H Beams (HEA, HEB)

OMEGA STEEL CO.
Istanbul · Dilovası plant

Hot-rolled wide-flange H beams (HEA light, HEB standard, HEM heavy series) from HE 100 to HE 600 to EN 10365 / EN 10034, grades S235JR, S275JR and S355J2 to EN 10025-2, in 6, 12 and 18 m lengths, cut, drilled or shot-blasted and primed, exported by container, flat-rack or breakbulk.

HEA · HEB · HEM 100–600 | EN 10365 · EN 10025-2 | S235JR · S275JR · S355J2 | 6 / 12 / 18 m | Cut · drilled · primed

Wide-flange H beams are the columns and primary beams of steel buildings: HEA (light, IPBl), HEB (standard, IPB) and HEM (heavy, IPBv) series from 100 to 600 mm depth, rolled to EN 10365 in S235JR, S275JR or S355J2. From stock in Dilovası in 12 m bars, cut to length, drilled, shot-blasted and primed on request, and shipped by container up to 12 m or by flat-rack and breakbulk up to 18 m.

H BEAM SIZES AND WEIGHT CHART

Size	HEA h × b × tw × tf (mm)	HEA kg/m	HEB h × b × tw × tf (mm)	HEB kg/m	HEM kg/m
HE 100	96 × 100 × 5 × 8	16.7	100 × 100 × 6 × 10	20.4	41.8
HE 120	114 × 120 × 5 × 8	19.9	120 × 120 × 6.5 × 11	26.7	52.1
HE 140	133 × 140 × 5.5 × 8.5	24.7	140 × 140 × 7 × 12	33.7	63.2
HE 160	152 × 160 × 6 × 9	30.4	160 × 160 × 8 × 13	42.6	76.2
HE 180	171 × 180 × 6 × 9.5	35.5	180 × 180 × 8.5 × 14	51.2	88.9
HE 200	190 × 200 × 6.5 × 10	42.3	200 × 200 × 9 × 15	61.3	103
HE 220	210 × 220 × 7 × 11	50.5	220 × 220 × 9.5 × 16	71.5	117
HE 240	230 × 240 × 7.5 × 12	60.3	240 × 240 × 10 × 17	83.2	157
HE 260	250 × 260 × 7.5 × 12.5	68.2	260 × 260 × 10 × 17.5	93.0	172
HE 280	270 × 280 × 8 × 13	76.4	280 × 280 × 10.5 × 18	103	189
HE 300	290 × 300 × 8.5 × 14	88.3	300 × 300 × 11 × 19	117	238
HE 320	310 × 300 × 9 × 15.5	97.6	320 × 300 × 11.5 × 20.5	127	245
HE 340	330 × 300 × 9.5 × 16.5	105	340 × 300 × 12 × 21.5	134	248
HE 360	350 × 300 × 10 × 17.5	112	360 × 300 × 12.5 × 22.5	142	250

First 14 of 19 rows — the full table is on the product page.

Nominal values per EN 10365; tolerance per EN 10034. HE 650–1000 on mill order.

H BEAM VS I BEAM (IPE / IPN)

	H beam (HEA/HEB)	I beam (IPE)	I beam (IPN)
Flange width	≈ depth (100–300 mm)	About half the depth	Narrow, tapered flanges
Weak-axis stiffness	High — good column	Low — beam only	Low
Weight for same depth	Heaviest	Lightest	Medium
Best for	Columns, heavy beams, crane girders	Floor beams, purlins, rafters	Legacy designs, machine frames
Price per ton	1.00–1.05	1.00	1.02–1.08

GRADES: S235JR, S275JR, S355J2

Grade	Yield (t ≤ 16 mm)	Tensile	Impact	Typical use	Price vs S235
S235JR	235 MPa	360–510	27 J at +20 °C	Light frames, non-critical members	1.00
S275JR	275 MPa	410–560	27 J at +20 °C	Standard for stock beams, EU/Gulf buildings	1.01–1.02
S355J2	355 MPa	470–630	27 J at −20 °C	Primary structures, cranes, EN 1090 EXC3, cold regions	1.04–1.08
S355J0	355 MPa	470–630	27 J at 0 °C	Where J2 not required	1.03–1.06

STANDARDS

EN 10365 (dimensions of hot-rolled I and H sections) · EN 10034 (tolerances on shape and dimensions) · EN 10025-2 (S235JR, S275JR, S355J2) · ASTM A992 / A572 Gr. 50 W-shapes (on request) · EN 1090-2 (execution of steel structures)