



PLATE S700MC | High Yield Strength

Description

S700MC is a thermo-mechanically controlled, advanced high strength steel produced in accordance with EN 10149-2. This steel grade has very competitive characteristics such as good weldability, improved formability and toughness. These play a major role in improving payload due to lightweight design and improved total savings on fuel and weight in vehicular applications. Material/ steel number: 1.8974

Product designation

S - Structural steel
 700 - Minimum yield strength in MPa
 M - Thermo-mechanically rolled
 C - Suitable for cold forming

Typical applications

Load handling equipment, superstructures of commercial vehicles, frames and booms for forestry, crane arms and other lifting equipment, masts, frame structures for mobile vehicles.

Chemical composition

C	Si	Mn	P	S	Nb	V	Ti	Mo	B
0.12	0.60	2.10	0.025	0.015	0.09	0.20	0.22	0.50	0.005

Mechanical properties

Nominal thickness (mm)	Minimum yield strength (MPa)	Tensile strength (MPa)	Minimum Elongation (%)	Minimum impact energy (J) @ -40°C	Minimum recommended inside bend radii
3 - 10	700	750 - 950	12	40 @ -20°C 28 @ -40°C	2t (3 < t ≤ 6) 2.5t (t > 6)

Note

- Chemical composition: Ladle analysis %max
- Mechanical properties: At ambient temperature
- For thicknesses > 8mm, yield strength can be 20 MPa lower
- Recommended inside bend radii: The values are applicable for bend angles ≤ 90°
- Dimensions and tolerances in accordance with EN 10029/ EN 10149-1

Approximate equivalents

EN 10025-6 Grade S690QL, ASTM 514, AS/NZS 3579 Grade 700, AM 700, Bisalloy 80.

Standard stock list

12000 x 1500 x (3-10mm)