



**EUROPEAN SPECIFICATION BEAMS WITH  
PARALLEL FLANGES IN ACCORDANCE  
WITH EURONORM 53-62**

<b>Designation</b>	<b>G kg/m</b>	<b>h mm</b>	<b>b mm</b>	<b>t<sub>w</sub> mm</b>	<b>t<sub>f</sub> mm</b>	<b>r mm</b>	<b>A cm<sup>2</sup></b>	<b>h<sub>i</sub> mm</b>	<b>d mm</b>
IPE 500A	79.4	497	200	8.4	14.5	21	101	468.0	426.0
IPE 500	90.7	500	200	10.2	16.0	21	116	468.0	426.0
IPE 500 0	107	506	202	12.0	19.0	21	137	468.0	426.0
IPE 500 R	111	508	198	12.6	20.0	21	142	468.0	426.0
IPE 500 V	129	514	204	14.2	23.0	21	164	468.0	426.0
IPE 550 A	92.1	547	210	9.0	15.7	24	117	515.6	467.6
IPE 550	105	550	210	11.1	17.2	24	134	515.6	467.6
IPE 550 0	123	556	212	12.7	20.2	24	156	515.6	467.6
IPE 550 R	134	560	210	14.0	22.2	24	170	515.6	467.6
IPE 550 V	159	566	216	17.1	25.2	24	202	515.6	467.6
IPE 600 A	108	597	220	9.8	17.5	24	137	562.0	514.0
IPE 600	122	600	220	12.0	19.0	24	156	562.0	514.0
IPE 600 0	154	610	224	15.0	24.0	24	197	562.0	514.0
IPE 600 R	144	608	218	14.0	23.0	24	184	562.0	514.0
IPE 600 V	184	618	228	18.0	28.0	24	234	562.0	514.0
IPE 750 x 137	137	753	263	11.5	17.0	17	175	719.0	685.0
IPE 750 x 147	147	753	265	13.2	17.0	17	187	719.0	685.0
IPE 750 x 161	160	758	266	13.8	19.3	17	204	719.4	685.4
IPE 750 x 173	173	762	267	14.4	21.6	17	221	718.8	684.8
IPE 750 x 185	185	766	267	14.9	23.6	17	236	718.8	684.8
IPE 750 x 196	196	770	268	15.6	25.4	17	251	719.2	685.2
IPE 750 x 210	210	775	268	16.0	28.0	17	268	719.0	685.0
IPE 750 x 222	222	778	269	17.0	29.5	17	283	719.0	685.0



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<b>Designation</b>	<b>Weight per Metre G kg/m</b>	<b>Depth of Section h mm</b>	<b>Depth of Section b mm</b>	<b>Thickness of Web t<sub>w</sub> mm</b>	<b>Thickness of Web t<sub>f</sub> mm</b>	<b>Radius of the Roof Fillet r mm</b>	<b>Area of Section A cm<sup>2</sup></b>	<b>Inner Depth Between Flanges h<sub>i</sub> mm</b>	<b>Depth of Straight Portion of Web h<sub>i</sub> mm</b>
HE 100 AA	12.2	91	100	4.2	5.5	12	15.6	80	56
HE 100 A	16.7	96	100	5.0	8.0	12	21.2	80	56
HE 100 B	20.4	100	100	6.0	10.0	12	26.0	80	56
HE 120 AA	14.6	109	120	4.2	5.5	12	18.6	98	74
HE 120 A	19.9	114	120	5.0	8.0	12	25.3	98	74
HE 120 B	26.7	120	120	6.5	11.0	12	34.0	98	74
HE 140 AA	18.1	128	140	4.3	6.0	12	23.0	116	92
HE 140A	24.7	133	140	5.5	8.5	12	31.4	116	92
HE 140 B	33.7	140	140	7.0	12.0	12	43.0	116	92
HE 160 AA	23.8	148	160	4.5	7.0	15	30.4	134	104
HE 160 A	30.4	152	160	6.0	9.0	15	38.8	134	104
HE 160 B	42.6	160	160	8.0	13.0	15	54.3	134	104
HE 160 M	76.2	180	166	14.0	23.0	15	97.1	134	104
HE 180 AA	28.7	167	180	5.0	7.5	15	36.5	152	122
HE 180 A	35.5	171	180	6.0	9.5	15	45.3	152	122
HE 180 B	51.2	180	180	8.5	14.0	15	65.3	152	122
HE 180 M	88.9	200	186	14.5	24.0	15	113	152	122
HE 200 AA	34.6	186	200	5.5	8.0	18	44.1	170	134
HE 200 A	42.3	190	200	6.5	10.0	18	53.8	170	134
HE 200 B	61.3	200	200	9.0	15.0	18	78.1	170	134
HE 200 M	103	220	206	15.0	25.0	18	131	170	134
HE 220 AA	40.4	205	220	6.0	8.5	18	51.5	188	152
HE 220 A	50.5	210	220	7.0	11.0	18	64.3	188	152
HE 220 B	71.5	220	220	9.5	16.0	18	91.0	188	152
HE 220 M	117	240	226	15.5	26.0	18	149	188	152
HE 240 M	47.4	224	240	6.5	9.0	21	60.4	206	164
HE 240 A	60.3	230	240	7.5	12.0	21	76.8	206	164
HE 240 13	83.2	240	240	10.0	17.0	21	106	206	164
HE 240 M	157	270	248	18.0	32.0	21	200	206	164
HE 260 AA	54.1	244	260	6.5	9.5	24	69.0	225	177
HE 260 A	68.2	250	260	7.5	12.5	24	86.8	225	177
HE 260 B	93.0	260	260	10.0	17.5	24	118	225	177
HE 260 M	172	290	268	18.0	32.5	24	220	225	177



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Moment of Inertia		Radius of Modulus		Elastic Sectional Modulus		Plastic Section Modulus		Warping Constant	Torsional Constant
$I_y$	$I_z$	$i_y$	$i_z$	$W_y$	$W_z$	$W_{ply}$	$W_{plz}$	$I_w$	$I_t$
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>	dm <sup>6</sup>	cm <sup>4</sup>
237	92.1	3.89	2.43	52.0	18.4	58.4	28.4	0.002	2.33
349	134	4.06	2.51	72.8	26.8	83.0	41.1	0.003	5.28
450	167	4.16	2.53	89.9	33.5	104	51.4	0.003	9.33
413	159	4.72	2.93	75.8	26.5	84.1	40.6	0.004	2.59
606	231	4.89	3.02	106	38.5	119	58.9	0.006	6.04
864	318	5.04	3.06	144	52.9	165	81.0	0.009	13.9
719	275	5.59	3.45	112	39.3	124	59.9	0.010	3.43
1033	389	5.73	3.52	155	55.6	173	84.8	0.015	8.10
1509	550	5.93	3.58	216	78.5	245	120	0.023	20.2
1283	479	6.50	3.97	173	59.8	190	91.4	0.024	6.43
1673	616	6.57	3.98	220	76.9	245	118	0.031	12.1
2492	889	6.78	4.05	312	111	345	170	0.048	31.3
5098	1759	7.25	4.26	566	212	675	325	0.108	161
1967	730	7.34	4.47	236	81.1	258	124	0.046	8.31
2510	925	7.45	4.52	294	103	325	156	0.060	14.9
3831	1363	7.66	4.57	426	151	481	231	0.094	42.2
7483	2580	8.13	4.77	748	277	883	425	0.200	201
2944	1068	8.17	4.92	317	107	347	163	0.085	12.5
3692	1336	8.28	4.98	389	134	429	204	0.108	21.0
5696	2003	8.54	5.07	570	200	643	306	0.171	59.7
10640	3651	9.00	5.27	967	354	1135	543	0.347	258
4170	1510	9.00	5.42	407	137	445	209	0.146	15.5
5410	1955	9.17	5.51	515	178	568	271	0.194	28.6
8091	2843	9.43	5.59	736	258	827	394	0.296	77.0
14600	5012	9.89	5.79	1217	444	1419	679	0.574	313
5835	2077	9.83	5.87	521	173	571	264	0.240	22.1
7763	2769	10.1	6.00	675	231	745	352	0.329	42.1
11260	3923	10.3	6.08	938	327	1053	498	0.488	104
24290	8158	11.0	6.39	1799	657	2117	1006	1.15	626
7981	2788	10.8	6.36	654	214	714	328	0.383	30.1
10450	3668	11.0	6.50	836	282	920	430	0.517	54.2
14920	5135	11.2	6.58	1148	395	1283	602	0.755	127
31310	10450	11.9	6.90	2159	780	2524	1192	1.73	720



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Designation	Weight per Metre G	Depth of Section h	Depth of Section b	Thickness of Web $t_w$	Thickness of Web $t_f$	Radius of the Roof Fillet r	Area of Section A	Inner Depth Between Flanges $h_i$	Depth of Straight Portion of Web $h_j$
	kg/m	mm	mm	mm	mm	mm	cm <sup>2</sup>	mm	mm
HE 280 AA	61.2	264	280	7.0	10.0	24	78	244	196
HE 280 A	76.4	270	280	8.0	13.0	24	97.3	244	196
HE 280 B	103	280	280	10.5	18.0	24	131	244	196
HE 280 M	189	310	288	18.5	33.0	24	240	244	196
HE 300 AA	69.8	283	300	7.5	10.5	27	88.9	262	208
HE 300 A	88.3	290	300	8.5	14.0	27	113	262	208
HE 300 B	117	300	300	11.0	19.0	27	149	262	208
HE 300 C	177	320	305	16.0	29.0	27	225	262	208
HE 300 M	238	340	310	21.0	39.0	27	303	262	208
HE 320 AA	74.2	301	300	8.0	11.0	27	94.6	279	225
HE 320 A	97.6	310	300	9.0	15.5	27	124	279	225
HE 320 B	127	320	300	11.5	20.5	27	161	279	225
HE 320 M	245	359	309	21.0	40.0	27	312	279	225
HE 340 AA	78.9	320	300	8.5	11.5	27	101	297	243
HE 340 A	105	330	300	9.5	16.5	27	133	297	243
HE 340 B	134	340	300	12.0	21.5	27	171	297	243
HE 340 M	248	377	309	21.0	40.0	27	316	297	243
HE 360 AA	83.7	339	300	9.0	12.0	27	107	315	261
HE 360 A	112	350	300	10.0	17.5	27	143	315	261
HE 360 B	142	360	300	12.5	22.5	27	181	315	261
HE 360 M	250	395	308	21.0	40.0	27	319	315	261
HE 400 AA	92.4	378	300	9.5	13.0	27	118	352	298
HE 400 x 107	107	384	297	10.0	16.0	27	136	352	298
HE 400 A	125	390	300	11.0	19.0	27	159	352	298
HE 400 B	155	400	300	13.5	24.0	27	198	352	298
HE 400 M	256	432	307	21.0	40.0	27	326	352	298
HE 450 AA	100	425	300	10.0	13.5	27	127	398	344
HE 450 x 123	123	435	300	10.2	18.5	27	158	398	344
HE 450 A	140	440	300	11.5	21.0	27	178	398	344
HE 450 B	171	450	300	14.0	26.0	27	218	398	344
HE 450 M	263	478	307	21.0	40.0	27	335	398	344
HE 500 AA	107	472	300	10.5	14.0	27	137	444	390
HE 500 A	155	490	300	12.0	23.0	27	198	444	390
HE 500 B	187	500	300	14.5	28.0	27	239	444	390
HE 500 M	270	524	306	21.0	40.0	27	344	444	390



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Moment of Inertia		Radius of Modulus		Elastic Sectional Modulus		Plastic Section Modulus		Warping Constant	Torsional Constant
$I_y$	$I_z$	$i_y$	$i_z$	$W_y$	$W_z$	$W_{ply}$	$W_{plz}$	$I_w$	$I_t$
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>	dm <sup>6</sup>	cm <sup>4</sup>
10560	3664	11.6	6.85	800	262	873	399	0.591	35.5
13670	4763	11.9	7.00	1013	340	1112	518	0.786	63.5
19270	6595	12.1	7.09	1376	471	1534	718	1.13	146
39550	13160	12.8	7.40	2551	914	2966	1397	2.52	807
13800	4734	12.5	7.30	976	316	1065	482	0.879	47.8
18260	6310	12.7	7.49	1260	421	1383	641	1.20	87.8
25170	8563	13.0	7.58	1678	571	1869	870	1.69	189
40950	13740	13.5	7.80	2559	901	2927	1374	2.91	604
59200	19400	14.0	8.00	3482	1252	4078	1913	4.39	1411
16450	4959	13.2	7.24	1093	331	1196	506	1.04	53.6
22930	6985	13.6	7.49	1479	466	1628	710	1.51	112
30820	9239	13.8	7.57	1926	616	2149	939	2.07	230
68130	19710	14.8	7.95	3796	1276	4435	1951	5.01	1506
19550	5185	13.9	7.18	1222	346	1341	529	1.23	60.0
27690	7436	14.4	7.46	1678	496	1850	756	1.83	131
36660	9690	14.6	7.53	2156	646	2408	986	2.46	263
76370	19710	15.6	7.90	4052	1276	4718	1953	5.60	1512
23040	5410	14.7	7.12	1359	361	1495	553	1.45	67.1
33090	7887	15.2	7.43	1891	526	2088	802	2.18	153
43190	10140	15.5	7.49	2400	676	2683	1032	2.89	298
84870	19520	16.3	7.83	4297	1268	4989	1942	6.15	1513
31250	5861	16.3	7.06	1654	391	1824	600	1.95	81.3
37640	6998	16.6	7.20	1960	471	2165	721	2.37	126
45070	8564	16.8	7.34	2311	571	2562	873	2.95	193
57680	10820	17.1	7.40	2884	721	3232	1104	3.82	361
104100	19340	17.9	7.70	4820	1260	5571	1934	7.43	1520
41890	6088	18.2	6.92	1971	406	2183	624	2.58	91.4
55860	8338	18.8	7.27	2568	556	2836	850	3.62	178
63720	9465	18.9	7.29	2896	631	3216	966	4.15	250
79890	11720	19.1	7.33	3551	781	3982	1198	5.27	448
131500	19340	19.8	7.59	5501	1260	6331	1939	9.28	1534
54640	6314	20.0	6.79	2315	421	2576	649	3.31	103
86970	10370	21.0	7.24	3550	691	3949	1059	5.65	318
107200	12620	21.2	7.27	4287	842	4815	1292	7.03	548
161900	19150	21.7	7.46	6180	1252	7094	1932	11.2	1544





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HE 550 AA	120	522	300	11.5	15.0	27	153	492	438
HE 550 A	166	540	300	12.5	24.0	27	212	492	438
HE 550 B	199	550	300	15.0	29.0	27	254	492	438
HE 550 M	278	572	306	21.0	40.0	27	354	492	438
HE 600 AA	129	571	300	12.0	15.5	27	164	540	486
HE 600 x 137	137	575	300	11.8	17.5	27	175	540	486
HE 600 x 151	151	582	300	11.6	20.6	27	193	540	486
HE 600 x 174	174	588	300	13.6	23.9	27	223	540	486
HE 600 A	178	590	300	13.0	25.0	27	226	540	486
HE 600 B	212	600	300	15.5	30.0	27	270	540	486
HE 600 M	285	620	305	21.0	40.0	27	364	540	486
HE 650 AA	138	620	300	12.5	16.0	27	176	588	534
HE 650 A	190	640	300	13.5	26.0	27	242	588	534
HE 650 B	225	650	300	16.0	31.0	27	286	588	534
HE 650 M	293	668	305	21.0	40.0	27	374	588	534
HE 700 AA	150	670	300	13.0	17.0	27	191	636	582
HE 700 x 166	166	678	300	12.5	21.0	27	212	636	582
HE 700 A	204	690	300	14.5	27.0	27	260	636	582
HE 700 B	241	700	300	17.0	32.0	27	306	636	582
HE 700 M	301	716	304	21.0	40.0	27	383	636	582
HE 800 AA	172	770	300	14.0	18.0	30	218	734	674
HE 800 A	224	790	300	15.0	28.0	30	286	734	674
HE 800 B	262	800	300	17.5	33.0	30	334	734	674
HE 800 M	317	814	303	21.0	40.0	30	404	734	674
HE 900 AA	198	870	300	15.0	20.0	30	252	830	770
HE 900 A	252	890	300	16.0	30.0	30	321	830	770
HE 900 B	291	900	300	18.5	35.0	30	371	830	770
HE 900 M	333	910	302	21.0	40.0	30	424	830	770
HE 1000 AA	222	970	300	16.0	21.0	30	282	928	868
HE 1000 A	272	990	300	16.5	31.0	30	347	928	868
HE 1000 B	314	1000	300	19.0	36.0	30	400	928	868
HE 1000 M	349	1008	302	21.0	40.0	30	444	928	868



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$I_y$	$I_z$	$i_y$	$i_z$	$W_y$	$W_z$	$W_{ply}$	$W_{plz}$	$I_w$	$I_t$
72870	6767	21.8	6.65	2792	451	3128	699	4.35	127
111900	10820	23.0	7.15	4146	721	4622	1107	7.20	360
136700	13080	23.2	7.17	4971	872	5591	1341	8.87	610
198000	19160	23.6	7.35	6923	1252	7933	1937	13.60	1559
91870	6993	23.7	6.53	3218	466	3623	724	5.40	142
101500	7893	24.1	6.70	2529	526	3952	814	6.13	177
117100	9287	24.7	6.90	4024	619	4483	953	7.32	247
136400	10780	24.7	7.00	4639	719	5202	1109	8.57	374
141200	11270	25.0	7.05	4787	751	5350	1156	9.00	407
171000	13530	25.2	7.08	5701	902	6425	1391	11.00	677
237400	18980	25.6	7.22	7660	1244	8772	1930	16.00	1570
113900	7221	25.5	6.41	3676	481	4160	751	6.59	158
175200	11720	26.9	6.97	5474	782	6136	1205	11.00	458
210600	13980	27.1	6.99	6480	932	7320	1441	13.40	749
281700	18980	27.5	7.13	8433	1245	9657	1936	18.70	1584
142700	7673	27.3	6.34	4260	512	4840	800	8.18	186
168900	9471	28.2	6.69	4982	631	5598	978	10.20	274
215300	12180	28.8	6.84	6241	812	7032	1257	13.40	522
256900	14440	29.0	6.87	7340	963	8327	1495	16.10	839
329300	18800	29.3	7.01	9198	1237	10540	1929	21.50	1595
208900	8134	30.9	6.10	5426	542	6225	857	11.50	243
303400	12640	32.6	6.65	7682	843	8699	1312	18.30	609
359100	14900	32.8	6.68	8977	994	10230	1553	21.90	959
442600	18630	33.1	6.79	10870	1230	12490	1930	27.90	1657
301100	9041	34.6	5.99	6923	603	7999	958	16.30	322
422100	13550	36.3	6.50	9485	903	10810	1414	25.00	749
494100	15820	36.5	6.53	10980	1054	12580	1658	29.60	1150
570400	18450	36.7	6.60	12540	1222	14440	1929	34.90	1683
406500	9501	38.0	5.80	8380	633	9777	1016	21.40	387
553800	14000	40.0	6.35	11190	934	12820	1470	32.20	835
644700	16280	40.1	6.38	12890	1085	14860	1716	37.80	1267
722300	18460	40.3	6.45	14330	1222	16570	1940	43.20	1713



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WITH EURONORM 53-62**

<b>Designation</b>	<b>G kg/m</b>	<b>h mm</b>	<b>b mm</b>	<b>t<sub>w</sub> mm</b>	<b>t<sub>f</sub> mm</b>	<b>r mm</b>	<b>A cm<sup>2</sup></b>	<b>h<sub>i</sub> mm</b>	<b>d mm</b>
IPE 100A	6.89	98	55	3.6	4.7	7	8.78	88.6	74.6
IPE 100	8.10	100	55	4.1	5.7	7	10.3	88.6	74.6
IPE 120A	8.66	118	64	3.8	5.1	7	11.0	107.4	93.4
IPE 120	10.4	120	64	4.4	6.3	7	13.2	107.4	93.4
IPE 140 A	10.5	138	73	3.8	5.6	7	13.4	126.2	112.2
IPE 140	12.9	140	73	4.7	6.9	7	16.4	126.2	112.2
IPE 140 R	14.4	142	72	5.3	7.8	7	18.4	126.4	112.4
IPE 160A	12.7	157	82	4.0	5.9	9	16.2	145.2	127.2
IPE 160	15.8	160	82	5.0	7.4	9	20.1	145.2	127.2
IPE 160 R	17.7	162	81	5.6	8.5	9	22.6	145.0	127.0
IPE 180 A	15.4	177	91	4.3	6.5	9	19.6	164.0	146.0
IPE 180	18.8	180	91	5.3	8.0	9	23.9	164.0	146.0
IPE 180 0	21.3	182	92	6.0	9.0	9	27.1	164.0	146.0
IPE 180 R	22.1	183	89	6.4	9.5	9	28.1	164.0	146.0
IPE 200 A	18.4	197	100	4.5	7.0	12	23.5	183.0	159.0
IPE 200	22.4	200	100	5.6	8.5	12	28.5	183.0	159.0
IPE 200 0	25.1	202	102	6.2	9.5	12	32.0	183.0	159.0
IPE 200 R	26.6	204	98	6.6	10.5	12	33.9	183.0	159.0
IPE 220 A	22.2	217	110	5.0	7.7	12	28.3	201.6	177.6
IPE 220	26.2	220	110	5.9	9.2	12	33.4	201.6	177.6
IPE 220 0	29.4	222	112	6.6	10.2	12	37.4	201.6	177.6
IPE 220 R	31.6	225	108	6.7	11.8	12	40.2	201.4	177.4
IPE 240 A	26.2	237	120	5.2	8.3	15	33.3	220.4	190.4
IPE 240	30.7	240	120	6.2	9.8	15	39.1	220.4	190.4
IPE 240 0	34.3	242	122	7.0	10.8	15	43.7	220.4	190.4
IPE 240 R	37.3	245	118	7.5	12.3	15	47.5	220.4	190.4





**EUROPEAN SPECIFICATION BEAMS WITH  
PARALLEL FLANGES IN ACCORDANCE  
WITH EURONORM 53-62**

$I_y$ $cm^4$	$I_z$ $cm^4$	$i_y$ $cm$	$i_z$ $cm$	$W_y$ $cm^3$	$W_z$ $cm^3$	$W_{ply}$ $cm^3$	$W_{plz}$ $cm^3$	$I_w$ $dm^6$	$I_t$ $cm^4$
141	13.1	4.01	1.22	28.8	4.77	33.0	7.54	0.000	0.727
171	15.9	4.07	1.24	34.2	5.79	39.4	9.15	0.000	1.16
257	22.4	4.83	1.42	43.8	7.00	49.9	11.0	0.001	0.996
318	27.7	4.90	1.45	53.0	8.65	60.7	13.6	0.001	1.69
435	36.4	5.70	1.65	63.3	9.98	71.6	15.5	0.002	1.34
541	44.9	5.74	1.65	77.3	12.3	88.3	19.2	0.002	2.40
611	48.8	5.77	1.63	86.1	13.5	99.1	21.3	0.002	3.36
689	54.4	6.53	1.83	87.8	13.3	99.1	20.7	0.003	1.93
869	68.3	6.58	1.84	109	16.7	124	26.1	0.004	3.54
989	75.7	6.62	1.83	122	18.7	140	29.4	0.004	5.05
1063	81.9	7.37	2.05	120	18.0	135	28.0	0.006	2.67
1317	101	7.42	2.05	146	22.2	166	34.6	0.007	4.73
1505	117	7.45	2.08	165	25.5	189	39.9	0.009	6.65
1554	112	7.44	2.00	170	25.2	195	39.7	0.008	7.63
1591	117	8.23	2.23	162	23.4	182	36.5	0.011	4.14
1943	142	8.26	2.24	194	28.5	221	44.6	0.013	6.92
2211	169	8.32	2.30	219	33.1	249	51.9	0.016	9.36
2363	166	8.35	2.21	232	33.8	265	53.2	0.016	11.7
2317	171	9.05	2.46	214	31.2	240	48.5	0.019	5.68
2772	205	9.11	2.48	252	37.3	285	58.1	0.023	9.03
3134	240	9.16	2.53	282	42.8	321	66.9	0.027	12.2
3474	249	9.29	2.49	309	46.1	352	71.8	0.028	16.4
3290	240	9.94	2.68	278	40.0	312	62.4	0.031	8.50
3892	284	9.97	2.69	324	47.3	367	73.9	0.038	13.0
4369	329	10.0	2.74	361	53.9	410	84.4	0.044	17.1
4823	339	10.1	2.67	394	57.4	450	90.1	0.046	22.8



**EUROPEAN SPECIFICATION BEAMS WITH  
PARALLEL FLANGES IN ACCORDANCE  
WITH EURONORM 53-62**

<b>Designation</b>	<b>G kg/m</b>	<b>h mm</b>	<b>b mm</b>	<b>t<sub>w</sub> mm</b>	<b>t<sub>f</sub> mm</b>	<b>r mm</b>	<b>A cm<sup>2</sup></b>	<b>h<sub>i</sub> mm</b>	<b>d mm</b>
IPE 270 A	30.7	267	135	5.5	8.7	15	39.1	249.6	219.6
IPE 270	36.1	270	135	6.6	10.2	15	45.9	249.6	219.6
IPE 270 0	42.3	274	136	7.5	12.2	15	53.8	249.6	219.6
IPE 270 R	44.0	276	133	7.7	13.1	15	56.0	249.8	219.8
IPE 300 A	36.5	297	150	6.1	9.2	15	46.5	278.6	248.6
IPE 300	42.2	300	150	7.1	10.7	15	53.8	278.6	248.6
IPE 300 0	49.3	304	152	8.0	12.7	15	62.8	278.6	248.6
IPE 300 R	51.7	306	147	8.5	13.7	15	65.9	278.6	248.6
IPE 330 A	43.0	327	160	6.5	10.0	18	54.7	307.0	271.0
IPE 330	49.1	330	160	7.5	11.5	18	62.6	307.0	271.0
IPE 330 0	57.0	334	162	8.5	13.5	18	72.6	307.0	271.0
IPE 330 R	60.3	336	158	9.2	14.5	18	76.8	307.0	271.0
IPE 360 A	50.2	357.6	170	6.6	11.5	18	64.0	334.6	298.6
IPE 360	57.1	360	170	8.0	12.7	18	72.7	334.6	298.6
IPE 360 0	66.0	364	172	9.2	14.7	18	84.1	334.6	298.6
IPE 360 R	70.3	366	168	9.9	16.0	18	89.6	334.0	298.0
IPE 400 A	57.4	397	180	7.0	12.0	21	73.1	373.0	331.0
IPE 400	66.3	400	180	8.6	13.5	21	84.5	373.0	331.0
IPE 400 0	75.7	404	182	9.7	15.5	21	96.4	373.0	331.0
IPE 400 R	81.5	407	178	10.6	17.0	21	104	373.0	331.0
IPE 400 V	84.0	408	182	10.6	17.5	21	107	373.0	331.0
IPE 450 A	67.2	447	190	7.6	13.1	21	85.5	420.8	378.8
IPE 450	77.6	450	190	9.4	14.6	21	98.8	420.8	378.8
IPE 450 0	92.4	456	192	11.0	17.6	21	118	420.8	378.8
IPE 450 R	95.2	458	188	11.3	18.6	21	121	420.8	378.8
IPE 450 V	104	460	194	12.4	19.6	21	132	420.8	378.8



**EUROPEAN SPECIFICATION BEAMS WITH  
PARALLEL FLANGES IN ACCORDANCE  
WITH EURONORM 53-62**

$I_y$	$I_z$	$i_y$	$i_z$	$W_y$	$W_z$	$W_{ply}$	$W_{plz}$	$I_w$	$I_t$
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>	dm <sup>6</sup>	cm <sup>4</sup>
4917	358	11.2	3.02	368	53.0	412	82.3	0.060	10.4
5790	420	11.2	3.02	429	62.2	484	97.0	0.071	15.9
6947	513	11.4	3.09	507	75.5	575	118	0.088	25.0
7312	516	11.4	3.03	530	77.6	602	121	0.089	29.1
7173	519	12.4	3.34	483	69.2	542	107	0.107	13.3
8356	604	12.5	3.35	557	80.5	628	125	0.126	19.9
9994	746	12.6	3.45	658	98.1	744	153	0.158	31.0
10500	728	12.6	3.32	686	99.0	780	155	0.155	37.0
10230	685	13.7	3.54	626	85.6	702	133	0.172	19.6
11770	788	13.7	3.55	713	98.5	804	154	0.200	28.1
13910	960	13.8	3.64	833	119	943	185	0.247	42.2
14690	958	13.8	3.53	874	121	995	190	0.247	50.6
14520	944	15.1	3.84	812	111	907	172	0.283	27.4
16270	1043	15.0	3.79	904	123	1019	191	0.315	37.4
19050	1251	15.0	3.86	1047	145	1186	227	0.382	55.7
20290	1270	15.0	3.76	1109	151	1262	236	0.389	68.7
20290	1171	16.7	4.00	1022	130	1144	202	0.434	36.2
23130	1318	16.5	3.95	1156	146	1307	229	0.492	51.3
26750	1564	16.7	4.03	1324	172	1502	269	0.590	73.3
28860	1606	16.7	3.93	1418	180	1618	284	0.611	92.5
30140	1766	16.8	4.06	1477	194	1681	304	0.673	99.6
29760	1502	18.7	4.19	1331	158	1494	246	0.707	47.1
33740	1676	18.5	4.12	1500	176	1702	276	0.794	66.7
40920	2085	18.6	4.21	1795	217	2046	341	1.00	109
42400	2070	18.7	4.13	1851	220	2115	346	0.999	123
46200	2397	18.7	4.26	2009	247	2301	389	1.16	149



**EUROPEAN SPECIFICATION BEAMS WITH  
PARALLEL FLANGES IN ACCORDANCE  
WITH EURONORM 53-62**

<b>ly cm<sup>4</sup></b>	<b>Iz cm<sup>4</sup></b>	<b>Iy cm</b>	<b>Iz cm</b>	<b>Wy cm<sup>3</sup></b>	<b>Wz cm<sup>3</sup></b>	<b>Wply cm<sup>3</sup></b>	<b>Wplz cm<sup>3</sup></b>	<b>Iw dm<sup>6</sup></b>	<b>It cm<sup>4</sup></b>
42930	1939	20.6	4.38	1728	194	1946	302	1.13	64.3
48200	2142	20.4	4.31	1928	214	2194	336	1.25	89.1
57780	2622	20.6	4.38	2284	260	2613	409	1.55	143
59930	2600	20.5	4.28	2360	263	2709	415	1.55	162
70720	3271	20.8	4.47	2752	321	3168	507	1.97	242
59980	2432	22.6	4.55	2193	232	2475	362	1.72	89.3
67120	2668	22.3	4.45	2441	254	2787	401	1.89	123
79160	3224	22.5	4.55	2847	304	3263	481	2.31	187
86600	3447	22.5	4.50	3093	328	3562	521	2.49	242
102300	4265	22.5	4.60	3616	395	4205	632	3.12	372
82920	3116	24.6	4.77	2778	283	3141	442	2.62	122
92080	3387	24.3	4.66	3069	308	3512	486	2.86	165
118300	4521	24.5	4.79	3879	404	4471	640	3.88	316
110300	3993	24.5	4.66	3629	366	4175	580	3.42	271
141600	5570	24.6	4.88	4582	489	5324	780	4.85	506
159900	5166	30.3	5.44	4246	393	4865	614	7.00	135
166100	5289	29.8	5.31	4411	399	5110	631	7.16	157
186100	6073	30.2	5.45	4909	457	5666	720	8.28	208
205800	6873	30.5	5.57	5402	515	6218	810	9.42	270
223000	7510	30.8	5.65	5821	563	6691	884	10.3	334
240300	8175	31.0	5.71	6241	610	7174	959	11.3	406
262200	9011	31.3	5.80	6765	672	7762	1054	12.6	512
278200	9604	31.3	5.82	7152	714	8225	1122	13.5	601



## IPN

### European Standard Beams

Flange slope : 14%, Dimensions : DIN 1025-1: 1963, NF A 45-209 (1983)

Tolerances : EN 10024: 1985, Surface Condition according to EN 10163-3: 1991, class C, subclass 1

Designation	G kg/m	Dimensions						A mm <sup>2</sup> x 10 <sup>2</sup>	Dimensions for Detailing			
		h mm	b mm	t <sub>w</sub> mm	t <sub>f</sub> mm	r <sub>1</sub> mm	r <sub>2</sub> mm		d mm	Ø	P <sub>min</sub> mm	P <sub>max</sub> mm
IPN 80	5.94	80	42	3.9	80	5.9	3.9	2.3	7.58	59	-	-
IPN 100	8.34	100	50	4.5	100	6.8	4.5	2.7	10.6	757	-	-
IPN 120	11.1	120	58	5.1	120	7.7	5.1	3.1	14.2	924	-	-
IPN 140	14.3	140	66	5.7	140	8.6	5.7	3.4	18.3	109.1	-	-
IPN 160	17.9	160	74	6.3	160	9.5	6.3	3.8	22.8	125.8	-	-
IPN 180	21.9	180	82	6.9	180	10.4	6.9	4.1	27.9	142.4	-	-
IPN 200	26.2	200	90	7.5	200	11.3	7.5	4.5	33.4	159.1	-	-
IPN 220	31.1	220	98	8.1	220	12.2	8.1	4.9	39.5	175.8	M10	56
IPN 240	36.2	240	106	8.7	240	13.1	8.7	5.2	46.1	192.5	M10	60
IPN 260	41.9	260	113	9.4	260	14.1	9.4	5.6	53.3	208.9	M12	62
IPN 280	47.9	280	119	10.1	280	15.2	10.1	6.1	61	225.1	M12	68
IPN 300	54.2	300	125	10.8	300	16.2	10.8	6.5	69	241.6	M12	74
IPN 320	61.0	320	131	11.5	320	17.3	11.5	6.9	77.7	257.9	M12	80
IPN 340	68.0	340	137	12.2	340	18.3	12.2	7.3	86.7	274.3	M12	86
IPN 360	76.1	360	143	13	360	19.5	13	7.8	97	290.2	M12	92
IPN 380	84.0	380	149	13.7	380	20.5	13.7	8.2	107	306.7	M16	86
IPN 400	92.4	400	155	14.4	400	21.6	14.4	8.6	118	322.9	M16	92
IPN 450	115	450	170	16.2	450	24.3	16.2	9.7	147	363.6	M16	106
IPN 500	141	500	185	18	500	27	18	10.8	179	404.3	M20	110
IPN 550	166	550	200	19	550	30	19	11.9	212	445.6	M22	118
IPN 600	199	600	215	21.6	600	32.4	21.6	13	254	485.8	M24	128





### IPN

#### European Standard Beams

Flange slope : 14%, Dimensions : DIN 1025-1: 1963, NF A 45-209 (1983)

Tolerances : EN 10024: 1985, Surface Condition according to EN 10163-3: 1991, class C, subclass 1

Surface		Section Properties											
		Strong Axis				Weak Axis z-z							
$A_L$ m <sup>2</sup> /m	$A_G$ m <sup>2</sup> /t	$I_y$ mm <sup>3</sup> x 10 <sup>4</sup>	$W_y$ mm <sup>3</sup> x 10 <sup>3</sup>	$W_{pl,y}$ mm <sup>3</sup> x 10 <sup>3</sup>	$i_y$ mm x 10	$A_{vz}$ mm <sup>2</sup> x 10 <sup>2</sup>	$I_z$ mm <sup>4</sup> x 10 <sup>4</sup>	$W_z$ mm <sup>3</sup> x 10 <sup>3</sup>	$W_{pl,z}$ mm <sup>3</sup> x 10 <sup>3</sup>	$i_y$ mm x 10	$S_s$ mm	$I_t$ mm <sup>4</sup> x 10 <sup>4</sup>	$I_w \times 10^{-3}$ mm <sup>6</sup> x 10 <sup>9</sup>
0.304	51.09	77.8	19.5	22.8	3.2	3.41	6.29	3	5	0.91	21.6	0.87	0.09
0.370	44.47	171	34.2	39.8	4.01	4.85	12.2	4.88	8.1	1.07	25	1.6	0.27
0.439	39.38	328	54.7	63.6	4.81	6.63	21.5	7.41	12.4	1.23	28.4	2.71	0.69
0.502	34.94	573	81.9	954	5.61	8.65	35.2	10.7	17.9	1.4	31.8	4.32	1.54
0.575	32.13	935	117	136	6.4	10.83	54.7	14.8	24.9	1.55	35.2	6.57	3.14
0.640	29.22	1450	161	187	7.2	13.35	81.3	19.8	33.2	1.71	38.6	9.58	5.92
0.709	27.04	2140	214	250	8.00	16.03	117	26	43.5	1.87	42	13.5	10.5
0.775	24.99	3060	278	324	8.80	19.06	162	33.1	55.7	2.02	45.4	18.6	17.8
0.844	23.32	4250	354	412	9.59	22.33	221	41.7	70	2.2	48.9	25	28.7
0.906	21.65	5740	442	514	10.4	26.08	288	51	85.9	2.32	52.6	33.5	44.1
0.966	20.17	7590	542	632	11.1	30.18	364	61.2	103	2.45	56.4	44.2	64.6
1.03	19.02	9800	653	762	11.9	34.58	451	72.2	121	2.56	60.1	56.8	91.8
1.09	17.87	12510	782	914	12.7	39.26	555	84.7	143	2.67	63.9	72.5	129
1.15	16.90	15700	923	1080	13.5	44.27	674	98.4	166	2.8	67.6	90.4	176
1.21	15.89	19610	1090	1276	14.2	49.95	818	114	194	2.9	71.8	115	240
1.27	15.12	24010	1260	1482	15.0	55.55	975	131	221	3.02	75.4	141	319
1.33	14.36	29210	1460	1714	15.7	61.69	1160	149	253	3.13	79.3	170	420
1.48	12.83	45850	2040	2400	17.7	77.79	1730	203	345	3.43	88.9	267	791
1.63	11.60	68740	2750	3240	195	95.6	2480	268	456	3.72	98.5	402	1400
1.80	10.80	99180	3610	4240	21.6	111.3	3490	349	592	4.02	107.3	544	2390
1.97	989	138800	4627	5452	23.39	138.0	4674	435	752	4.29	117.6	787	3814