

# 42CrMo6\*

All

## General Information

The chemical composition of 42CrMo6\*, conforms to the requirements in ISO 898-1:2013 for fasteners to 8.8 or 10.9 properties.

The material is suitable for quenching and tempering to 8.8 or 10.9 properties. Required 90% martensite in the core area of the material is achieved up to 64 mm diameter by oil quenching.

For additional Heat Treatment Data, please visit the Heat Treatment Guide.

*\* Designation followed by "\*" is not an official EN standard grade but named according to the rules in EN 10027.*

## Transformation temperatures

	Temperature °C
MS	311
AC1	747
AC3	793

## 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<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 (CO2e kg /1000 kg steel)	Climate compensated Net emission = Scope 3 (CO2e kg /1000 kg steel) Scope 1 - 2 = 0 (compensated)
Cromobolt, 6116	Round bar	+AR	530	245
Cromobolt, 6116	Round bar	+AR	783	295
42CrMnMo6-3, Cromobolt	Round bar	+AR	530	245
42CrMnMo6-3, Cromobolt	Round bar	+QT	783	295

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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Via telephone: +46 8 622 1300

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

### Disclaimer

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