



Material data sheet

Material Number	1.8963
Country	Germany
Designations	S355J2G1W

Standards	Military materials - Werkstoffe der Wehrtechnik DIN 5512-1 (05/1997)	Military Materials Handbook Materials for rail vehicles. Structural steels and structural steels with improved atmospheric corrosion resistance, hot rolled.
	DIN EN 10155 (08/1993)	Structural steels with improved atmospheric corrosion resistance.
Steelgroup	Alloy special steels: High strength weldable structural steels, steels not intended for heat treatment by user	
Range of application	Structural steels resistant to weathering	

Chemical composition

Element	min/max	Others	Footnote
C	<=0.16		
Si	<=0.50		
Mn	0.50 - 1.50		
P	<=0.035		
S	<=0.035		
Al	>=0.0200		
Cr	0.40 - 0.80		
Cu	0.25 - 0.55		
Mo	(<=0.30)		122)
Nb	0.015 - 0.060		
Ni	(<=0.65)		122)
Ti	0.02 - 0.10		
V	0.02 - 0.12		
Zr	(<=0.150)		122) 167)

122) Can be present

167) Must contain at least one of the following elements: Al g/tot >= 0,020%; Nb 0,015-0,060%; V 0,02-0,12%; Ti 0,02-0,10%