

30MnVS6 All

General Information

30MnVS6 is a micro alloyed cold heading steel which is used for example for short and longshaft ball points, threaded and heavy duty anchor bolts

Similar designations

9830 - 28MnV6

Chemical composition

Variant	Cast	Weldability		C%	Si%	Mn%	P%	S%	Cr%	Ni%	V%	Cu%	N%
9830	CC	CEV 0.64 _{max}	Min	0.26	0.35	1.40	-	-	-	-	0.080	-	0.0100
		Pcm 0.41 _{max}	Max	0.30	0.55	1.60	0.025	0.035	0.25	0.30	0.200	0.35	0.0200
30MnVS6 EN10267:1998	CC	CEV 0.65 _{max}	Min	0.26	0.15	1.20	-	0.020	-	-	0.080	-	0.0100
		Pcm 0.43 _{max}	Max	0.33	0.80	1.60	0.025	0.060	0.30	-	0.200	-	0.0200

Mechanical Properties

Variant	<div><div></div><div>Condition</div></div>	Format	Yield strength min [MPa]	Tensile strength [MPa]	Elongation A ₅ [%]	Reduction of area Z _{min} [%]	Hardness
9830	+AR	Round bar	600**	850-1000	14	-	230-310 HB
30MnVS6 EN10267:1998	+AR	All formats	450*	700-900	14	30	-

R_{p0.2} * *R_{eh}*, ** *R_{el}*

Transformation temperatures

	Temperature °C
MS	370
AC1	720
AC3	800

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](#).

In many international comparisons the crude steel Scope 1-2 emission is a key parameter, ie. the CO₂ emission from the steel works itself.

As of 1 January 2022 we carbon offset all our scope 1 and 2 volume shown below.

Steel works	Hofors	Smedjebacken	Imatra
CO ₂ e/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 (CO ₂ e kg /1000 kg steel)	Climate compensated Net emission = Scope 3 (CO ₂ e kg /1000 kg steel) Scope 1 - 2 = 0 (compensated)
9830	Flat bar	+AR	572	198

As of 1 January 2022 we use carbon offset for all our scope 1- 2 emissions, so in practice the climate compensated data is the same as the full Scope 3 level.

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/m ³)
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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