ASTM A36 Steel Plate

OMEGA STEEL CO.
Istanbul · Dilovası plant

ASTM A36 is the general-purpose carbon structural steel of the American system: 250 MPa (36 ksi) minimum yield, 400–550 MPa (58–80 ksi) tensile, readily welded, bent and machined. It is the ASTM counterpart of S235JR/S275JR and appears on every US-engineered project in the Gulf, Iraq and Africa for base plates, gussets, frames and non-critical structures. Turkish mills roll it to ASTM certification; we supply 6–100 mm to order and S235JR from stock as the usual substitute.

Yield ≥ 250 MPa (36 ksi) | Rm 400–550 MPa | S235JR / S275JR equivalent | 6–100 mm to order | S235JR stock substitute

A36 is the steel American engineers learned on and still write by reflex — the plate for anything that is not a high-strength member. For an ASTM-specified job we bring it from the mill with A36 on the certificate; for everything else our stock S235JR does the same work at the same price and ships tomorrow.

CHEMICAL COMPOSITION

Element	C	Mn	P	S	Si	Cu
max. % (ladle)	≤ 0.25 (≤ 20 mm) / 0.26 (20–40) / 0.27 (40–100)	0.80–1.20 (> 20 mm)	≤ 0.030	≤ 0.030	≤ 0.40	≥ 0.20 when specified

Mn not specified ≤ 20 mm. CEV ≈ 0.38–0.43.

MECHANICAL PROPERTIES

Thickness	Yield min (MPa / ksi)	Tensile (MPa / ksi)	Elongation min (200 / 50 mm)	Impact
≤ 200 mm	250 / 36	400–550 / 58–80	20 % / 23 %	not required (CVN on order)
> 200 mm	220 / 32	400–550 / 58–80	20 % / 23 %	—

EQUIVALENT GRADES

System	Grade	Note
EN 10025-2	S235JR (near) / S275JR (over-match)	S275JR usually accepted
DIN 17100	ST37-2 / ST44-2	historic
JIS G3101	SS400	closest Asian grade
GB/T 700	Q235B / Q275	
ASME	SA-36	identical
ISO 630	E235B / E275B	

THICKNESS RANGE AND STOCK SIZES

Thickness	Widths × lengths	Availability
6–12 mm	2 000 / 2 438 × 6 000–12 192	to order 2–4 weeks
15–40 mm	2 000 / 2 438 / 2 500 × 6 000–12 000	to order 2–4 weeks
50–100 mm	2 000–2 500 × 6 000	to order 3–5 weeks
any	S235JR / S275JR from stock as substitute	3–5 days

STANDARDS

ASTM A36/A36M — carbon structural steel · ASME SA-36 · ASTM A6 general requirements · AWS D1.1 prequalified base metal

Updated 22 September 2026 · figures are nominal; the mill certificate governs