

STEEL GRADE

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22Mn5* All**General Information**

2630, also known as Hydax 25 has high sulfur content to further improve the machinability of M-steel. Mechanical properties fulfil the requirements of the standard EN 10025-2 steel grade S355J0.

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.

Chemical composition

Variant	Cast	Di	Weldability		C %	Si %	Mn %	P %	S %
2630	CC	1	CEV 0.47 _{max}	Min	0.18	0.15	1.00	-	0.090
			Pcm 0.31 _{max}	Max	0.26	0.55	1.60	0.035	0.150

Mechanical Properties

Variant	Condition	Format	Dimension [mm]	Yield strength min [MPa]	Tensile strength [MPa]	Elongation A ₅ [%]	Reduction of area Z _{min} [%]	Hardness	Impact (ISO-V) strength _{min}
2630	+AR	Round bar	25 < 40	345*	490-630	22	45	< 180 HB	0 °C 27 J (long)
		Round bar	40 < 80	335*	490-630	21	45	< 180 HB	0 °C 27 J (long)
		Round bar	80 < 200	315*	490-630	20	45	< 180 HB	0 °C 27 J (long)

*RP_{0.2} * R_{eh}, ** R_{el}*

Billets and block material also available. Mechanicals as in round bars ø 80 - 200 mm

Transformation temperatures

	Temperature °C
MS	396
AC1	718
AC3	823

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 ₂ e/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 (CO ₂ e kg /1000 kg steel)
Hydax 25, 2630	Round bar	+AR	794

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 ³)
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:

Via e-mail: info@ovako.com

Via telephone: +46 8 622 1300

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

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