

Suorakaiteenmuotoiset rakenneputket EN10219

Rectangular Hollow Sections

Ainestandardi / Material acc. EN10025

Mittastandardi/ Dimensions acc. EN10058

Koko	Paksuus	Paino	Poikki- pinta-ala	Jäyhyys- momentti		Jäyhyys- säde		Taivutusvast- us		Plastinen taivutus- vastus		Vääntö- jäyhyys- momentti		Ulko- puolinen pinta-ala	Noin pituus/ tonni
Size	Thick- ness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Super- ficial area/m	Appr. length/ tonne
H x B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{elyy}	W _{plxx}	W _{plyy}	I _t	C _t	A _s	
mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m
50 x 25	2.0	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
	2.5	2.62	3.34	9.89	3.28	1.72	0.99	3.95	2.62	5.11	3.12	8.43	4.60	0.141	382
	3.0	3.07	3.91	11.2	3.67	1.69	0.97	4.47	2.93	5.86	3.56	9.64	5.18	0.140	326
50 x 30	2.0	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
	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
	3.0	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
	4.0	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
60 x 30	3.0	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
	4.0	4.83	6.15	24.7	8.06	2.00	1.14	8.23	5.37	10.92	6.62	21.5	9.52	0.166	207
60 x 40	2.5	3.60	4.59	22.1	11.70	2.19	1.60	7.36	5.87	9.06	6.84	25.1	9.72	0.191	278
	3.0	4.25	5.41	25.4	13.40	2.17	1.58	8.46	6.72	10.5	7.94	29.3	11.2	0.190	236
	4.0	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
	5.0	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
70 x 40	3.0	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
	4.0	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 x 50	3.0	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
	4.0	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
80 x 40	3.0	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
	4.0	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
	5.0	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 x 50	3.0	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
	4.0	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
	5.0	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 x 60	3.0	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
	4.0	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
	5.0	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
90 x 50	3.0	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
	3.5	7.06	8.99	92.7	36.9	3.21	2.03	20.6	14.8	25.8	17.1	87.5	25.3	0.268	142
	4.0	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
	5.0	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
100 x 40	3.0	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
	4.0	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
	5.0	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 x 50	3.0	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
	4.0	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
	5.0	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
	6.0	12.3	15.6	179	58.7	3.38	1.94	35.8	23.5	46.9	28.5	154	41.4	0.279	81.5
100 x 60	3.0	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
	3.5	8.16	10.4	137	61.9	3.63	2.44	27.4	20.6	33.8	23.8	139	34.8	0.306	123
	4.0	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
	5.0	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
	6.0	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 x 80	3.0	8.01	10.2	149	106	3.82	3.22	29.8	26.4	35.4	30.4	196	41.9	0.350	125
	4.0	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
	5.0	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
120 x 40	3.0	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
	4.0	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
	5.0	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 x 60	3.0	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
	3.5	9.26	11.8	216	73.1	4.28	2.49	35.9	24.4	44.9	27.7	179	42.2	0.348	108.0
	4.0	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
	5.0	12.8	16.4	287	96	4.19	2.42	47.8	32.0	60.9	37.4	242	55.8	0.343	77.9
	6.0	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 x 80	4.0	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
	5.0	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
	6.0	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
	8.0	21.4	27.2	476	252	4.18	3.04	79.3	62.9	102	76.9	584	108	0.366	46.8
140 x 80	3.0	9.90	12.6	334	141	5.15	3.35	47.8	35.3	58.2	39.6	317	59.7	0.430	101
	4.0	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
	5.0	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
	6.0	18.9	24.0	597	248	4.98	3.21	85.3	62.0	107	72.4	584	106	0.419	53.0
	8.0	23.9	30.4	708	293	4.82	3.10	101	73.3	131	88.4	731	129	0.406	41.8
	10.0	28.7	36.6	804	330	4.69	3.01	115	82.6	152	103	851	147	0.397	34.8
150 x 100	4.0	14.9	18.9	595	319	5.60	4.10	79.3	63.7	95.7	72.5	662	105	0.486	67.2
	5.0	18.3	23.4	719	384	5.55	4.05	95.9	76.8	117	88.3	809	127	0.483	54.5

Koko	Paksuus	Paino	Poikki- pinta-ala	Jäyhyys- momentti		Jäyhyys- säde		Taivutusvast- us		Plastinen taivutus- vastus		Vääntö- jäyhyys- momentti		Ulko- puolinen pinta-ala	Noin pituus/ tonni	
Size	Thick- ness	Mass	Sectional area	Moment of inertia		Radius of gyration		Elastic modulus		Plastic modulus		Torsional constants		Super- ficial area/m	Appr. length/ tonne	
H x B	T	M	A	I _{xx}	I _{yy}	i _{xx}	i _{yy}	W _{elxx}	W _{elyy}	W _{plxx}	W _{plyy}	I _t	C _t	A _s		
mm	mm	kg/m	cm ²	cm ⁴	cm ⁴	cm	cm	cm ³	cm ³	cm ³	cm ³	cm ⁴	cm ³	m ² /m	m	
	6.0	21.7	27.6	835	444	5.50	4.01	111	88.8	137	103	978	147	0.479	46.1	
	8.0	27.7	35.2	1008	536	5.35	3.90	134	107	169	128	1206	182	0.466	36.0	
	10.0	33.4	42.6	1162	614	5.22	3.80	155	123	199	150	1426	211	0.457	29.9	
	160 x 80	4.0	14.2	18.1	598	204	5.74	3.35	74.7	50.9	92.9	57.4	494	88	0.466	70.2
	5.0	17.5	22.4	722	244	5.68	3.30	90.2	61.0	113	69.7	601	106	0.463	57.0	
	6.0	20.7	26.4	836	281	5.62	3.26	105	70.2	132	81.3	702	122	0.459	48.2	
	8.0	26.4	33.6	1001	335	5.46	3.16	125	83.7	163	100	882	150	0.446	37.9	
	180 x 80	4.0	15.5	19.7	802	227	6.37	3.39	89.1	56.7	112	63.5	578	100	0.506	64.5
	5.0	19.1	24.4	971	272	6.31	3.34	108	68.1	137	77.2	704	120	0.503	52.3	
	6.0	22.6	28.8	1128	314	6.25	3.30	125	78.5	160	90.2	823	139	0.499	44.2	
	8.0	28.9	36.8	1362	377	6.08	3.20	151	94.1	198	111	1036	170	0.486	34.6	
	10.0	35.0	44.6	1570	429	5.94	3.10	174	107	234	131	1214	196	0.477	28.6	
	180 x 100	4.0	16.8	21.3	926	374	6.59	4.18	103	74.8	126	84	845	127	0.546	59.7
	5.0	20.7	26.4	1124	452	6.53	4.14	125	90.4	154	103	1045	154	0.543	48.3	
	6.0	24.5	31.2	1310	524	6.48	4.10	146	105	181	120	1227	179	0.539	40.8	
	8.0	31.4	40.0	1598	637	6.32	3.99	178	127	226	150	1565	222	0.526	31.8	
	10.0	38.1	48.6	1859	736	6.19	3.89	207	147	268	177	1859	260	0.517	26.2	
	200 x 100	4.0	18.0	22.9	1200	411	7.23	4.23	120	82.2	148	91.7	985	142	0.586	55.5
	5.0	22.3	28.4	1459	497	7.17	4.19	146	99.4	181	112	1206	172	0.583	44.9	
	6.0	26.4	33.6	1703	577	7.12	4.14	170	115	213	132	1417	200	0.579	37.9	
	8.0	33.9	43.2	2091	705	6.95	4.04	209	141	267	165	1811	250	0.566	29.5	
	10.0	41.3	52.6	2444	818	6.82	3.94	244	164	318	195	2154	292	0.557	24.2	
	200 x 120	4.0	19.3	24.5	1353	618	7.43	5.02	135	103	164	115	1345	172	0.626	51.9
	5.0	23.8	30.4	1649	750	7.37	4.97	165	125	201	141	1652	210	0.623	42.0	
	6.0	28.3	36.0	1929	874	7.32	4.93	193	146	237	166	1947	245	0.619	35.4	
	8.0	36.5	46.4	2386	1079	7.17	4.82	239	180	298	209	2507	308	0.606	27.4	
	10.0	44.4	56.6	2806	1262	7.04	4.72	281	210	356	250	3007	364	0.597	22.5	
	200 x 150	4.0	21.2	26.9	1584	1021	7.67	6.16	158	136	187	154	1942	219	0.686	47.3
	5.0	26.2	33.4	1935	1245	7.62	6.11	193	166	230	189	2391	267	0.683	38.2	
	6.0	31.1	39.6	2268	1457	7.56	6.06	227	194	271	223	2826	313	0.679	32.1	
	8.0	40.2	51.2	2829	1816	7.43	5.95	283	242	344	283	3665	396	0.666	24.9	
	10.0	49.1	62.6	3348	2143	7.31	5.85	335	286	413	339	4428	471	0.657	20.4	
	250 x 150	5.0	30.1	38.4	3304	1508	9.28	6.27	264	201	320	225	3285	337	0.783	33.2
	6.0	35.8	45.6	3886	1768	9.23	6.23	311	236	378	266	3886	396	0.779	27.9	
	8.0	46.5	59.2	4886	2219	9.08	6.12	391	296	482	340	5050	504	0.766	21.5	
	10.0	57.0	72.6	5825	2634	8.96	6.02	466	351	582	409	6121	602	0.757	17.6	
	12.0	66.0	84.1	6458	2925	8.77	5.90	517	390	658	463	7088	684	0.738	15.2	
	12.5	68.3	87.0	6633	3002	8.73	5.87	531	400	678	477	7315	704	0.736	14.6	
	300 x 100	6.0	35.8	45.6	4777	842	10.2	4.30	318	168	411	188	2403	306	0.779	27.9
	8.0	46.5	59.2	5978	1045	10.0	4.20	399	209	523	238	3080	385	0.766	21.5	
	10.0	57.0	72.6	7106	1224	9.90	4.11	474	245	631	285	3681	455	0.757	17.6	
	12.5	68.3	87.0	8010	1374	9.59	3.97	534	275	732	330	4292	521	0.736	14.6	
	300 x 200	6.0	45.2	57.6	7370	3962	11.3	8.29	491	396	588	446	8115	651	0.979	22.1
	8.0	59.1	75.2	9389	5042	11.2	8.19	626	504	757	574	10627	838	0.966	16.9	
	10.0	72.7	92.6	11313	6058	11.1	8.09	754	606	921	698	12987	1012	0.957	13.8	
	12.0	84.8	108	12788	6854	10.9	7.96	853	685	1056	801	15236	1167	0.938	11.8	
	12.5	88.0	112	13179	7060	10.8	7.94	879	706	1091	828	15768	1204	0.936	11.4	
	400 x 200	8.0	71.6	91.2	18974	6517	14.4	8.45	949	652	1173	728	15820	1133	1.170	14.0
	10.0	88.4	113	23003	7864	14.3	8.36	1150	786	1434	888	19368	1373	1.160	11.3	
	12.0	104	132	26248	8977	14.1	8.24	1312	898	1656	1027	22782	1591	1.140	9.6	
	12.5	108	137	27100	9260	14.1	8.22	1355	926	1714	1062	23594	1644	1.140	9.3	