S355MC High-Strength Steel

OMEGA STEEL CO.
Istanbul · Dilovası plant

1.0976 · S355MC is the entry grade of EN 10149-2: a thermomechanically rolled, micro-alloyed hot-rolled steel with 355 MPa minimum yield, designed to be cold-formed — bent, pressed, roll-formed — without cracking. Low carbon (≤ 0.12 %), fine grain and 40 J at −20 °C make it the standard strip for trailer chassis, truck bodies, agricultural frames and heavy cold-formed profiles. We supply it as coil and cut sheet in 2–12 mm from Turkish and EU mills.

1.0976 | Yield ≥ 355 MPa | Bend radius 0.5–1 × t | 2–12 mm coil & sheet | KV 40 J at −20 °C

Where S355J2 is a plate you weld, S355MC is a strip you bend: same 355 MPa, half the carbon, a clean fine-grained structure that takes an inside radius of 0.5–1 × t without cracking at the bend. Trailer and bodybuilders across Europe, the Gulf and North Africa run their press brakes and roll-formers on it; we cut it to length or slit it to width in Dilovası.

CHEMICAL COMPOSITION

Element	C	Si	Mn	P	S	Al	Nb	V	Ti
max. % (ladle)	0.12	0.50	1.50	0.025	0.020	≥ 0.015	0.09	0.20	0.15

Nb + V + Ti combined ≤ 0.22 %. CEV typically 0.28–0.32.

MECHANICAL PROPERTIES

Thickness	Yield ReH min (MPa)	Tensile Rm (MPa)	Elongation min	Impact KV
1.5–3 mm	355	430–550	19 (A80)	—
> 3 mm	355	430–550	23 % (A5)	40 J at −20 °C (long.)

EQUIVALENT GRADES

System	Grade	Note
SEW 092	QStE 380 TM	old German name
EN 10025-2	S355J2 (plate)	same yield, not for tight bends
ASTM	A1011 HSLAS Gr. 50 / A607 Gr. 50	HSLA sheet
JIS G3134	SPFH 540	
GB/T 1591	Q355 (TM)	
SSAB	Strenx 355MC / Domex 355MC	brand equivalents

THICKNESS RANGE AND STOCK SIZES

Thickness	Widths × lengths	Availability
2–3 mm	coil 1 000–1 500 mm; sheet to 6 000 mm	to order, cut-to-length in Dilovası
4–8 mm	coil 1 250–1 500 mm; sheet 1 500 × 6 000	part stock (6 mm), rest 2–3 weeks
10–12 mm	coil 1 500 mm; sheet 1 500 × 6 000–12 000	to order 2–3 weeks

STANDARDS

EN 10149-2:2013 — S355MC, 1.0976 · EN 10051 tolerances (coil, sheet) · EN 10204 3.1 · Former SEW 092 QStE 380 TM

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