

Poutrelles I européennes

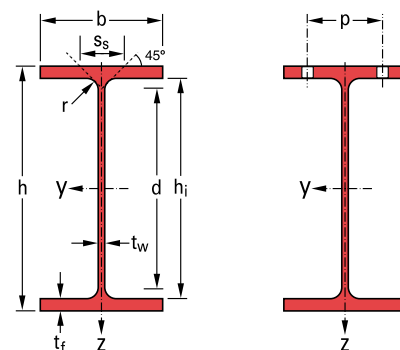
IPE 100 - 600 conformes à l'Euronorme 19-57; IPE A 100 - 600; IPE O 180 - 600; IPE 750

European I beams

IPE 100 - 600 in accordance with Euronorm 19-57; IPE A 100 - 600; IPE O 180 - 600; IPE 750

Europäische I-Profile

IPE 100 - 600 gemäß Euronorm 19-57; IPE A 100 - 600; IPE O 180 - 600; IPE 750



Désignation Designation Bezeichnung	Dimensions Abmessungen					A cm ²	Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche		
	G kg/m	h mm	b mm	t _w mm	t _f mm		r mm	h _i mm	d mm	∅	p _{min} mm	p _{max} mm	A _L m ² /m	A _G m ² /t
IPE A 100*	6.9	98	55	3.6	4.7	7	8.78	88.6	74.6	-	-	-	0.397	57.57
IPE 100	8.1	100	55	4.1	5.7	7	10.32	88.6	74.6	-	-	-	0.400	49.33
IPE A 120*	8.7	117.6	64	3.8	5.1	7	11.03	107.4	93.4	-	-	-	0.472	54.47
IPE 120	10.4	120	64	4.4	6.3	7	13.21	107.4	93.4	-	-	-	0.475	45.82
IPE A 140*	10.5	137.4	73	3.8	5.6	7	13.39	126.2	112.2	-	-	-	0.547	52.05
IPE 140	12.9	140	73	4.7	6.9	7	16.43	126.2	112.2	-	-	-	0.551	42.70
IPE A 160*	12.7	157	82	4	5.9	9	16.18	145.2	127.2	-	-	-	0.619	48.70
IPE 160	15.8	160	82	5	7.4	9	20.09	145.2	127.2	-	-	-	0.623	39.47
IPE A 180*	15.4	177	91	4.3	6.5	9	19.58	164	146	M10	48	48	0.694	45.15
IPE 180	18.8	180	91	5.3	8	9	23.95	164	146	M10	48	48	0.698	37.13
IPE O 180 ⁺	21.3	182	92	6	9	9	27.10	164	146	M10	50	50	0.705	33.12
IPE A 200*	18.4	197	100	4.5	7	12	23.47	183	159	M10	54	58	0.764	41.49
IPE 200	22.4	200	100	5.6	8.5	12	28.48	183	159	M10	54	58	0.768	34.36
IPE O 200 ⁺	25.1	202	102	6.2	9.5	12	31.96	183	159	M10	56	60	0.779	31.05
IPE A 220*	22.2	217	110	5	7.7	12	28.26	201.6	177.6	M12	60	62	0.843	38.02
IPE 220	26.2	220	110	5.9	9.2	12	33.37	201.6	177.6	M12	60	62	0.848	32.36
IPE O 220 ⁺	29.4	222	112	6.6	10.2	12	37.39	201.6	177.6	M10	58	66	0.858	29.24
IPE A 240*	26.2	237	120	5.2	8.3	15	33.31	220.4	190.4	M12	64	68	0.918	35.10
IPE 240	30.7	240	120	6.2	9.8	15	39.12	220.4	190.4	M12	66	68	0.922	30.02
IPE O 240 ⁺	34.3	242	122	7	10.8	15	43.71	220.4	190.4	M12	66	70	0.932	27.17
IPE A 270*	30.7	267	135	5.5	8.7	15	39.15	249.6	219.6	M16	70	72	1.037	33.75
IPE 270	36.1	270	135	6.6	10.2	15	45.95	249.6	219.6	M16	72	72	1.041	28.86
IPE O 270 ⁺	42.3	274	136	7.5	12.2	15	53.84	249.6	219.6	M16	72	72	1.051	24.88
IPE A 300*	36.5	297	150	6.1	9.2	15	46.53	278.6	248.6	M16	72	86	1.156	31.65
IPE 300	42.2	300	150	7.1	10.7	15	53.81	278.6	248.6	M16	72	86	1.160	27.46
IPE O 300 ⁺	49.3	304	152	8	12.7	15	62.83	278.6	248.6	M16	74	88	1.174	23.81
IPE A 330*	43.0	327	160	6.5	10	18	54.74	307	271	M16	78	96	1.250	29.09
IPE 330	49.1	330	160	7.5	11.5	18	62.61	307	271	M16	78	96	1.254	25.52
IPE O 330 ⁺	57.0	334	162	8.5	13.5	18	72.62	307	271	M16	80	98	1.268	22.24



• Commande minimale: pour S 235 JR, cf. conditions techniques de livraison p. 109; pour toute autre qualité 40t ou suivant accord.

+ Commande minimale: 40t par profilé et qualité ou suivant accord.

• Minimum order: for the S 235 JR grade cf. technical delivery conditions p. 109; for any other grade 40t or upon agreement.

+ Minimum order: 40t per section and grade or upon agreement.

• Mindestbestellmenge: für S 235 JR gemäß technischen Lieferbedingungen S. 109; für jede andere Güte 40t oder nach Vereinbarung.

+ Mindestbestellmenge: 40t pro Profil und Güte oder nach Vereinbarung.

IPE

Notations pages 104-108 / Bezeichnungen Seiten 104-108

Désignation Designation Bezeichnung	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1						HISTAR
	axe fort y-y strong axis y-y starke Achse y-y						axe faible z-z weak axis z-z schwache Achse z-z						pure bending y-y			pure compression			
	G kg/m	I_y cm ⁴	$W_{el,y}$ cm ³	$W_{pl,y} \blacktriangleup$ cm ³	i_y cm	A_{vz} cm ²	I_z cm ⁴	$W_{el,z}$ cm ³	$W_{pl,z} \blacktriangleup$ cm ³	i_z cm	s_s mm	I_t cm ⁴	$I_w \times 10^{-3}$ cm ⁶	S 235	S 355	S 460	S 235	S 355	
IPE A 100	6.9	141.2	28.81	32.98	4.01	4.44	13.12	4.77	7.54	1.22	21.20	0.77	0.28	1	1	-	1	1	-
IPE 100	8.1	171.0	34.20	39.41	4.07	5.08	15.92	5.79	9.15	1.24	23.70	1.2	0.35	1	1	-	1	1	-
IPE A 120	8.7	257.4	43.77	49.87	4.83	5.41	22.39	7.00	10.98	1.42	22.20	1.04	0.71	1	1	-	1	1	-
IPE 120	10.4	317.8	52.96	60.73	4.90	6.31	27.67	8.65	13.58	1.45	25.20	1.74	0.89	1	1	-	1	1	-
IPE A 140	10.5	434.9	63.30	71.60	5.70	6.21	36.42	9.98	15.52	1.65	23.20	1.36	1.58	1	1	-	1	2	-
IPE 140	12.9	541.2	77.32	88.34	5.74	7.64	44.92	12.31	19.25	1.65	26.70	2.45	1.98	1	1	-	1	1	-
IPE A 160	12.7	689.3	87.81	99.09	6.53	7.80	54.43	13.27	20.70	1.83	26.34	1.96	3.09	1	1	-	1	3	-
IPE 160	15.8	869.3	108.7	123.9	6.58	9.66	68.31	16.66	26.10	1.84	30.34	3.6	3.96	1	1	-	1	1	-
IPE A 180	15.4	1063	120.1	135.3	7.37	9.20	81.89	18.00	27.96	2.05	27.84	2.7	5.93	1	1	-	2	3	-
IPE 180	18.8	1317	146.3	166.4	7.42	11.25	100.9	22.16	34.60	2.05	31.84	4.79	7.43	1	1	-	1	2	-
IPE O 180	21.3	1505	165.4	189.1	7.45	12.70	117.3	25.50	39.91	2.08	34.54	6.76	8.74	1	1	-	1	1	-
IPE A 200	18.4	1591	161.6	181.7	8.23	11.47	117.2	23.43	36.54	2.23	32.56	4.11	10.53	1	1	-	2	4	-
IPE 200	22.4	1943	194.3	220.6	8.26	14.00	142.4	28.47	44.61	2.24	36.66	6.98	12.99	1	1	-	1	2	-
IPE O 200	25.1	2211	218.9	249.4	8.32	15.45	168.9	33.11	51.89	2.30	39.26	9.45	15.57	1	1	-	1	1	-
IPE A 220	22.2	2317	213.5	240.2	9.05	13.55	171.4	31.17	48.49	2.46	34.46	5.69	18.71	1	1	-	2	4	-
IPE 220	26.2	2772	252.0	285.4	9.11	15.88	204.9	37.25	58.11	2.48	38.36	9.07	22.67	1	1	-	1	2	-
IPE O 220	29.4	3134	282.3	321.1	9.16	17.66	239.8	42.83	66.91	2.53	41.06	12.27	26.79	1	1	-	1	2	-
IPE A 240	26.2	3290	277.7	311.6	9.94	16.31	240.1	40.02	62.40	2.68	39.37	8.35	31.26	1	1	-	2	4	-
IPE 240	30.7	3892	324.3	366.6	9.97	19.14	283.6	47.27	73.92	2.69	43.37	12.88	37.39	1	1	-	1	2	-
IPE O 240	34.3	4369	361.1	410.3	10.00	21.36	328.5	53.86	84.40	2.74	46.17	17.18	43.68	1	1	-	1	2	-
IPE A 270	30.7	4917	368.3	412.5	11.21	18.75	358.0	53.03	82.34	3.02	40.47	10.30	59.51	1	1	-	3	4	-
IPE 270	36.1	5790	428.9	484.0	11.23	22.14	419.9	62.20	96.95	3.02	44.57	15.94	70.58	1	1	-	2	3	-
IPE O 270	42.3	6947	507.1	574.6	11.36	25.23	513.5	75.51	117.7	3.09	49.47	24.90	87.64	1	1	-	1	2	-
IPE A 300	36.5	7173	483.1	541.8	12.42	22.25	519.0	69.20	107.3	3.34	42.07	13.43	107.2	1	2	-	3	4	-
IPE 300	42.2	8356	557.1	628.4	12.46	25.68	603.8	80.50	125.2	3.35	46.07	20.12	125.9	1	1	-	2	4	-
IPE O 300	49.3	9994	657.5	743.8	12.61	29.05	745.7	98.12	152.6	3.45	50.97	31.06	157.7	1	1	-	1	3	-
IPE A 330	43.0	10230	625.7	701.9	13.67	26.99	685.2	85.64	133.3	3.54	47.59	19.57	171.5	1	1	-	3	4	-
IPE 330	49.1	11770	713.1	804.3	13.71	30.81	788.1	98.52	153.7	3.55	51.59	28.15	199.1	1	1	-	2	4	-
IPE O 330	57.0	13910	833.0	942.8	13.84	34.88	960.4	118.6	185.0	3.64	56.59	42.15	245.7	1	1	-	1	3	-

♣ W_{pl} : Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise.
Voir page 108.

♣ W_{pl} : For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity.
See page 108.

♣ W_{pl} : Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören.
Siehe Seite 108.



Poutrelles I européennes

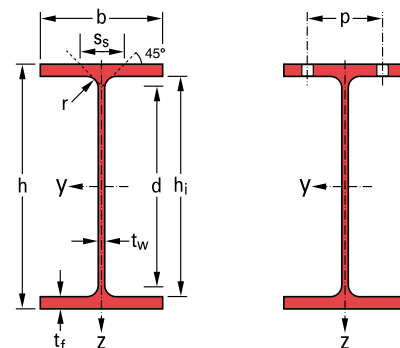
IPE 100 - 600 conformes à l'Euronorme 19-57; IPE A 100 - 600; IPE O 180 - 600; IPE 750

European I beams

IPE 100 - 600 in accordance with Euronorm 19-57; IPE A 100 - 600; IPE O 180 - 600; IPE 750

Europäische I-Profile

IPE 100 - 600 gemäß Euronorm 19-57; IPE A 100 - 600; IPE O 180 - 600; IPE 750



Désignation Designation Bezeichnung	Dimensions Abmessungen					A cm ²	Dimensions de construction Dimensions for detailing Konstruktionsmaße					Surface Oberfläche		
	G kg/m	h mm	b mm	t _w mm	t _f mm		r mm	h _i mm	d mm	∅	p _{min} mm	p _{max} mm	A _L m ² /m	A _G m ² /t
IPE A 360*	50.2	357.6	170	6.6	11.5	18	63.96	334.6	298.6	M22	86	88	1.351	26.91
IPE 360	57.1	360	170	8	12.7	18	72.73	334.6	298.6	M22	88	88	1.353	23.70
IPE O 360+	66.0	364	172	9.2	14.7	18	84.13	334.6	298.6	M22	90	90	1.367	20.69
IPE A 400*	57.4	397	180	7	12	21	73.10	373	331	M22	94	98	1.464	25.51
IPE 400	66.3	400	180	8.6	13.5	21	84.46	373	331	M22	96	98	1.467	22.12
IPE O 400+	75.7	404	182	9.7	15.5	21	96.39	373	331	M22	96	100	1.481	19.57
IPE A 450*	67.2	447	190	7.6	13.1	21	85.55	420.8	378.8	M24	100	102	1.603	23.87
IPE 450	77.6	450	190	9.4	14.6	21	98.82	420.8	378.8	M24	100	102	1.605	20.69
IPE O 450+	92.4	456	192	11	17.6	21	117.7	420.8	378.8	M24	102	104	1.622	17.56
IPE A 500*	79.4	497	200	8.4	14.5	21	101.1	468	426	M24	100	112	1.741	21.94
IPE 500	90.7	500	200	10.2	16	21	115.5	468	426	M24	102	112	1.744	19.23
IPE O 500+	107	506	202	12	19	21	136.7	468	426	M24	104	114	1.760	16.40
IPE A 550*	92.1	547	210	9	15.7	24	117.3	515.6	467.6	M24	106	122	1.875	20.36
IPE 550	106	550	210	11.1	17.2	24	134.4	515.6	467.6	M24	110	122	1.877	17.78
IPE O 550+	123	556	212	12.7	20.2	24	156.1	515.6	467.6	M24	110	122	1.893	15.45
IPE A 600*	108	597	220	9.8	17.5	24	137.0	562	514	M27	114	118	2.013	18.72
IPE 600	122	600	220	12	19	24	156.0	562	514	M27	116	118	2.015	16.45
IPE O 600+	154	610	224	15	24	24	196.8	562	514	M27	118	122	2.045	13.24
IPE 750 x 147	147	753	265	13.2	17	17	187.5	719	685	M27	104	164	2.510	17.06
IPE 750 x 173+	173	762	267	14.4	21.6	17	221.3	718.8	684.8	M27	104	166	2.534	14.58
IPE 750 x 196+	196	770	268	15.6	25.4	17	250.8	719.2	685.2	M27	106	166	2.552	12.96



• Commande minimale: pour S 235 JR, cf. conditions techniques de livraison p. 109; pour toute autre qualité 40t ou suivant accord.

+ Commande minimale: 40t par profilé et qualité ou suivant accord.

• Minimum order: for the S 235 JR grade cf. technical delivery conditions p. 109; for any other grade 40t or upon agreement.

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• Mindestbestellmenge: für S 235 JR gemäß technischen Lieferbedingungen S. 109; für jede andere Güte 40t oder nach Vereinbarung.

+ Mindestbestellmenge: 40t pro Profil und Güte oder nach Vereinbarung.

IPE

Notations pages 104-108 / Bezeichnungen Seiten 104-108

Désignation Designation Bezeichnung	Valeurs statiques / Section properties / Statische Kennwerte												Classification ENV 1993-1-1					HISTAR	
	axe fort y-y strong axis y-y starke Achse y-y					axe faible z-z weak axis z-z schwache Achse z-z					pure bending y-y			pure compression					
	G kg/m	I_y cm ⁴	$W_{el,y}$ cm ³	$W_{pl,y} \blacklozenge$ cm ³	i_y cm	A_{vz} cm ²	I_z cm ⁴	$W_{el,z}$ cm ³	$W_{pl,z} \blacklozenge$ cm ³	i_z cm	s_s mm	I_t cm ⁴	$I_w \times 10^{-3}$ cm ⁶	S 235	S 355	S 460	S 235		S 355
IPE A 360	50.2	14520	811.8	906.8	15.06	29.76	944.3	111.1	171.9	3.84	50.69	26.51	282	1	1	-	4	4	-
IPE 360	57.1	16270	903.6	1019	14.95	35.14	1043	122.8	191.1	3.79	54.49	37.32	313.6	1	1	-	2	4	-
IPE O 360	66.0	19050	1047	1186	15.05	40.21	1251	145.5	226.9	3.86	59.69	55.76	380.3	1	1	-	1	3	-
IPE A 400	57.4	20290	1022	1144	16.66	35.78	1171	130.1	202.1	4.00	55.60	34.79	432.2	1	1	-	4	4	-
IPE 400	66.3	23130	1156	1307	16.55	42.69	1318	146.4	229.0	3.95	60.20	51.08	490	1	1	-	3	4	-
IPE O 400	75.7	26750	1324	1502	16.66	47.98	1564	171.9	269.1	4.03	65.30	73.10	587.6	1	1	-	2	3	-
IPE A 450	67.2	29760	1331	1494	18.65	42.26	1502	158.1	245.7	4.19	58.40	45.67	704.9	1	1	-	4	4	-
IPE 450	77.6	33740	1500	1702	18.48	50.85	1676	176.4	276.4	4.12	63.20	66.87	791	1	1	-	3	4	-
IPE O 450	92.4	40920	1795	2046	18.65	59.4	2085	217.2	341.0	4.21	70.80	109	997.6	1	1	-	2	4	-
IPE A 500	79.4	42930	1728	1946	20.61	50.41	1939	193.9	301.6	4.38	62.00	62.78	1125	1	1	-	4	4	-
IPE 500	90.7	48200	1928	2194	20.43	59.87	2142	214.2	335.9	4.31	66.80	89.29	1249	1	1	1	3	4	4
IPE O 500	107	57780	2284	2613	20.56	70.21	2622	259.6	408.5	4.38	74.60	143.5	1548	1	1	1	2	4	4
IPE A 550	92.1	59980	2193	2475	22.61	60.30	2432	231.6	361.5	4.55	68.52	86.53	1710	1	1	-	4	4	-
IPE 550	106	67120	2441	2787	22.35	72.34	2668	254.1	400.5	4.45	73.62	123.2	1884	1	1	1	4	4	4
IPE O 550	123	79160	2847	3263	22.52	82.69	3224	304.2	480.5	4.55	81.22	187.5	2302	1	1	1	2	4	4
IPE A 600	108	82920	2778	3141	24.6	70.14	3116	283.3	442.1	4.77	72.92	118.8	2607	1	1	-	4	4	-
IPE 600	122	92080	3069	3512	24.3	83.78	3387	307.9	485.6	4.66	78.12	165.4	2846	1	1	1	4	4	4
IPE O 600	154	118300	3879	4471	24.52	104.4	4521	403.6	640.1	4.79	91.12	318.1	3860	1	1	1	2	4	4
IPE 750 x 147	147	166100	4411	5110	29.76	105.4	5289	399.2	630.8	5.31	67.12	161.5	7141	1	1	-	4	4	-
IPE 750 x 173	173	205800	5402	6218	30.49	116.4	6873	514.9	809.9	5.57	77.52	273.6	9391	1	1	1	4	4	4
IPE 750 x 196	196	240300	6241	7174	30.95	127.3	8175	610.1	958.8	5.71	86.32	408.9	11290	1	1	1	4	4	4

◆ W_{pl} : Pour un dimensionnement plastique, la section doit appartenir à la classe 1 ou 2 suivant la capacité de rotation requise.
Voir page 108.

◆ W_{pl} : For plastic design, the shape must belong to class 1 or 2 according to the required rotation capacity.
See page 108.

◆ W_{pl} : Bei einer plastischen Bemessung muss das Profil der Klasse 1 oder 2, entsprechend der erforderlichen Rotationskapazität, angehören.
Siehe Seite 108.

