Steel Channels (UPN, UPE)

OMEGA STEEL CO.
Istanbul · Dilovası plant

Hot-rolled C channels (U channels) UPN 50–400 mm with tapered flanges and UPE 80–400 mm with parallel flanges to EN 10365 / EN 10279, grades S235JR, S275JR and S355J2, 6 and 12 m lengths, from stock in Dilovası; cut, drilled, blasted and primed; used as frames, rails, stringers, bracing, machine bases, truck chassis and door and window frames; plus galvanized cold-formed C channels for light applications.

UPN 50 – 400 · UPE 80 – 400 | EN 10365 · EN 10025-2 | S235JR · S275JR · S355J2 | 6 / 12 m | Cut · drilled · primed

The C channel that Gulf and Balkan drawings call NPU or UPN is a hot-rolled tapered-flange channel; UPE is the parallel-flange version that bolts flat. We stock both from 50 to 300 mm (400 mm to order) in S235JR/S275JR, S355J2 in common sizes, 6 and 12 m, cut and drilled to drawing. For light, galvanized C sections see the cold-formed [C and Z purlins](/products/sections/c-z-purlins/) page.

UPN CHANNEL SIZES AND WEIGHT CHART

Size	h × b (mm)	Web tw	Flange tf	kg/m	Ix (cm⁴)	Wx (cm³)
UPN 50	50 × 38	5.0	7.0	5.6	26.4	10.6
UPN 65	65 × 42	5.5	7.5	7.1	57.5	17.7
UPN 80	80 × 45	6.0	8.0	8.6	106	26.5
UPN 100	100 × 50	6.0	8.5	10.6	206	41.2
UPN 120	120 × 55	7.0	9.0	13.4	364	60.7
UPN 140	140 × 60	7.0	10.0	16.0	605	86.4
UPN 160	160 × 65	7.5	10.5	18.8	925	116
UPN 180	180 × 70	8.0	11.0	22.0	1 350	150
UPN 200	200 × 75	8.5	11.5	25.3	1 910	191
UPN 220	220 × 80	9.0	12.5	29.4	2 690	245
UPN 240	240 × 85	9.5	13.0	33.2	3 600	300
UPN 260	260 × 90	10.0	14.0	37.9	4 820	371
UPN 280	280 × 95	10.0	15.0	41.8	6 280	448
UPN 300	300 × 100	10.0	16.0	46.2	8 030	535

First 14 of 17 rows — the full table is on the product page.

UPE CHANNEL SIZES AND WEIGHT CHART

Size	h × b (mm)	Web tw	Flange tf	kg/m	Ix (cm⁴)	Wx (cm³)
UPE 80	80 × 50	4.0	7.0	7.9	107	26.8
UPE 100	100 × 55	4.5	7.5	9.8	207	41.4
UPE 120	120 × 60	5.0	8.0	12.1	364	60.6
UPE 140	140 × 65	5.0	9.0	14.5	600	85.6
UPE 160	160 × 70	5.5	9.5	17.0	911	114
UPE 180	180 × 75	5.5	10.5	19.7	1 350	150
UPE 200	200 × 80	6.0	11.0	22.8	1 910	191
UPE 220	220 × 85	6.5	12.0	26.6	2 680	244
UPE 240	240 × 90	7.0	12.5	30.2	3 600	300
UPE 270	270 × 95	7.5	13.5	35.2	5 250	389
UPE 300	300 × 100	9.5	15.0	44.4	7 820	522
UPE 330	330 × 105	11.0	16.0	53.2	10 690	648
UPE 360	360 × 110	12.0	17.0	61.2	14 830	824
UPE 400	400 × 115	13.5	18.0	72.2	20 980	1 049

UPN VS UPE VS COLD-FORMED C

	UPN (hot-rolled, tapered)	UPE (hot-rolled, parallel)	Cold-formed C (galvanized)
Flanges	Tapered 8%, thick	Parallel, thinner	Parallel, lipped, thin (1.5–3 mm)
Weight for same depth	1.00	0.90–0.95	0.35–0.50
Bolting	Tapered washers	Flat	Flat, punched
Availability	50–400, wide stock	80–400	100–350

	UPN (hot-rolled, tapered)	UPE (hot-rolled, parallel)	Cold-formed C (galvanized)
Use	Frames, chassis, bases, bracing	Same, where flat bolting matters	Purlins, girts, cladding rails
Grades	S235–S355	S235–S355	S280GD–S450GD

STANDARDS

EN 10365 (dimensions of channels) · EN 10279 (tolerances for hot-rolled channels) · EN 10025-2 (S235JR, S275JR, S355J2) · DIN 1026-1 (UPN) / DIN 1026-2 (UPE) — superseded · BS 4-1 PFC / ASTM A36 C-channels (on request)