MATERIAL DATA SHEET

STEEL GRADE

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OVAKO

56SiCr7 All

General Information

Grade 56SiCr7 is a silicon spring steel with an addition of chromium for hardenability.

Similar designations

1.7106, 9084 - 54Si7

Chemical composition

Variant	Cast		C %	Si %	Mn %	P %	S %	Cr %
SB 9071	CC	Min	0.52	1.70	0.80	-	-	0.20
		Max	0.57	2.10	1.00	0.025	0.025	0.30
56SiCr7 EN10089	Std	Min	0.52	1.60	0.70	-	-	0.20
		Max	0.60	2.00	1.00	0.025	0.025	0.45

Mechanical Properties

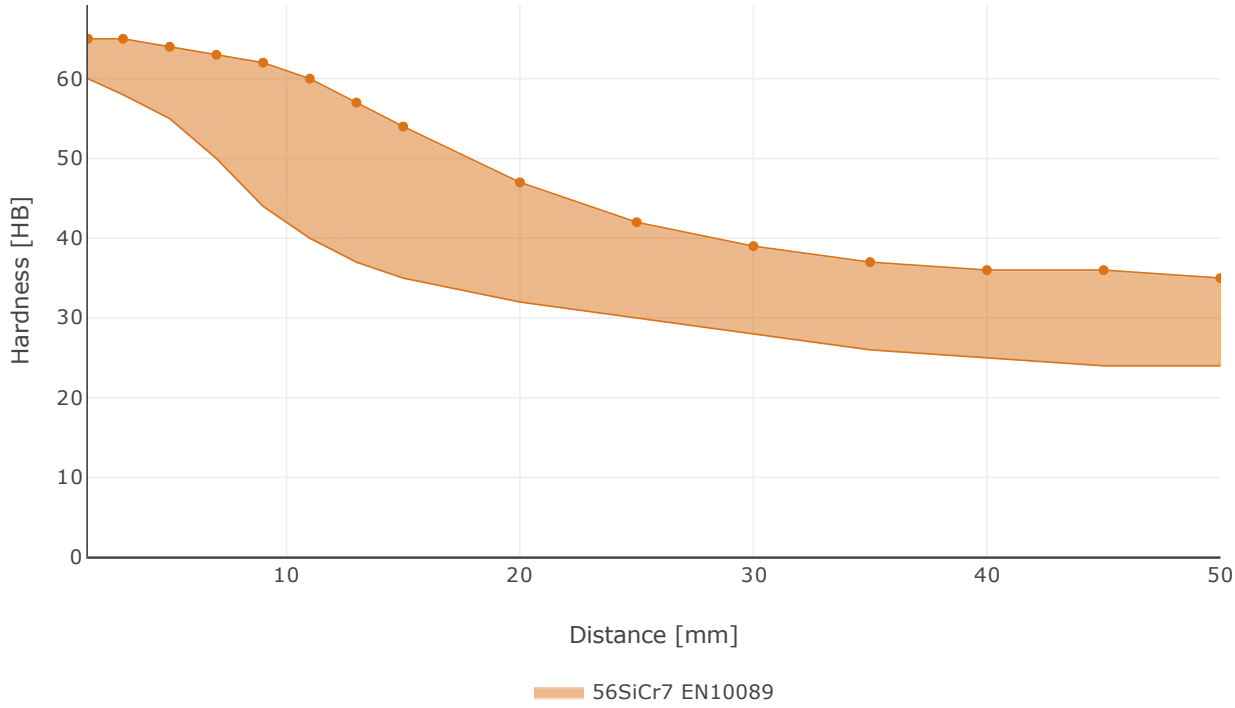
Variant	Condition	Yield strength min [MPa]	Tensile strength [MPa]	Elongation A_5 [%]
56SiCr7 EN10089	+QT	1350	1500-1800	6

*$Rp_{0.2}$ * R_{eh}, ** R_{el}*

Transformation temperatures

	Temperature °C
MS	265
AC1	770
AC3	821

Hardenability



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 CO_2 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)
SB 9084	Round bar	+AR	434	198

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

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/