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34CrMo4

General Information

SAE4130m is a low alloyed steel used in quenched and tempered condition. The nearest equivalents are 34CrMo4 in EN10083-3 or 4130 in ASTM A29 with some deviations. The material is delivered as rolled or annealed.

Chemical composition

Variant	Cast	Weldability		C %	Si %	Mn %	Р %	S %	Cr %	Ni %	Mo %	Cu %
4130 ASTM A29	СС	CEV 0.65 _{max}	Min	0.28	0.15	0.40	-	-	0.80	-	0.15	-
		Pcm 0.42 _{max}	Max	0.33	0.35	0.60	0.035	0.040	1.10	0.25	0.30	0.35

Transformation temperatures

	Temperature °C			
MS	552			
AC1	737			
AC3	808			

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	Scope 1-3 (CO2e k Condition /1000 kg steel)		Climate compensated Net emission = Scope 3 (CO2e kg /1000 kg steel) Scope 1 - 2 = 0 (compensated)				
4130 ASTM A29	Flat bar	+AR	421	201				
SAE4130m	Flat bar	+AR	421	201				

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 resistivityAmbient temperature (μΩm)
12	460 - 480	40 - 45	0.20 - 0.25

Contact us

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

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