2.53	1.80	0.093	733
25	25	2,5	1.64	2.09	1.69	1.69	0.899	0.899	1.35	1.35	1.71	1.71	2.97	2.07	0.091	610
25	25	3	1.89	2.41	1.84	1.84	0.874	0.874	1.47	1.47	1.91	1.91	3.33	2.27	0.090	529
28	28	4	2.69	3.43	3.07	3.07	0.947	0.947	2.19	2.19	2.94	2.94	5.73	3.43	0.098	372
30	20	1,5	1.06	1.35	1.59	0.840	1.08	0.788	1.06	0.840	1.32	0.993	1.83	1.40	0.095	942
30	20	2	1.36	1.74	1.94	1.02	1.06	0.765	1.29	1.02	1.65	1.24	2.29	1.71	0.093	733
30	20	2,5	1.64	2.09	2.21	1.15	1.03	0.742	1.47	1.15	1.92	1.44	2.68	1.95	0.091	610
30	20	3	1.89	2.41	2.41	1.25	1.00	0.720	1.60	1.25	2.15	1.61	2.99	2.13	0.090	529
30	30	1,5	1.30	1.65	2.20	2.20	1.15	1.15	1.46	1.46	1.74	1.74	3.57	2.21	0.115	771
30	30	2	1.68	2.14	2.72	2.72	1.13	1.13	1.81	1.81	2.21	2.21	4.54	2.75	0.113	596
30	30	2,5	2.03	2.59	3.16	3.16	1.10	1.10	2.10	2.10	2.61	2.61	5.40	3.20	0.111	492
30	30	3	2.36	3.01	3.50	3.50	1.08	1.08	2.34	2.34	2.96	2.96	6.15	3.58	0.110	423
30	30	4	2.94	3.75	3.97	3.97	1.03	1.03	2.64	2.64	3.50	3.50	7.31	4.11	0.106	340
35	25	1,5	1.30	1.65	2.75	1.63	1.29	0.994	1.57	1.31	1.92	1.53	3.35	2.13	0.115	771
35	25	2	1.68	2.14	3.42	2.01	1.26	0.971	1.95	1.61	2.43	1.93	4.25	2.65	0.113	596
35	25	2,5	2.03	2.59	3.97	2.33	1.24	0.948	2.27	1.86	2.88	2.28	5.05	3.08	0.111	492
35	25	3	2.36	3.01	4.41	2.57	1.21	0.925	2.52	2.06	3.27	2.57	5.73	3.43	0.110	423
35	35	1,5	1.53	1.95	3.60	3.60	1.36	1.36	2.05	2.05	2.43	2.43	5.78	3.09	0.135	653
35	35	2	1.99	2.54	4.51	4.51	1.33	1.33	2.58	2.58	3.09	3.09	7.41	3.89	0.133	502
35	35	2,5	2.42	3.09	5.29	5.29	1.31	1.31	3.02	3.02	3.69	3.69	8.89	4.58	0.131	412
35	35	3	2.83	3.61	5.95	5.95	1.28	1.28	3.40	3.40	4.23	4.23	10.2	5.18	0.130	353
35	35	4	3.57	4.55	6.93	6.93	1.23	1.23	3.96	3.96	5.11	5.11	12.4	6.10	0.126	280
40	20	1,5	1.30	1.65	3.27	1.10	1.41	0.815	1.63	1.10	2.07	1.27	2.74	1.91	0.115	771
40	20	2	1.68	2.14	4.05	1.34	1.38	0.793	2.02	1.34	2.61	1.60	3.45	2.36	0.113	596
40	20	2,5	2.03	2.59	4.69	1.54	1.35	0.770	2.35	1.54	3.09	1.88	4.06	2.72	0.111	492
40	20	3	2.36	3.01	5.21	1.68	1.32	0.748	2.60	1.68	3.50	2.12	4.57	3.00	0.110	423

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Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	/tonne
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
40	25	2	1.83	2.34	4.77	2.28	1.43	0.988	2.39	1.82	2.99	2.16	5.17	3.07	0.123	545
40	25	2,5	2.23	2.84	5.57	2.64	1.40	0.965	2.79	2.11	3.56	2.56	6.15	3.59	0.121	449
40	25	3	2.60	3.31	6.24	2.94	1.37	0.942	3.12	2.35	4.06	2.90	7.00	4.01	0.120	385
40	30	1,5	1.53	1.95	4.38	2.81	1.50	1.20	2.19	1.87	2.64	2.17	5.52	3.02	0.135	653
40	30	2	1.99	2.54	5.49	3.51	1.47	1.18	2.75	2.34	3.37	2.77	7.07	3.79	0.133	502
40	30	2,5	2.42	3.09	6.45	4.10	1.45	1.15	3.23	2.74	4.03	3.30	8.47	4.46	0.131	412
40	30	3	2.83	3.61	7.27	4.60	1.42	1.13	3.63	3.07	4.61	3.77	9.72	5.03	0.130	353
40	30	4	3.57	4.55	8.47	5.33	1.36	1.08	4.24	3.55	5.57	4.54	11.8	5.91	0.126	280
40	40	1,5	1.77	2.25	5.49	5.49	1.56	1.56	2.75	2.75	3.22	3.22	8.75	4.13	0.155	566
40	40	2	2.31	2.94	6.94	6.94	1.54	1.54	3.47	3.47	4.13	4.13	11.3	5.23	0.153	434
40	40	2,5	2.82	3.59	8.22	8.22	1.51	1.51	4.11	4.11	4.97	4.97	13.6	6.21	0.151	355
40	40	3	3.30	4.21	9.32	9.32	1.49	1.49	4.66	4.66	5.72	5.72	15.8	7.07	0.150	303
40	40	4	4.20	5.35	11.1	11.1	1.44	1.44	5.54	5.54	7.01	7.01	19.4	8.48	0.146	238
45	45	1,5	2.00	2.55	7.96	7.96	1.77	1.77	3.54	3.54	4.13	4.13	12.6	5.31	0.175	499
45	45	2	2.62	3.34	10.1	10.1	1.74	1.74	4.50	4.50	5.32	5.32	16.3	6.77	0.173	382
45	45	2,5	3.21	4.09	12.1	12.1	1.72	1.72	5.36	5.36	6.43	6.43	19.8	8.09	0.171	312
45	45	3	3.77	4.81	13.8	13.8	1.69	1.69	6.12	6.12	7.44	7.44	23.0	9.27	0.170	265
45	45	4	4.83	6.15	16.6	16.6	1.64	1.64	7.38	7.38	9.22	9.22	28.7	11.3	0.166	207
50	20	1,5	1.53	1.95	5.77	1.35	1.72	0.833	2.31	1.35	2.97	1.55	3.69	2.42	0.135	653
50	20	2	1.99	2.54	7.23	1.67	1.69	0.811	2.89	1.67	3.78	1.96	4.66	3.00	0.133	502
50	20	2,5	2.42	3.09	8.48	1.92	1.66	0.789	3.39	1.92	4.51	2.32	5.50	3.49	0.131	412
50	20	3	2.83	3.61	9.51	2.12	1.62	0.767	3.81	2.12	5.16	2.63	6.20	3.88	0.130	353
50	25	1,5	1.65	2.10	6.65	2.25	1.78	1.04	2.66	1.80	3.33	2.05	5.54	3.13	0.145	606
50	25	2	2.15	2.74	8.38	2.81	1.75	1.01	3.35	2.25	4.26	2.62	7.06	3.92	0.143	465
50	25	2,5	2.62	3.34	9.89	3.28	1.72	0.991	3.95	2.62	5.11	3.12	8.43	4.60	0.141	382
50	25	3	3.07	3.91	11.2	3.67	1.69	0.969	4.47	2.93	5.86	3.56	9.64	5.18	0.140	326
50	30	1,5	1.77	2.25	7.54	3.42	1.83	1.23	3.01	2.28	3.70	2.60	7.60	3.83	0.155	566
50	30	2	2.31	2.94	9.54	4.29	1.80	1.21	3.81	2.86	4.74	3.33	9.77	4.84	0.153	434
50	30	2,5	2.82	3.59	11.3	5.05	1.77	1.19	4.52	3.37	5.70	3.98	11.7	5.72	0.151	355
50	30	3	3.30	4.21	12.8	5.70	1.75	1.16	5.13	3.80	6.57	4.58	13.5	6.49	0.150	303

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D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
50	30	4	4.20	5.35	15.3	6.69	1.69	1.12	6.10	4.46	8.05	5.58	16.5	7.71	0.146	238
50	40	1,5	2.00	2.55	9.30	6.60	1.91	1.61	3.72	3.30	4.42	3.80	12.3	5.24	0.175	499
50	40	2	2.62	3.34	11.8	8.39	1.88	1.59	4.74	4.19	5.70	4.89	15.9	6.67	0.173	382
50	40	2,5	3.21	4.09	14.1	9.98	1.86	1.56	5.65	4.99	6.89	5.90	19.2	7.96	0.171	312
50	40	3	3.77	4.81	16.1	11.4	1.83	1.54	6.46	5.69	7.98	6.83	22.3	9.12	0.170	265
50	40	4	4.83	6.15	19.5	13.7	1.78	1.49	7.80	6.84	9.89	8.45	27.8	11.1	0.166	207
50	50	1,5	2.24	2.85	11.1	11.1	1.97	1.97	4.43	4.43	5.15	5.15	17.4	6.65	0.195	447
50	50	2	2.93	3.74	14.1	14.1	1.95	1.95	5.66	5.66	6.66	6.66	22.6	8.51	0.193	341
50	50	2,5	3.60	4.59	16.9	16.9	1.92	1.92	6.78	6.78	8.07	8.07	27.5	10.2	0.191	278
50	50	3	4.25	5.41	19.5	19.5	1.90	1.90	7.79	7.79	9.39	9.39	32.1	11.8	0.190	236
50	50	4	5.45	6.95	23.7	23.7	1.85	1.85	9.49	9.49	11.7	11.7	40.4	14.4	0.186	183
50	50	5	6.56	8.36	27.0	27.0	1.80	1.80	10.8	10.8	13.7	13.7	47.5	16.6	0.183	152
51	26,9	2,25	2.49	3.17	10.1	3.70	1.79	1.08	3.98	2.75	5.06	3.22	9.12	4.76	0.148	402
60	20	2	2.31	2.94	11.7	1.99	1.99	0.824	3.89	1.99	5.15	2.32	5.89	3.65	0.153	434
60	30	1,5	2.00	2.55	11.8	4.03	2.15	1.26	3.94	2.68	4.90	3.03	9.77	4.64	0.175	499
60	30	2	2.62	3.34	15.0	5.08	2.12	1.23	5.02	3.39	6.31	3.89	12.6	5.88	0.173	382
60	30	2,5	3.21	4.09	17.9	6.00	2.09	1.21	5.98	4.00	7.62	4.67	15.1	6.98	0.171	312
60	30	3	3.77	4.81	20.5	6.80	2.06	1.19	6.83	4.53	8.82	5.39	17.5	7.95	0.170	265
60	30	4	4.83	6.15	24.7	8.06	2.00	1.14	8.23	5.37	10.9	6.62	21.5	9.52	0.166	207
60	40	1,5	2.24	2.85	14.4	7.71	2.25	1.64	4.80	3.86	5.77	4.38	16.0	6.35	0.195	447
60	40	2	2.93	3.74	18.4	9.83	2.22	1.62	6.14	4.92	7.47	5.65	20.7	8.12	0.193	341
60	40	2,5	3.60	4.59	22.1	11.7	2.19	1.60	7.36	5.87	9.06	6.84	25.1	9.72	0.191	278
60	40	3	4.25	5.41	25.4	13.4	2.17	1.58	8.46	6.72	10.5	7.94	29.3	11.2	0.190	236
60	40	4	5.45	6.95	31.0	16.3	2.11	1.53	10.3	8.14	13.2	9.89	36.7	13.7	0.186	183
60	40	5	6.56	8.36	35.3	18.4	2.06	1.48	11.8	9.21	15.4	11.5	42.8	15.6	0.183	152
60	50	2	3.25	4.14	21.8	16.5	2.29	1.99	7.26	6.58	8.63	7.62	29.9	10.4	0.213	308
60	50	3	4.72	6.01	30.3	22.8	2.24	1.95	10.1	9.11	12.2	10.8	42.6	14.4	0.210	212
60	50	4	6.08	7.75	37.3	28.0	2.19	1.90	12.4	11.2	15.4	13.6	53.9	17.8	0.206	164
60	50	5	7.34	9.36	42.9	32.1	2.14	1.85	14.3	12.8	18.1	16.0	63.7	20.6	0.203	136

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Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
60	60	2	3.56	4.54	25.1	25.1	2.35	2.35	8.38	8.38	9.79	9.79	39.8	12.6	0.233	281
60	60	2,5	4.39	5.59	30.3	30.3	2.33	2.33	10.1	10.1	11.9	11.9	48.7	15.2	0.231	228
60	60	3	5.19	6.61	35.1	35.1	2.31	2.31	11.7	11.7	14.0	14.0	57.1	17.7	0.230	193
60	60	4	6.71	8.55	43.6	43.6	2.26	2.26	14.5	14.5	17.6	17.6	72.6	22.0	0.226	149
60	60	5	8.13	10.4	50.5	50.5	2.21	2.21	16.8	16.8	20.9	20.9	86.4	25.6	0.223	123
60	60	6	9.45	12.0	56.1	56.1	2.16	2.16	18.7	18.7	23.7	23.7	98.4	28.6	0.219	106
70	30	2	2.93	3.74	22.2	5.86	2.44	1.25	6.35	3.91	8.08	4.45	15.4	6.93	0.193	341
70	30	3	4.25	5.41	30.6	7.90	2.38	1.21	8.74	5.26	11.4	6.20	21.5	9.41	0.190	236
70	30	4	5.45	6.95	37.2	9.42	2.31	1.16	10.6	6.28	14.2	7.66	26.5	11.3	0.186	183
70	40	2	3.25	4.14	26.9	11.3	2.55	1.65	7.67	5.64	9.44	6.41	25.7	9.56	0.213	308
70	40	2,5	3.99	5.09	32.3	13.5	2.52	1.63	9.23	6.75	11.5	7.78	31.3	11.5	0.211	250
70	40	3	4.72	6.01	37.3	15.5	2.49	1.61	10.7	7.75	13.4	9.05	36.5	13.2	0.210	212
70	40	4	6.08	7.75	46.0	18.9	2.44	1.56	13.1	9.44	16.8	11.3	45.8	16.2	0.206	164
70	40	5	7.34	9.36	52.9	21.5	2.38	1.52	15.1	10.8	19.8	13.3	53.8	18.7	0.203	136
70	50	2	3.56	4.54	31.5	18.8	2.63	2.03	8.99	7.50	10.8	8.58	37.5	12.2	0.233	281
70	50	3	5.19	6.61	44.1	26.1	2.58	1.99	12.6	10.4	15.4	12.2	53.6	17.1	0.230	193
70	50	4	6.71	8.55	54.7	32.2	2.53	1.94	15.6	12.9	19.5	15.4	68.1	21.2	0.226	149
70	50	5	8.13	10.4	63.5	37.2	2.48	1.90	18.1	14.9	23.1	18.2	80.8	24.6	0.223	123
70	70	2	4.19	5.34	40.7	40.7	2.76	2.76	11.6	11.6	13.5	13.5	64.0	17.5	0.273	239
70	70	2,5	5.17	6.59	49.4	49.4	2.74	2.74	14.1	14.1	16.5	16.5	78.5	21.2	0.271	193
70	70	3	6.13	7.81	57.5	57.5	2.71	2.71	16.4	16.4	19.4	19.4	92.4	24.7	0.270	163
70	70	4	7.97	10.1	72.1	72.1	2.67	2.67	20.6	20.6	24.8	24.8	119	31.1	0.266	126
70	70	5	9.70	12.4	84.6	84.6	2.62	2.62	24.2	24.2	29.6	29.6	142	36.7	0.263	103
76,2	38,1	4	6.35	8.09	55.2	18.2	2.61	1.50	14.5	9.58	18.8	11.5	47.2	16.8	0.215	157
76,2	50,8	3	5.52	7.03	54.9	29.2	2.79	2.04	14.4	11.5	17.7	13.4	62.3	19.0	0.244	181
76,2	50,8	4	7.15	9.11	68.4	36.2	2.74	1.99	18.0	14.2	22.4	16.9	79.3	23.7	0.240	140
76,2	50,8	5	8.68	11.1	79.8	41.9	2.69	1.95	20.9	16.5	26.6	20.0	94.3	27.7	0.237	115
80	30	2	3.25	4.14	31.3	6.65	2.75	1.27	7.82	4.43	10.0	5.01	18.4	7.97	0.213	308
80	30	3	4.72	6.01	43.4	8.99	2.69	1.22	10.8	6.00	14.2	7.01	25.6	10.9	0.210	212
80	30	4	6.08	7.75	53.2	10.8	2.62	1.18	13.3	7.19	17.9	8.70	31.7	13.1	0.206	164

EN 10219 Properties cold formed square and rectangular hollow sections																
Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
80	40	2	3.56	4.54	37.4	12.7	2.87	1.67	9.34	6.36	11.6	7.17	30.9	11.0	0.233	281
80	40	2,5	4.39	5.59	45.1	15.3	2.84	1.65	11.3	7.63	14.1	8.72	37.6	13.2	0.231	228
80	40	3	5.19	6.61	52.3	17.6	2.81	1.63	13.1	8.78	16.5	10.2	43.9	15.3	0.230	193
80	40	4	6.71	8.55	64.8	21.5	2.75	1.59	16.2	10.7	20.9	12.8	55.2	18.8	0.226	149
80	40	5	8.13	10.4	75.1	24.6	2.69	1.54	18.8	12.3	24.7	15.0	65.0	21.7	0.223	123
80	50	2	3.88	4.94	43.4	21.1	2.97	2.07	10.9	8.43	13.2	9.54	45.3	14.0	0.253	258
80	50	2,5	4.78	6.09	52.6	25.4	2.94	2.04	13.2	10.2	16.1	11.6	55.4	17.0	0.251	209
80	50	3	5.66	7.21	61.1	29.4	2.91	2.02	15.3	11.8	18.8	13.6	65.0	19.7	0.250	177
80	50	4	7.34	9.35	76.4	36.5	2.86	1.98	19.1	14.6	24.0	17.2	82.7	24.6	0.246	136
80	50	5	8.91	11.4	89.2	42.3	2.80	1.93	22.3	16.9	28.5	20.5	98.4	28.7	0.243	112
80	60	2	4.19	5.34	49.5	31.9	3.05	2.44	12.4	10.6	14.7	12.1	61.2	17.1	0.273	239
80	60	2,5	5.17	6.59	60.1	38.6	3.02	2.42	15.0	12.9	18.0	14.8	75.1	20.7	0.271	193
80	60	3	6.13	7.81	70.0	44.9	3.00	2.40	17.5	15.0	21.2	17.4	88.3	24.1	0.270	163
80	60	4	7.97	10.1	87.9	56.1	2.94	2.35	22.0	18.7	27.0	22.1	113	30.3	0.266	126
80	60	5	9.70	12.4	103	65.7	2.89	2.31	25.8	21.9	32.2	26.4	136	35.7	0.263	103
80	80	3	7.07	9.01	87.8	87.8	3.12	3.12	22.0	22.0	25.8	25.8	140	33.0	0.310	141
80	80	4	9.22	11.7	111	111	3.07	3.07	27.8	27.8	33.1	33.1	180	41.8	0.306	108
80	80	5	11.3	14.4	131	131	3.03	3.03	32.9	32.9	39.7	39.7	218	49.7	0.303	88.7
80	80	6	13.2	16.8	149	149	2.98	2.98	37.3	37.3	45.8	45.8	252	56.6	0.299	75.7
81	51	5	9.07	11.6	93.5	44.9	2.84	1.97	23.1	17.6	29.4	21.3	104	29.8	0.247	110
90	50	2	4.19	5.34	57.9	23.4	3.29	2.09	12.9	9.35	15.7	10.5	53.4	15.9	0.273	239
90	50	3	6.13	7.81	81.9	32.7	3.24	2.05	18.2	13.1	22.6	15.0	76.7	22.4	0.270	163
90	50	4	7.97	10.1	103	40.7	3.18	2.00	22.8	16.3	28.8	19.1	97.7	28.0	0.266	126
90	50	5	9.70	12.4	121	47.4	3.12	1.96	26.8	18.9	34.4	22.7	116	32.7	0.263	103
90	60	2	4.50	5.74	65.6	35.2	3.38	2.48	14.6	11.7	17.5	13.3	72.5	19.3	0.293	222
90	60	2,5	5.56	7.09	79.8	42.7	3.36	2.46	17.7	14.2	21.4	16.2	89.0	23.5	0.291	180
90	60	3	6.60	8.41	93.2	49.8	3.33	2.43	20.7	16.6	25.2	19.1	105	27.4	0.290	152
90	70	4	9.22	11.7	132	89.6	3.36	2.76	29.4	25.6	35.7	30.0	174	41.1	0.306	108
90	70	5	11.3	14.4	157	106	3.30	2.71	34.8	30.2	42.9	36.1	210	48.7	0.303	88.7

EN 10219 Properties cold formed square and rectangular hollow sections																
Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
90	90	3	8.01	10.2	127	127	3.53	3.53	28.3	28.3	33.0	33.0	201	42.5	0.350	125
90	90	4	10.5	13.3	162	162	3.48	3.48	36.0	36.0	42.6	42.6	261	54.2	0.346	95.4
90	90	5	12.8	16.4	193	193	3.43	3.43	42.9	42.9	51.4	51.4	316	64.7	0.343	77.9
90	90	5,6	14.2	18.1	210	210	3.41	3.41	46.6	46.6	56.4	56.4	348	70.5	0.341	70.4
90	90	6	15.1	19.2	220	220	3.39	3.39	49.0	49.0	59.5	59.5	368	74.2	0.339	66.2
100	40	2	4.19	5.34	65.4	15.6	3.50	1.71	13.1	7.81	16.5	8.69	41.5	13.9	0.273	239
100	40	2,5	5.17	6.59	79.3	18.8	3.47	1.69	15.9	9.39	20.2	10.6	50.5	16.8	0.271	193
100	40	3	6.13	7.81	92.3	21.7	3.44	1.67	18.5	10.8	23.7	12.4	59.0	19.4	0.270	163
100	40	4	7.97	10.1	116	26.7	3.38	1.62	23.1	13.3	30.3	15.7	74.5	24.0	0.266	126
100	40	5	9.70	12.4	136	30.8	3.31	1.58	27.1	15.4	36.1	18.5	87.9	27.9	0.263	103
100	50	2	4.50	5.74	75.0	25.7	3.62	2.12	15.0	10.3	18.5	11.5	61.6	17.7	0.293	222
100	50	2,5	5.56	7.09	91.2	31.1	3.59	2.09	18.2	12.4	22.7	14.0	75.4	21.5	0.291	180
100	50	3	6.60	8.41	106	36.1	3.56	2.07	21.3	14.4	26.7	16.4	88.6	25.0	0.290	152
100	50	3,5	7.61	9.69	121	40.7	3.53	2.05	24.2	16.3	30.5	18.7	101	28.3	0.288	131
100	50	4	8.59	10.9	134	44.9	3.50	2.03	26.8	18.0	34.1	20.9	113	31.3	0.286	116
100	50	5	10.5	13.4	158	52.5	3.44	1.98	31.6	21.0	40.8	25.0	135	36.8	0.283	95.4
100	60	2,5	5.96	7.59	103	46.9	3.69	2.49	20.6	15.6	25.1	17.7	103	26.2	0.311	168
100	60	3	7.07	9.01	121	54.6	3.66	2.46	24.1	18.2	29.6	20.8	122	30.6	0.310	141
100	60	4	9.22	11.7	153	68.7	3.60	2.42	30.5	22.9	37.9	26.6	156	38.7	0.306	108
100	60	5	11.3	14.4	181	80.8	3.55	2.37	36.2	26.9	45.6	31.9	188	45.8	0.303	88.7
100	60	6	13.2	16.8	205	91.2	3.49	2.33	41.1	30.4	52.5	36.6	216	51.9	0.299	75.7
100	80	3	8.01	10.2	149	106	3.82	3.22	29.8	26.4	35.4	30.4	196	41.9	0.350	125
100	80	4	10.5	13.3	189	134	3.77	3.17	37.9	33.5	45.6	39.2	254	53.4	0.346	95.4
100	80	5	12.8	16.4	226	160	3.72	3.12	45.2	39.9	55.1	47.2	308	63.7	0.343	77.9
100	80	6	15.1	19.2	258	182	3.67	3.08	51.7	45.5	63.8	54.7	357	73.0	0.339	66.2
100	100	3	8.96	11.4	177	177	3.94	3.94	35.4	35.4	41.2	41.2	279	53.2	0.390	112
100	100	4	11.7	14.9	226	226	3.89	3.89	45.3	45.3	53.3	53.3	362	68.1	0.386	85.2
100	100	5	14.4	18.4	271	271	3.84	3.84	54.2	54.2	64.6	64.6	441	81.7	0.383	69.4
100	100	6	17.0	21.6	311	311	3.79	3.79	62.3	62.3	75.1	75.1	514	94.1	0.379	58.9
110	70	3	8.01	10.2	170	84.5	4.08	2.88	30.8	24.1	37.4	27.5	181	40.1	0.350	125

EN 10219 Properties cold formed square and rectangular hollow sections																
Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
110	70	4	10.5	13.3	216	107	4.02	2.83	39.3	30.6	48.3	35.3	233	51.0	0.346	95.4
110	70	5	12.8	16.4	258	127	3.97	2.79	46.8	36.3	58.3	42.6	282	60.8	0.343	77.9
120	40	3	7.07	9.01	148	25.8	4.05	1.69	24.7	12.9	32.2	14.6	74.6	23.5	0.310	141
120	40	4	9.22	11.7	187	31.9	3.99	1.65	31.1	15.9	41.2	18.5	94.2	29.2	0.306	108
120	40	5	11.3	14.4	221	36.9	3.92	1.60	36.8	18.5	49.4	22.0	111	34.1	0.303	88.7
120	50	2,5	6.35	8.09	144	36.7	4.22	2.13	24.0	14.7	30.3	16.4	96.0	26.0	0.331	157
120	50	3	7.54	9.61	169	42.7	4.19	2.11	28.1	17.1	35.7	19.3	113	30.3	0.330	133
120	50	3,5	8.71	11.1	192	48.3	4.16	2.09	32.0	19.3	40.9	22.0	129	34.4	0.328	115
120	50	4	9.85	12.5	214	53.4	4.13	2.06	35.6	21.4	45.8	24.6	144	38.1	0.326	102
120	50	5	12.1	15.4	254	62.6	4.07	2.02	42.3	25.0	55.2	29.5	172	44.9	0.323	83.0
120	60	2,5	6.74	8.59	161	55.2	4.33	2.53	26.9	18.4	33.2	20.6	133	31.7	0.351	148
120	60	3	8.01	10.2	189	64.4	4.30	2.51	31.5	21.5	39.2	24.2	156	37.1	0.350	125
120	60	4	10.5	13.3	241	81.2	4.25	2.47	40.1	27.1	50.5	31.1	201	47.0	0.346	95.4
120	60	5	12.8	16.4	287	96.0	4.19	2.42	47.8	32.0	60.9	37.4	242	55.8	0.343	77.9
120	60	6	15.1	19.2	328	109	4.13	2.38	54.7	36.3	70.6	43.1	280	63.6	0.339	66.2
120	80	3	8.96	11.4	230	123	4.49	3.29	38.4	30.9	46.2	35.0	255	50.8	0.390	112
120	80	4	11.7	14.9	295	157	4.44	3.24	49.1	39.3	59.8	45.2	331	64.9	0.386	85.2
120	80	5	14.4	18.4	353	188	4.39	3.20	58.9	46.9	72.4	54.7	402	77.8	0.383	69.4
120	80	6	17.0	21.6	406	215	4.33	3.15	67.7	53.8	84.3	63.5	469	89.4	0.379	58.9
120	100	6	18.9	24.0	484	365	4.49	3.89	80.7	72.9	97.9	86.4	682	115	0.419	53.0
120	120	3	10.8	13.8	312	312	4.76	4.76	52.1	52.1	60.2	60.2	488	78.2	0.470	92.3
120	120	4	14.2	18.1	402	402	4.71	4.71	67.0	67.0	78.3	78.3	637	101	0.466	70.2
120	120	5	17.5	22.4	485	485	4.66	4.66	80.9	80.9	95.4	95.4	778	122	0.463	57.0
120	120	6	20.7	26.4	562	562	4.61	4.61	93.7	93.7	112	112	913	141	0.459	48.2
120	120	8	26.4	33.6	677	677	4.49	4.49	113	113	138	138	1163	175	0.446	37.9
120	120	10	31.8	40.6	777	777	4.38	4.38	129	129	162	162	1376	203	0.437	31.4
124	124	3,5	13.0	16.6	397	397	4.90	4.90	64.0	64.0	74.3	74.3	623	96.1	0.484	77.0
133	133	3,5	14.0	17.8	493	493	5.26	5.26	74.2	74.2	86.0	86.0	772	111	0.520	71.5

EN 10219 Properties cold formed square and rectangular hollow sections																
Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
140	80	3	9.90	12.6	334	141	5.15	3.35	47.8	35.3	58.2	39.6	317	59.7	0.430	101
140	80	4	13.0	16.5	430	180	5.10	3.30	61.4	45.1	75.5	51.3	412	76.5	0.426	77.0
140	80	5	16.0	20.4	517	216	5.04	3.26	73.9	54.0	91.8	62.2	501	91.8	0.423	62.6
140	80	6	18.9	24.0	597	248	4.98	3.21	85.3	62.0	107	72.4	584	106	0.419	53.0
140	80	8	23.9	30.4	708	293	4.82	3.10	101	73.3	131	88.4	731	129	0.406	41.8
140	80	10	28.7	36.6	804	330	4.69	3.01	115	82.6	152	103	851	147	0.397	34.8
140	140	4	16.8	21.3	652	652	5.52	5.52	93.1	93.1	108	108	1023	140	0.546	59.7
140	140	5	20.7	26.4	791	791	5.48	5.48	113	113	132	132	1256	170	0.543	48.3
140	140	6	24.5	31.2	920	920	5.43	5.43	131	131	155	155	1479	198	0.539	40.8
140	140	8	31.4	40.0	1127	1127	5.30	5.30	161	161	194	194	1901	248	0.526	31.8
140	140	10	38.1	48.6	1312	1312	5.20	5.20	187	187	230	230	2274	291	0.517	26.2
150	100	3	11.3	14.4	461	248	5.65	4.15	61.4	49.5	73.5	55.8	507	81.4	0.490	88.4
150	100	4	14.9	18.9	595	319	5.60	4.10	79.3	63.7	95.7	72.5	662	105	0.486	67.2
150	100	5	18.3	23.4	719	384	5.55	4.05	95.9	76.8	117	88.3	809	127	0.483	54.5
150	100	6	21.7	27.6	835	444	5.50	4.01	111	88.8	137	103	948	147	0.479	46.1
150	100	8	27.7	35.2	1008	536	5.35	3.90	134	107	169	128	1206	182	0.466	36.1
150	100	10	33.4	42.6	1162	614	5.22	3.80	155	123	199	150	1426	211	0.457	29.9
150	150	4	18.0	22.9	808	808	5.93	5.93	108	108	125	125	1265	162	0.586	55.5
150	150	5	22.3	28.4	982	982	5.89	5.89	131	131	153	153	1554	197	0.583	44.9
150	150	6	26.4	33.6	1146	1146	5.84	5.84	153	153	180	180	1833	230	0.579	37.9
150	150	8	33.9	43.2	1412	1412	5.71	5.71	188	188	226	226	2364	289	0.566	29.5
150	150	10	41.3	52.6	1653	1653	5.61	5.61	220	220	269	269	2839	341	0.557	24.2
160	80	3	10.8	13.8	464	159	5.80	3.39	58.0	39.8	71.4	44.3	380	68.6	0.470	92.3
160	80	4	14.2	18.1	598	204	5.74	3.35	74.7	50.9	92.9	57.4	494	88.0	0.466	70.2
160	80	5	17.5	22.4	722	244	5.68	3.30	90.2	61.0	113	69.7	601	106	0.463	57.0
160	80	6	20.7	26.4	836	281	5.62	3.26	105	70.2	132	81.3	702	122	0.459	48.2
160	80	8	26.4	33.6	1001	335	5.46	3.16	125	83.7	163	100	882	150	0.446	37.9
160	90	4	14.9	18.9	646	266	5.84	3.74	80.8	59.0	99.1	66.7	606	100	0.486	67.2
160	90	5	18.3	23.4	782	320	5.79	3.70	97.7	71.0	121	81.2	740	121	0.483	54.5
160	90	6	21.7	27.6	907	369	5.73	3.65	113	82.0	142	94.8	866	140	0.479	46.1
160	90	8	27.7	35.2	1094	443	5.57	3.55	137	98.5	175	117	1097	172	0.466	36.1
160	90	10	33.4	42.6	1259	507	5.44	3.45	157	113	206	137	1291	199	0.457	29.9



EN 10219 Properties cold formed square and rectangular hollow sections																
Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
160	160	4	19.3	24.5	987	987	6.34	6.34	123	123	143	143	1541	185	0.626	51.9
160	160	5	23.8	30.4	1202	1202	6.29	6.29	150	150	175	175	1896	226	0.623	42.0
160	160	6	28.3	36.0	1405	1405	6.25	6.25	176	176	206	206	2239	264	0.619	35.4
160	160	8	36.5	46.4	1741	1741	6.12	6.12	218	218	260	260	2897	334	0.606	27.4
160	160	10	44.4	56.6	2048	2048	6.02	6.02	256	256	311	311	3490	395	0.597	22.5
180	80	3	11.8	15.0	621	177	6.43	3.43	69.0	44.2	85.8	48.9	445	77.5	0.510	84.9
180	80	4	15.5	19.7	802	227	6.37	3.39	89.1	56.7	112	63.5	578	99.6	0.506	64.5
180	80	5	19.1	24.4	971	272	6.31	3.34	108	68.1	137	77.2	704	120	0.503	52.3
180	80	6	22.6	28.8	1128	314	6.25	3.30	125	78.5	160	90.2	823	139	0.499	44.2
180	80	8	28.9	36.8	1362	377	6.08	3.20	151	94.1	198	111	1036	170	0.486	34.6
180	80	10	35.0	44.6	1570	429	5.94	3.10	174	107	234	131	1214	196	0.477	28.6
180	100	4	16.8	21.3	926	374	6.59	4.18	103	74.8	126	84.0	854	127	0.546	59.7
180	100	5	20.7	26.4	1124	452	6.53	4.14	125	90.4	154	103	1045	154	0.543	48.3
180	100	6	24.5	31.2	1310	524	6.48	4.10	146	105	181	120	1227	179	0.539	40.8
180	100	8	31.4	40.0	1598	637	6.32	3.99	178	127	226	150	1565	222	0.526	31.8
180	100	10	38.1	48.6	1859	736	6.19	3.89	207	147	268	177	1859	260	0.517	26.2
180	180	5	27.0	34.4	1737	1737	7.11	7.11	193	193	224	224	2724	290	0.703	37.1
180	180	6	32.1	40.8	2037	2037	7.06	7.06	226	226	264	264	3223	340	0.699	31.2
180	180	8	41.5	52.8	2546	2546	6.94	6.94	283	283	336	336	4189	432	0.686	24.1
180	180	10	50.7	64.6	3017	3017	6.84	6.84	335	335	404	404	5074	515	0.677	19.7
200	100	4	18.0	22.9	1200	411	7.23	4.23	120	82.2	148	91.7	985	142	0.586	55.5
200	100	5	22.3	28.4	1459	497	7.17	4.19	146	99.4	181	112	1206	172	0.583	44.9
200	100	6	26.4	33.6	1703	577	7.12	4.14	170	115	213	132	1417	200	0.579	37.9
200	100	8	33.9	43.2	2091	705	6.95	4.04	209	141	267	165	1811	250	0.566	29.5
200	100	10	41.3	52.6	2444	818	6.82	3.94	244	164	318	195	2154	292	0.557	24.2
200	120	4	19.3	24.5	1353	618	7.43	5.02	135	103	164	115	1345	172	0.626	51.9
200	120	5	23.8	30.4	1649	750	7.37	4.97	165	125	201	141	1652	210	0.623	42.0
200	120	6	28.3	36.0	1929	874	7.32	4.93	193	146	237	166	1947	245	0.619	35.4
200	120	8	36.5	46.4	2386	1079	7.17	4.82	239	180	298	209	2507	308	0.606	27.4
200	120	10	44.4	56.6	2806	1262	7.04	4.72	281	210	356	250	3007	364	0.597	22.5

**EN 10219 Properties cold formed square and rectangular hollow sections**

Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
200	150	4	21.2	26.9	1584	1021	7.67	6.16	158	136	187	154	1942	219	0.686	47.3
200	150	5	26.2	33.4	1935	1245	7.62	6.11	193	166	230	189	2391	267	0.683	38.2
200	150	6	31.1	39.6	2268	1457	7.56	6.06	227	194	271	223	2826	313	0.679	32.1
200	150	8	40.2	51.2	2829	1816	7.43	5.95	283	242	344	283	3665	396	0.666	24.9
200	150	10	49.1	62.6	3348	2143	7.31	5.85	335	286	413	339	4428	471	0.657	20.4
200	200	5	30.1	38.4	2410	2410	7.93	7.93	241	241	279	279	3763	362	0.783	33.2
200	200	6	35.8	45.6	2833	2833	7.88	7.88	283	283	330	330	4459	426	0.779	27.9
200	200	8	46.5	59.2	3566	3566	7.76	7.76	357	357	421	421	5815	544	0.766	21.5
200	200	10	57.0	72.6	4251	4251	7.65	7.65	425	425	508	508	7072	651	0.757	17.6
200	200	12,5	68.3	87.0	4859	4859	7.47	7.47	486	486	594	594	8502	765	0.736	14.6
220	120	6	30.2	38.4	2439	952	7.97	4.98	222	159	274	180	2222	271	0.659	33.1
250	100	4	21.2	26.9	2092	503	8.81	4.32	167	101	210	111	1323	179	0.686	47.3
250	100	5	26.2	33.4	2554	610	8.75	4.28	204	122	259	136	1620	217	0.683	38.2
250	100	6	31.1	39.6	2992	710	8.69	4.23	239	142	305	160	1905	253	0.679	32.1
250	100	8	40.2	51.2	3714	875	8.51	4.13	297	175	385	201	2439	317	0.666	24.9
250	100	10	49.1	62.6	4384	1021	8.37	4.04	351	204	462	240	2910	373	0.657	20.4
250	150	5	30.1	38.4	3304	1508	9.28	6.27	264	201	320	225	3285	337	0.783	33.2
250	150	6	35.8	45.6	3886	1768	9.23	6.23	311	236	378	266	3886	396	0.779	27.9
250	150	8	46.5	59.2	4886	2219	9.08	6.12	391	296	482	340	5050	504	0.766	21.5
250	150	10	57.0	72.6	5825	2634	8.96	6.02	466	351	582	409	6121	602	0.757	17.6
250	150	12,5	68.3	87.0	6633	3002	8.73	5.87	531	400	678	477	7315	704	0.736	14.6
250	250	6	45.2	57.6	5672	5672	9.92	9.92	454	454	524	524	8843	681	0.979	22.1
250	250	8	59.1	75.2	7229	7229	9.80	9.80	578	578	676	676	11598	878	0.966	16.9
250	250	10	72.7	92.6	8707	8707	9.70	9.70	697	697	822	822	14197	1062	0.957	13.8
250	250	12,5	88.0	112	10161	10161	9.52	9.52	813	813	975	975	17283	1266	0.936	11.4
300	100	6	35.8	45.6	4777	842	10.2	4.30	318	168	411	188	2403	306	0.779	27.9
300	100	8	46.5	59.2	5978	1045	10.0	4.20	399	209	523	238	3080	385	0.766	21.5
300	100	10	57.0	72.6	7106	1224	9.90	4.11	474	245	631	285	3681	455	0.757	17.6
300	100	12,5	68.3	87.0	8010	1374	9.59	3.97	534	275	732	330	4292	521	0.736	14.6
300	200	6	45.2	57.6	7370	3962	11.3	8.29	491	396	588	446	8115	651	0.979	22.1

EN 10219 Properties cold formed square and rectangular hollow sections																
Size		Thickness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Superficial area/m	Approx. length /tonne
D	B	T	M	A	I <sub>xx</sub>	I <sub>yy</sub>	i <sub>xx</sub>	i <sub>yy</sub>	W <sub>el,xx</sub>	W <sub>el,yy</sub>	W <sub>pl,xx</sub>	W <sub>pl,yy</sub>	I <sub>t</sub>	C <sub>t</sub>	A <sub>s</sub>	/tonne
mm	mm	mm	kg/m	cm <sup>2</sup>	cm <sup>4</sup>	cm <sup>4</sup>	cm	cm	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>	m <sup>2</sup> /m	m
300	200	8	59.1	75.2	9389	5042	11.2	8.19	626	504	757	574	10627	838	0.966	16.9
300	200	10	72.7	92.6	11313	6058	11.1	8.09	754	606	921	698	12987	1012	0.957	13.8
300	200	12,5	88.0	112	13179	7060	10.8	7.94	879	706	1091	828	15768	1204	0.936	11.4