



G	=	weight
A	=	cross-sectional area
I	=	moment of inertia
W_{y;el}	=	elastic section modulus
W_{y;pl}	=	plastic section modulus
i	=	radius of gyration = $(I/A)^{0.5}$

Profile	Geometry												
	d	t	G	A	I _y	W _{y,el}	W _{y,pl}	i _y	I _z	W _{z,el}	W _{z,pl}	i _z	I _t
	[mm]	[mm]	[kg/m]	[mm ²]	[mm ⁴]	[mm ³]	[mm ³]	[mm]	[mm ⁴]	[mm ³]	[mm ³]	[mm]	[mm ⁴]
					·10 ⁴	·10 ³	·10 ³		·10 ⁴	·10 ³	·10 ³		·10 ⁵
Hot Formed Circular Hollow Section													
HF CHS 42.4 x 2.6	42.4	2.6	2.55	325	6.5	3.05	4.12	14.1	6.5	3.05	4.12	14.1	1.29
HF CHS 42.4 x 3.2	42.4	3.2	3.09	394	7.6	3.59	4.93	13.9	7.6	3.59	4.93	13.9	1.52
HF CHS 48.3 x 3.2	48.3	3.2	3.56	453	11.6	4.8	6.52	16.0	11.6	4.8	6.52	16.0	2.32
HF CHS 60.3 x 3.2	60.3	3.2	4.51	574	23.5	7.78	10.44	20.2	23.5	7.78	10.44	20.2	4.69
HF CHS 76.1 x 3.2	76.1	3.2	5.75	733	48.8	12.82	17.02	25.8	48.8	12.82	17.02	25.8	9.76
HF CHS 76.1 x 4	76.1	4	7.11	906	59.1	15.52	20.81	25.5	59.1	15.52	20.81	25.5	11.81
HF CHS 88.9 x 4	88.9	4	8.38	1067	96.3	21.67	28.85	30.0	96.3	21.67	28.85	30.0	19.27
HF CHS 101.6 x 4	101.6	4	9.63	1226	146.3	28.8	38.12	34.5	146.3	28.8	38.12	34.5	29.26
HF CHS 114.3 x 4	114.3	4	10.88	1386	211.1	36.93	48.69	39.0	211.1	36.93	48.69	39.0	42.21
HF CHS 139.7 x 4	139.7	4	13.39	1705	392.9	56.24	73.68	48.0	392.9	56.24	73.68	48.0	78.57
HF CHS 168.3 x 4	168.3	4	16.21	2065	697.1	82.84	108.0	58.1	697.1	82.84	108.0	58.1	139.4
HF CHS 177.8 x 5	177.8	5	21.31	2714	1014.0	114.1	149.3	61.1	1014.0	114.1	149.3	61.1	202.8

Profile	Geometry												
	d [mm]	t [mm]	G [kg/m]	A [mm ²]	I _y [mm ⁴] ·10 ⁴	W _{y;el} [mm ³] ·10 ³	W _{y;pl} [mm ³] ·10 ³	i _y [mm]	I _z [mm ⁴] ·10 ⁴	W _{z;el} [mm ³] ·10 ³	W _{z;pl} [mm ³] · 10 ³	i _z [mm]	I _t [mm ⁴] · 10 ⁵
Hot Formed Circular Hollow Section													
HF CHS 193.7 x 5	193.7	5	23.27	2964	1320.2	136.3	178.1	66.7	1320.2	136.3	178.1	66.7	264.0
HF CHS 219.1 x 5	219.1	5	26.4	3363	1928.0	176.0	229.2	75.7	1928.0	176.0	229.2	75.7	385.6
HF CHS 219.1 x 6	219.1	6	31.53	4017	2281.9	208.3	272.5	75.4	2281.9	208.3	272.5	75.4	456.4
HF CHS 244.5 x 6	244.5	6	35.29	4496	3198.5	261.6	341.4	84.3	3198.5	261.6	341.4	84.3	639.7
HF CHS 273 x 6	273	6	39.51	5033	4487.1	328.7	427.8	94.4	4487.1	328.7	427.8	94.4	897.4
HF CHS 323.9 x 6	323.9	6	47.04	5992	7572.5	467.6	606.4	112.4	7572.5	467.6	606.4	112.4	1514
HF CHS 355.6 x 6	355.6	6	51.73	6590	10071	566.4	733.4	123.6	10071	566.4	733.4	123.6	2014
HF CHS 406.4 x 6	406.4	6	59.25	7547	15128	744.5	962.0	141.6	15128	744.5	962.0	141.6	3026
HF CHS 457 x 6	457	6	66.73	8501	21618	946.1	1220	159.5	21618	946.1	1220	159.5	4324
HF CHS 457 x 8	457	8	88.58	11285	28446	1245	1613	158.8	28446	1245	1613	158.8	5689
HF CHS 508 x 8	508	8	98.65	12566	39280	1546	2000	176.8	39280	1546	2000	176.8	7856
HF CHS 610 x 8	610	8	118.77	15130	68551	2248	2899	212.9	68551	2248	2899	212.9	13710
HF CHS 610 x 10	610	10	147.97	18850	84847	2782	3600	212.2	84847	2782	3600	212.2	16969
HF CHS 711 x 10	711	10	172.88	22023	135301	3806	4914	247.9	135301	3806	4914	247.9	27060
HF CHS 762 x 10	762	10	185.45	23625	167028	4384	5655	265.9	167028	4384	5655	265.9	33406
HF CHS 813 x 10	813	10	198.03	25227	203364	5003	6448	283.9	203364	5003	6448	283.9	40673
HF CHS 914 x 10	914	10	222.94	28400	290147	6349	8172	319.6	290147	6349	8172	319.6	58029
HF CHS 914 x 12	914	12	266.94	34005	345890	7569	9764	318.9	345890	7569	9764	318.9	69178
HF CHS 1016 x 12	1016	12	297.12	37850	476985	9389	12097	355.0	476985	9389	12097	355.0	95397
HF CHS 1067 x 12	1067	12	312.21	39773	553420	10373	13357	373.0	553420	10373	13357	373.0	110684
HF CHS 1168 x 12	1168	12	342.1	43580	728050	12467	16037	408.7	728050	12467	16037	408.7	145610
HF CHS 1168 x 16	1168	16	454.56	57906	960774	16452	21235	407.3	960774	16452	21235	407.3	192155
HF CHS 1219 x 16	1219	16	474.68	60469	1094091	17951	23157	425.4	1094091	17951	23157	425.4	218818
HF CHS 1219 x 20	1219	20	591.38	75335	1354155	22217	28755	424.0	1354155	22217	28755	424.0	270831
HF CHS 1219 x 25	1219	25	736.15	93777	1671873	27430	35646	422.2	1671873	27430	35646	422.2	334375