

S275JR All

General Information

S275JR belongs to the group of none alloyed structural steels

Similar designations

St 44-2, SS1414, SS 141412-00

Chemical composition

Variant	Cast		C %	Si %	Mn %	P %	S %	Cu %	N %
SB1412	CC	Min	-	-	-	-	-	-	-
		Max	0.21	0.40	1.50	0.040	0.040	0.55	0.0120

Mechanical Properties

Variant	Condition ^①	Format	Dimension [mm]	Yield strength min [MPa]	Tensile strength [MPa]	Elongation A ₅ [%]
SB1412	+AR	Flat bar	< 16	275*	410-560	22
		Flat bar	17 < 40	265*	410-560	22
		Flat bar	41 < 63	255*	410-560	21
		Flat bar	64 < 80	245*	410-560	20

*RP_{0.2} * R_{eh} ** R_{el}*

Transformation temperatures

	Temperature °C
MS	485
AC1	725
AC3	863

SUSTAINABILITY-ENVIRONMENTAL IMPACT DATA

At Ovako sustainability and reduction of our environmental impact is a major focus in everything we do.

Further information is found [here](#).

Steel works	Hofors	Smedjebacken	Imatra
CO2e/kg	120	62	76

To get the full picture of our products environmental impact we have to look at all of our CO₂ emission sources.

Not only the steel work Scope 1-2 itself, but all operations downstream in our production, heating and heat treatment furnaces etc (full scope 1-2) as well as all the emission from input material, eg. alloys, scope 3.

Steel Grade	Format	Condition	Scope 1-3 (CO2e kg /1000 kg steel)	Climate compensated Net emission = Scope 3 (CO2e kg /1000 kg steel) Scope 1 - 2 = 0 (compensated)
SB1412	Flat bar	+AR	398	178

All above data are to be seen as typical values for the specified format and condition. Detailed information about your specific product please contact your sales contact.

Other properties (typical values)

Youngs module (GPa)	Poisson´s ratio (-)	Shear module (GPa)	Density (kg/m3)
210	0.3	80	7800
Average CTE 20-300°C (µm/m°K)	Specific heat capacity 50/100°C (J/kg °K)	Thermal conductivity Ambient temperature (W/m°K)	Electrical resistivity Ambient temperature (µΩm)
12	460 - 480	40 - 45	0.20 - 0.25

Contact us

Would you like to know more about our offers? Don´t hesitate to contact us:

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For more detailed information please visit <http://www.ovako.com/en/Contact-Ovako/>

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