

MATERIAL DATA SHEET

STEEL GRADE

OVAKO

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11SMn30 All

General Information

2715, also called Green Cut, has been developed to replace leaded free-cutting steels, when the customer is looking for an environmentally friendly alternative. High sulfur content combined with M-treatment gives superior machinability both with carbide and HSS tools.

M-Steel®

The basis for the concept is that non-metallic inclusions are modified and controlled with calcium treatment in a way to minimize tool wear and to maximize chip control in machining operations. Our M-Steel treatment can be applied to any steel grade.

Similar designations

SS 1912, SS 1914, 1.0715

Chemical composition

Variant	Cast	Di	Weldability		C %	Si %	Mn %	P %	S %
2715	CC	0.57	CEV 0.4 _{max}	Min	0.05	0.05	1.00	-	0.270
			Pcm 0.22 _{max}	Max	0.14	0.40	1.40	0.050	0.330

Mechanical Properties

Variant	<div>Condition</div>	Format	Dimension [mm]	Yield strength min [MPa]	Tensile strength [MPa]	Elongation A ₅ [%]	Hardness
2715	+AR	Round bar	25 < 200	270*	360-540	22	120-160 HB
	+C	Round bar	20 < 40	375*	460-710	8	160-210 HB
		Round bar	40 < 55	305*	400-650	9	150-200 HB
	+SH	Round bar	23 < 125	270*	360-540	22	120-160 HB

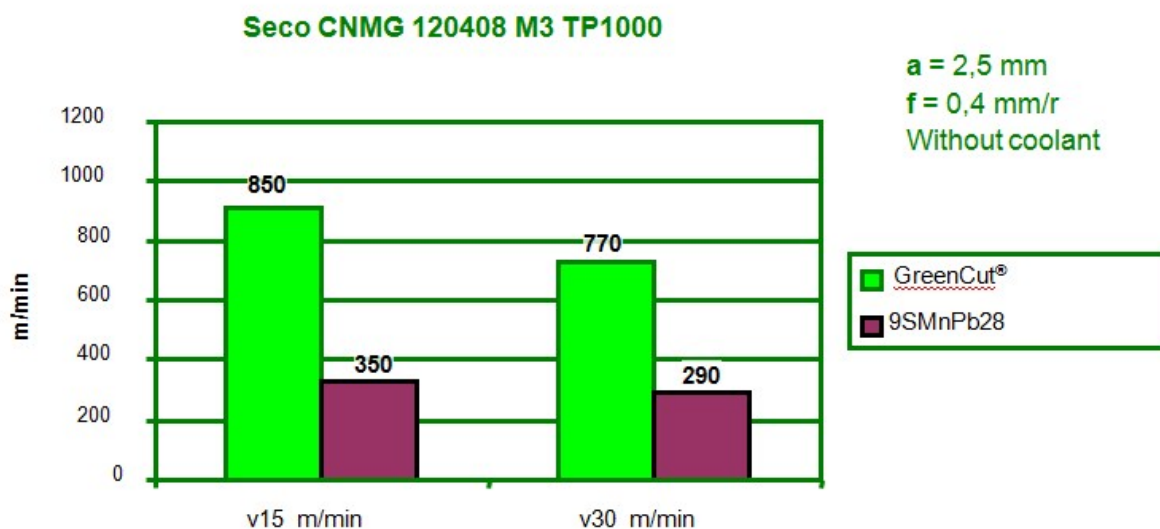
*R_{p0.2} * R_{eh}, ** R_{el}*

Transformation temperatures

	Temperature °C
MS	436
AC1	715
AC3	843

Turning with carbide tool

GreenCut® Turning with carbide tool



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	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)
Green Cut, 2715	Round bar	+AR	528	226

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

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