



Shaped beams and channels

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STEEL RANGE

Non-alloyed quality steels intended to be used in the manufacturing of structural elements, such as welded, bolted and riveted structures, for use at ambient temperature EN 10025

PRODUCTION RANGE

STANDARD MANUFACTURING SIZES

IPN Beams (mm)	80 - 100 - 120 - 140 - 160 - 180 - 200
IPE Beams (mm)	100 - 120 - 140 - 160 - 180 - 200 - 220 - 240 - 270
HEA Beams (mm)	100 - 120 - 140 - 160 - 180 - 200
HEB Beams (mm)	100 - 120 - 140 - 160 - 180 - 200
UPN Irons (mm)	100 - 120 - 140 - 160 - 180 - 200 - 220 - 240 - 260 - 300

BAR LENGTH

6.1 ÷ 18.1 m
Commercial length with range ≤ 1 m
Standard Fixed Length: ± 100 mm

DIMENSIONAL TOLERANCES AND STRAIGHTNESS

IPN Beams	EN10024
IPE Beams	EN10034
HEA Beams	EN10034
HEB Beams	EN10034
UPN Irons	EN10279

END APPEARANCE

Standard Cutting with chip removal at both ends

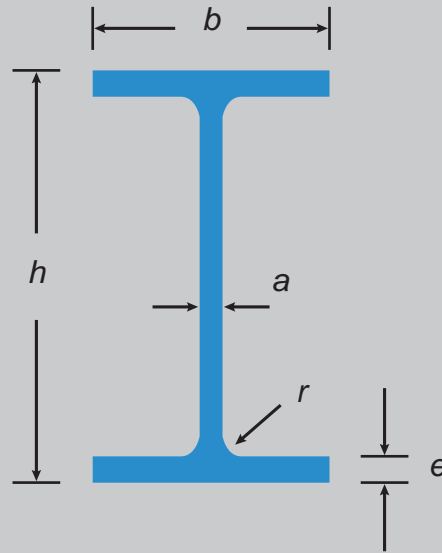
BUNDLE WEIGHT

Standard Bundles with length equal to 12 ÷ 18 m: 3,000 ÷ 5,000 kg
Bundles with length equal to 6 m: 1,500 ÷ 2,500 kg.

OTHER INFORMATION

Cold sawability	Guaranteed
Manufacturing times	Available from ready stock
Product certificate	Compliant with EN 10204 EC certification as per EN 10025-1/06 for rolled sections intended for use in structures
Minimum batch size	10 tons. For standard products included in the shape list
Weight tolerance with respect with the ordered amount	± 20% up to 5 tons. ± 10% > 5 ÷ 25 tons. ± 6% > 25 tons.

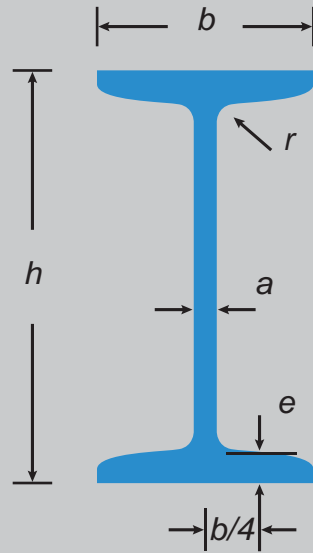
IPE SHAPE



SECTION WEIGHTS AND CHARACTERISTICS

IPE h (mm)	b (mm)	a (mm)	e (mm)	r (mm)	Weight (kg/m)	Cross- section (cm ²)	Moments of inertia		Section moduli		Inertia radii	
							J _x (cm ⁴)	J _y (cm ⁴)	W _x (cm ³)	W _y (cm ³)	i _x (cm)	i _y (cm)
100	55	4.1	5.7	7	8.1	10.32	171.0	15.92	34.20	5.79	4.07	1.24
120	64	4.4	6.3	7	10.4	13.21	317.8	27.67	52.96	8.65	4.90	1.45
140	73	4.7	6.9	7	12.9	16.43	541.2	44.92	77.32	12.31	5.74	1.65
160	82	5.0	7.4	9	15.8	20.09	869.3	68.31	108.7	16.66	6.58	1.84
180	91	5.3	8.0	9	18.8	23.95	1,317	100.9	146.3	22.16	7.42	2.05
200	100	5.6	8.5	12	22.4	28.48	1,943	142.4	194.3	28.47	8.26	2.24
220	110	5.9	9.2	12	26.2	33.37	2,772	204.9	252.0	37.25	9.11	2.48
240	120	6.2	9.8	15	30.7	39.12	3,892	283.6	324.3	47.27	9.97	2.69
270	135	6.6	10.2	15	36.1	45.95	5,790	419.9	428.9	62.20	11.23	3.02

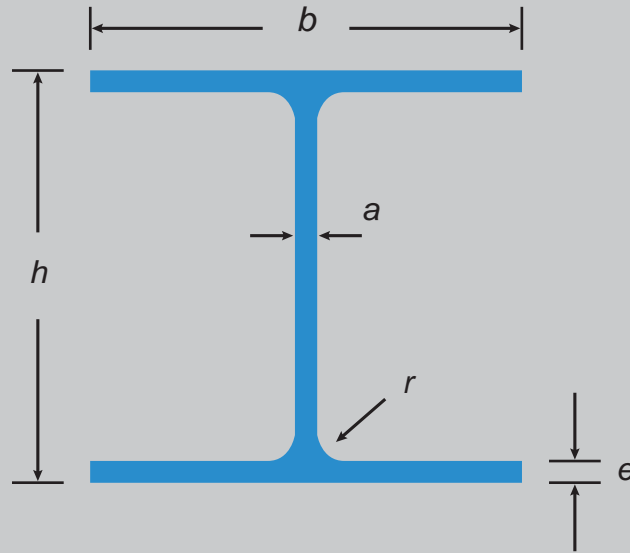
IPN SHAPE



SECTION WEIGHTS AND CHARACTERISTICS

IPN h (mm)	b (mm)	a (mm)	e (mm)	r (mm)	Weight (kg/m)	Cross- section (cm ²)	Inertia moments		Section moduli		Inertia radii	
							J _x (cm ⁴)	J _y (cm ⁴)	W _x (cm ³)	W _y (cm ³)	i _x (cm)	i _y (cm)
80	42	3.9	5.9	3.9	5.94	7.57	77.7	6.28	19.4	2.99	3.20	0.91
100	50	4.5	6.8	4.5	8.34	10.6	170	12.1	34.1	4.86	4.00	1.07
120	58	5.1	7.7	5.1	11.1	14.2	328	21.5	54.7	7.41	4.81	1.23
140	66	5.7	8.6	5.7	14.3	18.3	573	35.2	81.9	10.7	5.61	1.40
160	74	6.3	9.5	6.3	17.9	22.8	935	54.7	117	14.8	6.40	1.55
180	82	6.9	10.4	6.9	21.9	27.9	1,450	81.3	161	19.8	7.20	1.71
200	90	7.5	11.3	7.5	26.2	33.4	2,140	117	214	26.0	8.00	1.87

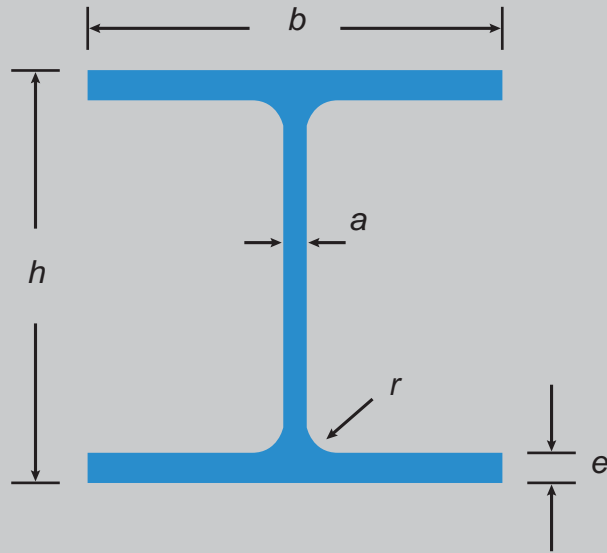
HEA SHAPE



SECTION WEIGHTS AND CHARACTERISTICS

HEA h (mm)	b (mm)	h (mm)	a (mm)	e (mm)	r (mm)	Weight (kg/m)	Cross- section (cm ²)	Inertia moments		Section moduli		Inertia radii	
								J _x (cm ⁴)	J _y (cm ⁴)	W _x (cm ³)	W _y (cm ³)	i _x (cm)	i _y (cm)
100	100	96	5.0	8.0	12	16.7	21.24	349.2	133.8	72.76	26.76	4.06	2.51
120	120	114	5.0	8.0	12	19.9	25.34	606.2	230.9	106.3	38.48	4.89	3.02
140	140	133	5.5	8.5	12	24.7	31.42	1,033	389.3	155.4	55.62	5.73	3.52
160	160	152	6.0	9.0	15	30.4	38.77	1,673	615.6	220.1	76.95	6.57	3.98
180	180	171	6.0	9.5	15	35.5	45.25	2,510	924.6	293.6	102.7	7.45	4.52
200	200	190	6.5	10.0	18	42.3	53.83	3,692	1,326	388.6	133.6	8.28	4.98

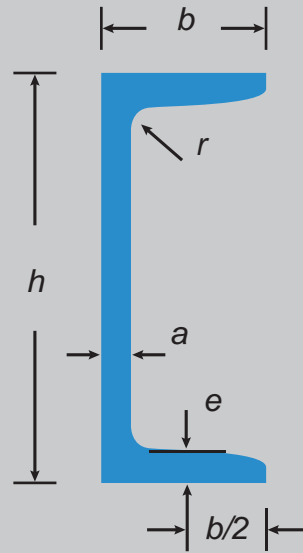
HEB SHAPE



SECTION WEIGHTS AND CHARACTERISTICS

HEB h (mm)	b (mm)	h (mm)	a (mm)	e (mm)	r (mm)	Weight (kg/m)	Cross- section (cm ²)	Inertia moments		Section moduli		Inertia radii	
								J _x (cm ⁴)	J _y (cm ⁴)	W _x (cm ³)	W _y (cm ³)	i _x (cm)	i _y (cm)
100	100	100	6.0	10.0	12	20.4	26.04	449.5	167.3	89.91	33.45	4.16	2.53
120	120	120	6.5	11.0	12	26.7	34.01	864.4	317.5	144.1	52.92	5.04	3.06
140	140	140	7.0	12.0	12	33.7	42.96	1,509	549.7	215.6	78.52	5.93	3.58
160	160	160	8.0	13.0	15	42.6	54.25	2,492	889.2	311.5	111.2	6.78	4.05
180	180	180	8.5	14.0	15	51.2	65.25	3,831	1,363	425.7	151.4	7.66	4.57
200	200	200	9.0	15.0	18	61.3	78.08	5,696	2,003	569.6	200.3	8.54	5.07

UPN SHAPE



SECTION WEIGHTS AND CHARACTERISTICS

UPN h (mm)	b (mm)	a (mm)	e (mm)	r (mm)	Weight (kg/m)	Cross- section (cm ²)	Inertia moments		Section moduli		Inertia radii	
							J _x (cm ⁴)	J _y (cm ⁴)	W _x (cm ³)	W _y (cm ³)	i _x (cm)	i _y (cm)
80	45	6.0	8.0	8.0	8.65	11.0	106	19.4	26.5	6.35	3.10	1.33
100	50	6.0	8.5	8.5	10.6	13.5	205	29.1	41.1	8.45	3.91	1.47
120	55	7.0	9.0	9.0	13.3	17.0	364	43.1	60.7	11.1	4.63	1.59
140	60	7.0	10.0	10.0	16.0	20.4	605	62.5	86.4	14.7	5.45	1.75
160	65	7.5	10.5	10.5	18.9	24.0	925	85.1	116	18.2	6.21	1.88
180	70	8.0	11.0	11.0	22.0	28.0	1,354	114	150	22.4	6.96	2.01
200	75	8.5	11.5	11.5	25.3	32.2	1,911	148	191	26.9	7.71	2.14
220	80	9.0	12.5	12.5	29.4	37.4	2,691	196	245	33.5	8.48	2.29
240	85	9.5	13.0	13.0	33.2	42.3	3,599	247	300	39.5	9.22	4.42
260	90	10.0	14.0	14.0	37.9	48.3	4,824	317	371	47.8	10.0	2.56
280	95	10.0	15.0	15.0	41.9	53.4	6,276	398	448	57.2	10.8	2.73
300	100	10.0	16.0	16.0	46.1	58.8	8,028	493	535	67.6	11.7	2.90