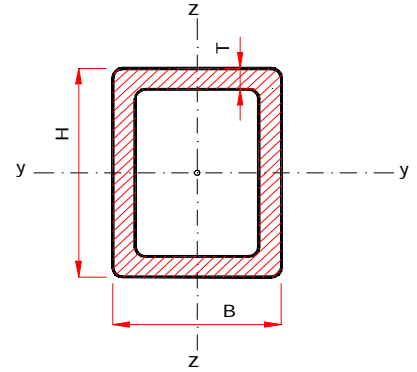


## Profile tubulare dreptunghiulare



Formate la cald, in executie sudata sau fara sudura  
extras din DIN EN 10210-2, ed. noiembrie 1997 (inlocuieste DIN 59410)

Dimensiuni		A	M	Caracteristici sectionale						Valori de calcul				
H x B	T			$I_y$	$W_y$	$i_y$	$I_z$	$W_z$	$i_z$	$W_{pl,y}$	$M_{pl,y}$	$W_{pl,z}$	$I_T$	$C_1$
mm	mm	cm <sup>2</sup>	kg/m	cm <sup>4</sup>	cm <sup>3</sup>	cm	cm <sup>4</sup>	cm <sup>3</sup>	cm	cm <sup>3</sup>	kNm	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
50 x 30	3.0	4.34	3.41	13.6	5.43	1.77	5.94	3.96	1.17	6.88	1.65	4.76	13.5	6.51
	4.0	5.59	4.39	16.5	6.60	1.72	7.08	4.72	1.13	8.59	2.06	5.88	16.6	7.77
60 x 40	3.0	5.54	4.35	26.5	8.82	2.18	13.9	6.95	1.58	10.9	2.62	8.19	29.2	11.2
	4.0	7.19	5.64	32.8	10.9	2.14	17.0	8.52	1.54	13.8	3.31	10.3	36.7	13.7
80 x 40	3.0	6.74	5.29	54.2	13.6	2.84	18.0	9.0	1.63	17.1	4.10	10.4	43.8	15.3
	4.0	8.79	6.90	68.2	17.1	2.79	22.2	11.1	1.59	21.8	5.23	13.2	55.2	18.9
	5.0	10.70	8.42	80.3	20.1	2.74	25.7	12.9	1.55	26.1	6.26	15.7	65.1	21.9
90 x 50	3.0	7.94	6.24	84.4	18.8	3.26	33.5	13.4	2.05	23.2	5.57	15.3	76.5	22.4
	4.0	10.4	8.15	107	23.8	3.21	41.9	16.8	2.01	29.8	7.15	19.6	97.5	28
	5.0	12.7	9.99	127	28.3	3.16	49.2	19.7	1.97	36.0	8.64	23.5	116	32.9
100 x 50	4.0	11.2	8.78	140	27.9	3.53	46.2	18.5	2.03	35.2	8.45	21.5	113	31.4
	5.0	13.7	10.80	167	33.3	3.48	54.3	21.7	1.99	42.6	10.20	25.8	135	36.9
	6.3	16.9	13.30	197	39.4	3.42	63.0	25.2	1.93	51.3	12.30	30.8	160	42.9
100 x 60	4.0	12.0	9.41	158	31.6	3.63	70.5	23.5	2.43	39.1	9.38	27.3	156	38.7
	5.0	14.7	11.6	189	37.8	3.58	83.6	27.9	2.38	47.4	11.4	32.9	188	45.9
	6.3	18.1	14.2	225	45.0	3.52	98.1	32.7	2.33	57.3	13.8	39.5	224	53.8
120 x 60	4.0	13.6	10.7	249	41.5	4.28	83.1	27.7	2.47	51.9	12.5	31.7	201	47.1
	5.0	16.7	13.1	299	49.9	4.23	98.8	32.9	2.43	63.1	15.1	38.4	242	56
	6.3	20.7	16.2	358	59.7	4.16	116	38.8	2.37	76.7	18.4	46.3	290	65.9
120 x 80	4.0	15.2	11.9	303	50.4	4.46	161	40.2	3.25	61.2	14.7	46.1	330	65
	5.0	18.7	14.7	365	60.9	4.42	193	48.2	3.21	74.6	17.9	56.1	401	77.9
	6.3	23.2	18.2	440	73.3	4.36	230	57.6	3.15	91.0	21.8	68.2	487	92.9
140 x 80	4.0	16.8	13.2	441	62.9	5.12	184	46.0	3.31	77.1	18.5	52.2	411	76.5
	5.0	20.7	16.3	534	76.3	5.08	222	55.3	3.27	94.3	22.6	63.6	499	91.9
	6.3	25.7	20.2	646	92.3	5.01	265	66.2	3.21	115	27.6	77.5	607	110
150 x 100	6.3	29.5	23.1	898	120	5.52	474	94.8	4.01	147	35.3	110.0	986	153
	8.0	36.8	28.9	1087	145	5.44	569	114.0	3.94	180	43.2	135.0	1205	183
	10.0	44.9	35.3	1282	171	5.34	665	133.0	3.85	216	51.8	161.0	1432	214
160 x 80	5.0	22.7	17.8	744	93	5.72	249	62.3	3.31	116	27.8	71.1	600	106
	6.3	28.2	22.2	903	113	5.66	299	74.8	3.26	142	39.1	86.8	730	127
	8.0	35.2	27.6	1091	136	5.57	356	89	3.18	175	42.0	106	883	151
	10.0	42.9	33.7	1284	161	5.47	411	103	3.10	209	50.2	125	1041	175
180 x 100	5.0	26.7	21.0	1153	128	6.57	460	92	4.15	157	37.7	104	1042	154
	6.3	33.3	26.1	1407	156	6.50	557	111	4.09	194	46.6	128	1277	186
	8.0	41.6	32.6	1713	190	6.42	671	134	4.02	239	57.4	157	1560	224
	10.0	50.9	40.0	2036	226	6.32	787	157	3.93	288	69.1	177	1862	263
200 x 100	6.3	35.8	28.1	1829	183	7.15	613	123	4.14	228	54.7	140	1475	208
	8.0	44.8	35.1	2234	223	7.06	739	148	4.06	282	67.7	172	1804	251
	10.0	54.9	43.1	2664	266	6.96	869	174	3.98	341	81.8	206	2156	295
	12.5	67.1	52.7	3136	314	6.84	1004	201	3.87	408	97.9	245	2541	341
200 x 120	6.3	38.3	30.1	2065	207	7.34	929	155	4.92	253	60.7	177	2028	255
	8.0	48.0	37.6	2529	253	7.26	1128	188	4.85	313	75.1	218	2495	310

Profile tubulare dreptunghiulare p.2														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
200 x 120	10.0	58.9	46.3	3026	303	7.17	1337	223	4.76	379	91.0	263	3001	367
	12.5	72.1	56.6	3576	358	7.04	1562	260	4.66	455	109.0	314	3569	428
250 x 150	6.3	48.4	38.0	4143	331	9.25	1874	250	6.22	402	96.5	283	4054	413
	8.0	60.8	47.7	5111	409	9.17	2298	306	6.15	501	120	350	5021	506
	10.0	74.9	58.8	6174	494	9.08	2755	367	6.06	611	147	426	6090	605
	12.5	92.1	72.3	7378	591	8.96	3265	435	5.96	740	178	514	7326	717
260 x 180	6.3	53.4	41.9	5166	397	9.83	2929	325	7.40	475	114	369	5810	524
	8.0	67.2	52.7	6390	492	9.75	3608	401	7.33	592	142	459	7221	644
	10.0	82.9	65.1	7741	595	9.66	4351	483	7.24	724	174	560	8798	775
	12.5	102.0	80.1	9299	715	9.54	5196	577	7.13	879	211	679	10643	924
300 x 200	6.3	61.0	47.9	7829	522	11.3	4193	419	8.29	624	150	472	8476	681
	8.0	76.8	60.3	9717	648	11.3	5184	518	8.22	779	187	589	10562	840
	10.0	94.9	74.5	11819	788	11.2	6278	628	8.13	956	229	721	12908	1015
	12.5	117.0	91.9	14273	952	11.0	7537	754	8.02	1165	280	877	15677	1217
350 x 250	8.0	92.8	72.8	16449	940	13.3	9798	784	10.30	1118	268	888	19027	1254
	10.0	115.0	90.2	20102	1149	13.2	11937	955	10.20	1375	330	1091	23354	1525
	12.5	142.0	112.0	24419	1395	13.1	14444	1156	10.10	1685	404	1334	28526	1842
	16.0	179.0	141.0	30011	1715	12.9	17654	1412	9.93	2095	503	1655	35325	2246
400 x 200	8.0	92.8	72.8	19562	978	14.5	6660	666	8.47	1203	289	743	15732	1135
	10.0	115.0	90.2	23914	1196	14.4	8084	808	8.39	1480	355	911	19259	1376
	12.5	142.0	112.0	29063	1453	14.3	9738	974	8.28	1813	435	1111	23438	1656
	16.0	179.0	141.0	35738	1787	14.1	11824	1182	8.13	2256	541	1374	28871	2010
450 x 250	8.0	109.0	85.4	30082	1337	16.6	12142	971	10.60	1622	389	1081	27083	1629
	10.0	135.0	106.0	36895	1640	16.5	14819	1185	10.50	2000	480	1331	33284	1986
	12.5	167.0	131.0	45026	2001	16.4	17973	1438	10.40	2458	590	1631	40719	2406
	16.0	211.0	166.0	55705	2476	16.2	22041	1763	10.20	3070	737	2029	50545	2947
500 x 300	10.0	155.0	122.0	53762	2150	18.6	24439	1629	12.60	2595	623	1826	52450	2696
	12.5	192.0	151.0	65813	2633	18.5	29780	1985	12.50	3196	767	2244	64389	3281
	16.0	243.0	191.0	81783	3271	18.3	36768	2451	12.30	4005	961	2804	80329	4044
	20.0	300.0	235.0	98777	3951	18.2	44078	2939	12.10	4885	1172	3408	97447	4842

**Formate la rece, in executie sudata**  
 extras din DIN EN 10219-2, ed. noiembrie 1997 (inlocuieste DIN 59411)

Dimensiuni		A	M	Caracteristici sectionale						Valori de calcul				
H x B	T			I <sub>y</sub>	W <sub>y</sub>	i <sub>y</sub>	I <sub>z</sub>	W <sub>z</sub>	i <sub>z</sub>	W <sub>pl,y</sub>	M <sub>pl,y</sub>	W <sub>pl,z</sub>	I <sub>T</sub>	C <sub>1</sub>
mm	mm	cm <sup>2</sup>	kg/m	cm <sup>4</sup>	cm <sup>3</sup>	cm	cm <sup>4</sup>	cm <sup>3</sup>	cm	cm <sup>3</sup>	kNm	cm <sup>3</sup>	cm <sup>4</sup>	cm <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
50 x 30	2.0	2.94	2.31	9.54	3.81	1.80	4.29	2.86	1.21	4.74	1.14	3.33	9.77	4.84
	3.0	4.21	3.30	12.8	5.13	1.75	5.70	3.80	1.16	6.57	1.58	4.58	13.5	6.49
	4.0	5.35	4.20	15.3	6.10	1.69	6.69	4.46	1.12	8.05	1.93	5.58	16.5	7.71
60 x 40	2.0	3.74	2.93	18.4	6.14	2.22	9.83	4.92	1.62	7.47	1.79	5.65	20.7	8.12
	3.0	5.41	4.25	25.4	8.46	2.17	13.4	6.72	1.58	10.5	2.52	7.94	29.3	11.2
	4.0	6.95	5.45	31.0	10.3	2.11	16.3	8.14	1.53	13.2	3.17	9.89	36.7	13.7
	5.0	8.36	6.56	35.3	11.8	2.06	18.4	9.21	1.48	15.4	3.70	11.5	42.8	15.6
80 x 40	2.0	4.54	3.56	37.4	9.34	2.87	12.7	6.36	1.67	11.6	2.79	7.17	30.9	11.0
	3.0	6.61	5.19	52.3	13.1	2.81	17.6	8.78	1.63	16.5	3.96	10.2	43.9	15.3
	4.0	8.55	6.71	64.8	16.2	2.75	21.5	10.7	1.59	20.9	5.02	12.8	55.2	18.8
	5.0	10.40	8.13	75.1	18.8	2.69	24.6	12.3	1.54	24.7	5.93	15.0	65.0	21.7
90 x 50	3.0	7.81	6.13	81.9	18.2	3.24	32.7	13.1	2.05	22.6	5.42	15.0	76.7	22.4
	4.0	10.10	7.97	103	22.8	3.18	40.7	16.3	2.00	28.8	6.91	19.1	97.7	28.0
	5.0	12.40	9.70	121	26.8	3.12	47.4	18.9	1.96	34.4	8.26	22.7	116.0	32.7
100 x 50	3.0	8.41	6.60	106	21.3	3.56	36.1	14.4	2.07	26.7	6.41	16.4	88.6	25.0
	5.0	13.40	10.50	158	31.6	3.44	52.5	21.0	1.98	40.8	9.79	25.0	135	36.8
100 x 60	3.0	9.01	7.07	121	24.1	3.66	54.6	18.2	2.46	29.6	7.10	20.8	122	30.6
	4.0	11.7	9.22	153	30.5	3.60	68.7	22.9	2.42	37.9	9.10	26.6	156	38.7
	5.0	14.4	11.30	181	36.2	3.55	80.8	26.9	2.37	45.6	10.9	31.9	188	45.8

Profile tubulare dreptunghiulare p.3														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>100 x 60</b>	<b>6.3</b>	17.2	13.50	203	40.7	3.44	90.9	30.3	2.30	52.8	12.7	36.9	223	53.0
<b>120 x 60</b>	<b>3.0</b>	10.2	8.01	189	31.5	4.30	64.4	21.5	2.51	39.2	9.41	24.2	156	37.1
	<b>4.0</b>	13.3	10.5	241	40.1	4.25	81.2	27.1	2.47	50.5	12.1	31.1	201	47.0
	<b>5.0</b>	16.4	12.8	287	47.8	4.19	96	32.0	2.42	60.9	16.4	37.4	242	55.8
	<b>6.3</b>	19.7	15.5	327	54.5	4.07	109	36.4	2.35	71.2	17.1	43.7	289	65.1
<b>120 x 80</b>	<b>4.0</b>	14.9	11.7	295	49.1	4.44	157	39.3	3.24	59.8	14.4	45.2	331	64.9
	<b>5.0</b>	18.4	14.4	353	58.9	4.39	188	46.8	3.20	72.4	17.4	54.7	402	77.8
	<b>6.3</b>	22.2	17.5	408	68.1	4.28	217	54.3	3.12	85.6	20.5	64.7	488	92.1
<b>140 x 80</b>	<b>4.0</b>	16.5	13.0	430	61.4	5.10	180	45.1	3.30	75.5	18.1	51.3	412	76.5
	<b>5.0</b>	20.4	16.0	517	73.9	5.04	216	54.0	3.26	91.8	22.0	62.2	501	91.8
	<b>6.3</b>	24.8	19.4	603	86.1	4.93	251	62.9	3.19	109	26.2	74.0	609	109
<b>150 x 100</b>	<b>4.0</b>	18.9	14.9	595	79.3	5.60	319	63.7	4.10	95.7	23.0	72.5	662	105
	<b>5.0</b>	23.4	18.3	719	95.9	5.55	384	76.8	4.05	117	28.1	88.3	809	127
	<b>6.3</b>	28.5	22.4	848	113.0	5.45	453	90.5	3.98	140	33.6	106	992	152
	<b>8.0</b>	35.2	27.7	1008	134.0	5.35	536	107.0	3.90	169	40.6	128	1206	182
<b>160 x 80</b>	<b>4.0</b>	18.1	14.2	598	74.7	5.74	204	50.9	3.35	92.6	22.2	57.4	494	88
	<b>5.0</b>	22.4	17.5	722	90.2	5.68	244	61.0	3.30	113	27.1	69.7	601	106
	<b>6.3</b>	27.3	21.4	846	106	5.57	286	71.4	3.24	135	32.4	83.3	732	126
	<b>8.0</b>	33.6	26.4	1001	125	5.46	335	83.7	3.16	163	39.1	100	882	150
<b>180 x 100</b>	<b>5.0</b>	26.4	20.7	1124	125	6.53	452	90.4	4.14	154	37.0	103	1045	154
	<b>6.3</b>	32.3	25.4	1335	148	6.43	536	107	4.07	186	44.6	124	1283	185
	<b>8.0</b>	40.0	31.4	1598	178	6.32	637	127	3.99	226	54.2	150	1565	222
	<b>10.0</b>	48.6	38.1	1859	207	6.19	736	147	3.89	268	64.3	177	1869	260
<b>200 x 100</b>	<b>6.3</b>	34.8	27.4	1739	174	7.06	591	118	4.12	219	52.6	135	1486	208
	<b>8.0</b>	43.2	33.9	2091	209	6.95	705	141	4.04	267	64.1	165	1811	250
	<b>10.0</b>	52.6	41.3	2444	244	6.82	818	164	3.94	318	76.3	195	2154	292
<b>200 x 120</b>	<b>5.0</b>	30.4	23.8	1649	165	7.37	750	125	4.97	201	48.2	141	1652	210
	<b>6.3</b>	37.4	29.3	1976	198	7.27	898	150	4.90	244	58.6	172	2040	255
	<b>8.0</b>	46.4	36.5	2386	239	7.17	1079	180	4.82	298	81.5	209	2507	308
	<b>10.0</b>	56.6	44.4	2806	281	7.04	1262	210	4.72	356	85.4	250	3007	364
<b>250 x 150</b>	<b>6.3</b>	47.4	37.2	4001	320	9.18	1825	243	6.20	391	93.8	276	4078	412
	<b>8.0</b>	59.2	46.5	4886	391	9.08	2219	286	6.12	482	116	340	5050	504
	<b>10.0</b>	72.6	57.0	5825	466	8.96	2634	351	6.02	582	140	409	6121	602
	<b>12.5</b>	87.0	68.3	6633	531	8.73	3002	400	5.87	678	163	477	7316	704
<b>300 x 100</b>	<b>6.3</b>	47.4	37.2	4907	327	10.20	868	174	4.28	425	102	194	2515	318
	<b>10.0</b>	72.6	46.5	7106	474	9.90	1224	245	4.11	631	151	285	3681	455
	<b>12.0</b>	84.1	57.0	7808	521	9.64	1343	269	4.00	710	170	321	4177	508
<b>300 x 200</b>	<b>6.3</b>	60.0	47.1	7624	508	11.30	4104	410	8.27	610	146	463	8524	680
	<b>8.0</b>	75.2	59.1	9389	626	11.20	5042	504	8.19	757	182	574	10527	838
	<b>10.0</b>	92.6	72.7	11313	754	11.10	6058	606	8.09	921	221	698	12987	1012
	<b>12.5</b>	112.0	88.0	13179	879	10.80	7066	706	7.94	1091	262	828	15768	1204
<b>350 x 250</b>	<b>6.3</b>	72.6	57.0	12923	738	13.30	7744	620	10.30	876	210	698	15291	1010
	<b>8.0</b>	91.2	71.6	16001	914	13.20	9573	766	10.20	1092	262	869	19136	1253
	<b>10.0</b>	113.0	88.4	19407	1109	13.10	11588	927	10.10	1335	320	1062	23500	1522
	<b>12.0</b>	132.0	104.0	22197	1268	13.00	13261	1061	8.45	1544	371	1229	27749	1770
<b>400 x 200</b>	<b>8.0</b>	91.2	71.6	18974	949	14.40	6517	652	8.36	1173	282	728	15820	1133
	<b>10.0</b>	113.0	88.4	23003	1150	14.30	7864	786	8.22	1434	344	888	19368	1373
	<b>12.5</b>	137.0	108.0	27100	1355	14.10	9260	926	12.30	1714	411	1062	23594	1644
<b>400 x 300</b>	<b>8.0</b>	107.0	84.2	25122	1256	15.30	16212	1081	12.20	1487	357	1224	31179	1747
	<b>10.0</b>	133.0	104.0	30609	1530	15.20	19726	1315	12.20	1824	438	1501	38407	2132
	<b>12.0</b>	156.0	123.0	35284	1764	15.00	22747	1516	12.10	2122	509	1747	45527	2492

#### Nota

Setul de date a fost colationat cu cea mai mare atentie.

Pentru eventuale erori de redactare nu preluam nici o raspundere.

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