

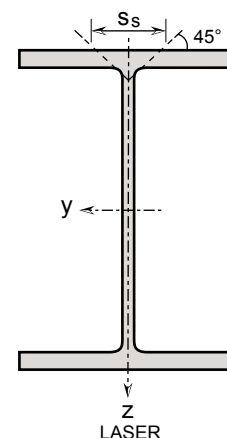
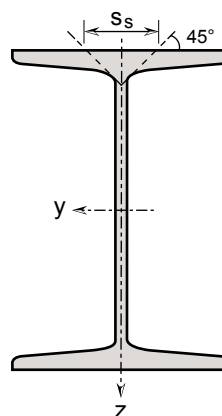
European standard beams

Dimensions: in accordance with DIN 1025
Tolerances: EN 10024: 1995

General properties										
Designation		Dimensions							Dimensions for detailing	
	G kg/m	h mm	b mm	t _w mm	t _f mm	r ₁ mm	r ₂ mm	A mm ² x10 ²	h _i mm	d mm
IPN 80	6.1	80	42	3.9	5.9	3.9	2.3	7.57	-	59
IPN 80*	6.1	80	42	3.9	5.9	2	< 1	7.65	68.2	64.2
IPN 100	8.48	100	50	4.5	6.8	4.5	2.7	10.6	-	75.7
IPN 100*	8.6	100	50	4.5	6.8	2	< 1	10.72	86.4	82.4
IPN 120	11.36	120	58	5.1	7.7	5.1	3.1	14.2	-	92.4
IPN 120*	11.4	120	58	5.1	7.7	2	< 1	14.3	104.6	100.6
IPN 140	14.56	140	66	5.7	8.6	5.7	3.4	18.2	-	109.1
IPN 140*	14.7	140	66	5.7	8.6	2	< 1	18.39	122.8	118.8
IPN 160	18.24	160	74	6.3	9.5	6.3	3.8	22.8	-	125.8
IPN 160*	18.4	160	74	6.3	9.5	2	< 1	22.98	141	137
IPN 180	22.32	180	82	6.9	10.4	6.9	4.1	27.9	-	142.5
IPN 180*	22.5	180	82	6.9	10.4	2	< 1	28.08	159.2	155.2
IPN 200	26.72	200	90	7.5	11.3	7.5	4.5	33.4	-	159.1
IPN 200*	26.9	200	90	7.5	11.3	2	< 1	33.68	177.4	173.4
IPN 220*	31.8	220	98	8.1	12.2	2	< 1	39.79	195.6	191.6
IPN 240*	37.1	240	106	8.7	13.1	2	< 1	46.41	213.8	209.8
IPN 260*	43	260	113	9.4	14.1	2	< 1	53.69	231.8	227.8
IPN 280*	49.1	280	119	10.1	15.2	2	< 1	61.42	249.6	245.6
IPN 300*	55.5	300	125	10.8	16.2	2	< 1	69.44	267.6	263.6
IPN 320*	62.5	320	131	11.5	17.3	2	< 1	78.18	285.4	281.4
IPN 340*	69.8	340	137	12.2	18.3	2	< 1	87.19	303.4	299.4
IPN 360*	78	360	143	13	19.5	2	< 1	97.53	321	317

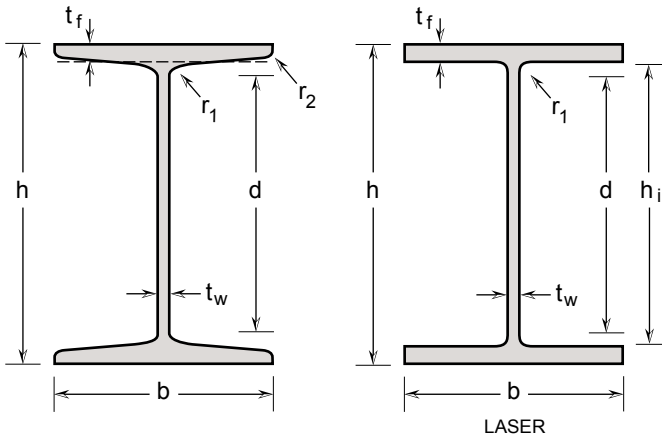
Stainless steel

Grade according to EN 10088-3: 1D
Surface condition: blasted and pickled



Structural properties

Designation	Strong axis y-y					Weak axis z-z				Ss mm	It mm ⁴ x10 ⁴	Iw mm ⁶ x10 ⁹
	Iy mm ⁴ x10 ⁴	W _{el.y} mm ³ x10 ³	W _{pl.y} mm ³ x10 ³	i _y mm x10	A _{vz} mm ² x10	Iz mm ⁴ x10 ⁴	W _{el.z} mm ³ x10 ³	W _{pl.z} mm ³ x10 ³	i _z mm x10			
IPN 80	77.8	19.5	22.8	3.2	3.41	6.29	3	5	0.91	21.6	0.87	0.09
IPN 80*	78.87	19.72	23.01	3.21	3.16	7.32	3.49	5.47	0.98	18.04	0.73	0.1
IPN 100	171	34.2	39.8	4.01	4.85	12.2	4.88	8.1	1.07	25	1.60	0.27
IPN 100*	172.74	34.55	40.23	4.01	4.5	14.23	5.69	8.95	1.15	20.44	1.34	0.31
IPN 120	328	54.7	63.6	4.81	6.63	21.5	7.41	12.4	1.23	28.4	2.71	0.69
IPN 120*	331.61	55.27	64.28	4.82	6.07	25.16	8.68	13.64	1.33	22.84	2.26	0.79
IPN 140	573	81.9	95.4	5.61	8.65	35.2	10.7	17.9	1.4	31.8	4.32	1.54
IPN 140*	579.94	82.85	96.28	5.62	7.87	41.4	12.55	19.74	1.5	25.24	3.59	1.78
IPN 160	935	117	136	6.4	10.83	54.7	14.8	24.9	1.55	35.2	6.57	3.14
IPN 160*	946.07	118.26	137.35	6.42	9.9	64.46	17.42	27.42	1.67	27.64	5.44	3.63
IPN 180	1450	161	187	7.2	13.35	81.3	19.8	33.2	1.71	38.6	9.58	5.92
IPN 180*	1462.2	162.47	188.63	7.22	12.15	96.01	23.42	36.87	1.85	30.04	7.93	6.87
IPN 200	2140	214	250	8	16.03	117	26	43.5	1.87	42	13.5	10.5
IPN 200*	2164.42	216.44	251.22	8.02	14.64	137.92	30.65	48.27	2.02	32.44	11.18	12.22
IPN 220*	3092.71	281.16	326.26	8.82	17.35	192.25	39.23	61.81	2.2	34.84	15.33	20.66
IPN 240*	4290.91	357.58	414.86	9.62	20.3	261.22	49.29	77.66	2.37	37.24	20.56	33.47
IPN 260*	5802.58	446.35	518.46	10.4	23.71	340.69	60.3	95.16	2.52	39.94	27.48	51.26
IPN 280*	7662.64	547.33	636.71	11.17	27.39	429.06	72.11	114.01	2.64	42.84	36.3	74.84
IPN 300*	9894.54	659.64	768.5	11.94	31.33	530.16	84.83	134.39	2.76	45.54	46.46	106.18
IPN 320*	12628.81	789.3	920.68	12.71	35.54	651.83	99.52	157.9	2.89	48.44	59.34	148.48
IPN 340*	15834.34	931.43	1087.81	13.48	40.01	788.87	115.16	183.05	3.01	51.14	73.86	202.91
IPN 360*	19774.69	1098.59	1284.92	14.24	45.08	956.26	133.74	212.96	3.13	54.34	93.50	275.46



European standard beams

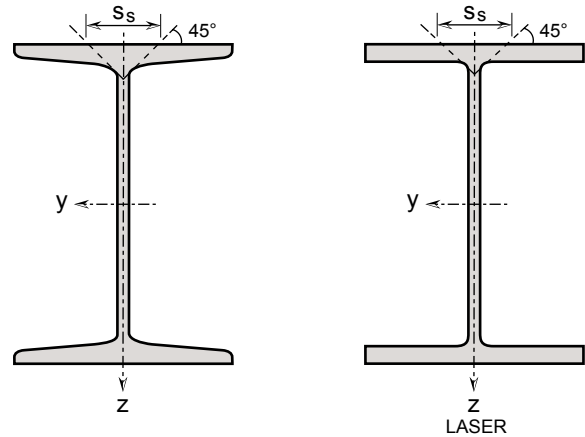
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	G kg/m	h mm	b mm	t _w mm	t _f mm	r ₁ mm	r ₂ mm	A mm ² x10 ²	h _i mm	d mm
IPN 380 ⁺	86.1	380	149	13.7	20.5	2	< 1	107.57	339	335
IPN 400 ⁺	94.7	400	155	14.4	21.6	2	< 1	118.37	356.8	352.8
IPN 450 ⁺	118.1	450	170	16.2	24.3	2	< 1	147.68	401.4	397.4
IPN 500 ⁺	144.2	500	185	18	27	2	< 1	180.21	446	442.0
IPN 550 ⁺	170.5	550	200	19	30	2	< 1	213.13	490	486
IPN 600 ⁺	204	600	215	21.6	32.4	2	< 1	254.96	535.2	531.2

* Profiles are laser fused with full penetration, equivalent to hot rolled (r = laser seam).

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	Iy mm ⁴ x10 ⁴	Wey mm ³ x10 ³	Wply mm ³ x10 ³	iy mm x10	Avz mm ² x10	Iz mm ⁴ x10 ⁴	Wey mm ³ x10 ³	Wply mm ³ x10 ³	iz mm x10			
IPN 380 ⁺	24217.16	1274.59	1492.28	15	50.11	1137.5	152.68	243.49	3.25	57.04	113.74	365.17
IPN 400 ⁺	29457.08	1472.85	1725.8	15.77	55.39	1349.49	174.13	277.99	3.38	59.94	138.42	479.89
IPN 450 ⁺	46216.56	2054.07	2411.8	17.69	69.97	2004.01	235.77	377.5	3.68	67.14	217.25	901.47
IPN 500 ⁺	69261.49	2770.46	3258.52	19.6	86.25	2870.94	310.37	498.2	3.99	74.34	325.67	1593.64
IPN 550 ⁺	99858.29	3631.21	4261.31	21.65	100.03	4028.04	402.8	644.26	4.35	81.34	463.35	2704
IPN 600 ⁺	139952.5	4665.08	5501.59	23.43	123.93	5411.71	503.42	811.31	4.61	88.74	658.38	4322.49