S275JR Steel Plate

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Istanbul · Dilovası plant

1.0044 · Hot-rolled structural plate S275JR to EN 10025-2 (DIN St44-2, near ASTM A572 Grade 42 / JIS SS400 upper range), 275 MPa yield, 6–50 mm thick, 1 500–2 500 mm wide, cut, bevelled, blasted and primed in Dilovası; the middle grade for welded frames, crane parts and machinery where S235 is marginal and S355 is not required.

1.0044 | S275JR · EN 10025-2 | 6 – 50 mm | 275 MPa yield | ST44-2 · Fe 430 equivalent | Cut · bevelled · primed

S275JR sits between S235JR and S355J2: 275 MPa yield, 410–560 MPa tensile, weldable without preheat up to 50 mm, and only 1–3% dearer than S235. It is the default grade of many Gulf and EU structural specifications for secondary members, bracing, base plates and welded machinery frames. Stocked 6–50 mm, cut to size or DXF, primed on request.

MECHANICAL PROPERTIES BY THICKNESS

Thickness	Yield min (MPa)	Tensile (MPa)	Elongation min	Impact
≤ 16 mm	275	410–560	23%	27 J at +20 °C
16 – 40 mm	265	410–560	23%	27 J at +20 °C
40 – 63 mm	255	410–560	22%	27 J at +20 °C
63 – 80 mm	245	410–560	22%	27 J at +20 °C

S275J0 (0 °C) and S275J2 (−20 °C) on request. Chemistry: C ≤ 0.21, Mn ≤ 1.50, P/S ≤ 0.035, CEV ≤ 0.40.

EQUIVALENTS

Standard	Grade	Yield	Note
DIN 17100	St44-2	275	Superseded by S275JR
BS 4360	43A / 43B	275	Superseded
ISO 630	Fe 430 B	275	—
ASTM	A572 Gr. 42	290	Near; slightly higher yield
JIS G3101	SS400	245	Lower yield, often accepted
GOST	St4sp	265	CIS specs

WEIGHT CHART

Thickness	kg/m²	1 500 × 6 000 (kg)	2 000 × 6 000 (kg)	2 500 × 12 000 (kg)
6 mm	47.1	424	565	1 413
8 mm	62.8	565	754	1 884
10 mm	78.5	707	942	2 355
12 mm	94.2	848	1 130	2 826
15 mm	118	1 060	1 413	3 533
20 mm	157	1 413	1 884	4 710
25 mm	196	1 766	2 355	5 888
30 mm	236	2 120	2 826	7 065
40 mm	314	2 826	3 768	9 420
50 mm	393	3 533	4 710	11 775

STANDARDS

EN 10025-2 (S275JR / J0 / J2) · EN 10029 (tolerances) · ASTM A572 Gr. 42 (near) · DIN 17100 St44-2 (superseded) · BS 4360 Gr. 43A (superseded)