

S690QL

S690QL is a grade of high-strength quenched and tempered steel according to the EN 10025 specification. The designation S690QL refers to a minimum yield strength of 690 MPa.

The combination of good availability, competitive pricing, and high strength coupled with ease of fabrication has made S690QL steel plate a popular grade for mobile applications such as cranes, lifting equipment, and fixed steel structures. The high-strength nature of this steel means that structures can be designed lighter, and for mobile applications, this translates to increased payload and operational efficiency.

Main Applications Trailer chassis, machinery, agricultural applications.

Toughness Charpy V longitudinal - specimen 10x10mm
Average value of 3 tests.
Test temperature °C = -40°C.
Longitudinal Charpy-V toughness = 27 Joules.

Mechanical Properties Yield Strength Re 0.2 : 650 N/mm².
Typical value Tensile Strength Rm : 760 – 930 N/mm².
Elongation A% : 14.

Chemical Composition
(Typical MAX values in %):

C	Si	Mn	P	S	N	B	Cr	Cu	Mo	Nb	Ni	Ti	V	Zr
0.2	0.80	1.70	0.025	0.015	0.015	0.005	1.50	0.50	0.70	0.06	2.0	0.05	0.12	0.15

Thicknesses 51 to 100 mm.
Compliant with NF EN 10029 (Dimensions, thickness, flatness).

Bending:

Transverse R/e = 3.

Longitudinal R/e = 4.

R = recommended minimum inner bending radius. e = sheet thickness.