

HIGH STRENGTH STRUCTURAL STEEL S700 MC

Description

S700 MC is a thermo –mechanical control rolled advanced high strength steel. This steel has very high competitive characteristics such as good weld-ability and cold forming that play a huge role in promotion of light weight designs for increased payload and improved total savings on fuel consumption. The “M” indicates that this steel is thermo-mechanically rolled and the “C” indicates that these steels are suitable for cold forming in compliance with EN 10149-1.

Application

S700 MC is mainly used for:

- Load handling equipment
- Super structures of commercial vehicle
- Frames and booms for forestry
- Crane arms and other lifting equipment
- Masts
- Frame structures for mobile vehicles

Chemical Compositions

C	Mn	Si	P	S	Nb	Ti	V	Mo
≤0,12	≤2,0	≤0,6	≤0,025	≤0,010	≤0,06	≤0,05	≤0,2	≤0,5

Material Properties

Thickness (mm)	Yield Strength (Mpa) (min)	Tensile Strength (MPa)	Elongation (min) A ₅
3.0-10	700	750-930	15

Charpy-V Notch Impact Test

Transversal /Longitudinal (-40°C)	
Lowest individual value	Average value
≥ 28J	≥ 40J