

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

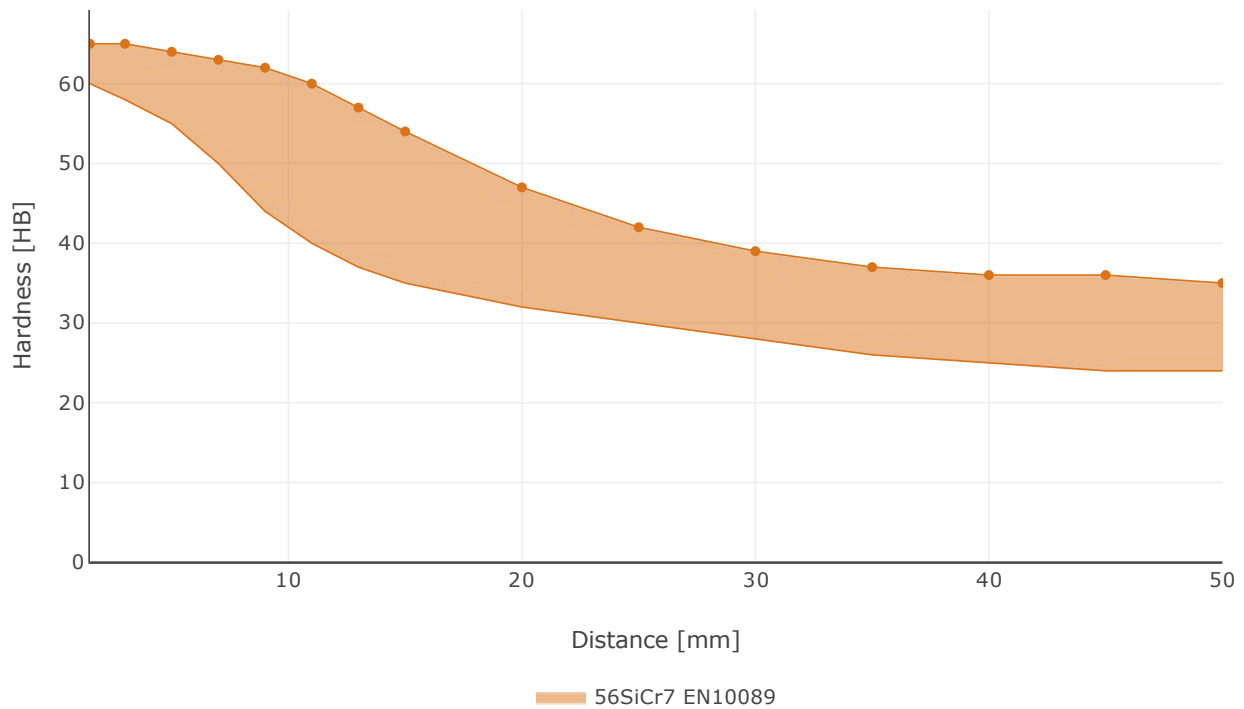
Variant	Condition <sup>i</sup>	Yield strength min [MPa]	Tensile strength [MPa]	Elongation A <sub>5</sub> [%]
56SiCr7 EN10089	+QT	1350	1500-1800	6

*R<sub>p0.2</sub> \* R<sub>eh</sub>, \*\* R<sub>el</sub>*

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
CO <sub>2</sub> e/kg	120	62	76

To get the full picture of our products environmental impact we have to look at all of our CO<sub>2</sub> 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 <sub>2</sub> e kg /1000 kg steel)	Climate compensated Net emission = Scope 3 (CO <sub>2</sub> e 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/m <sup>3</sup> )
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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Via telephone: +46 8 622 1300

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

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