

16Mn5 All

General Information

2720, also known as Hydax 15 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.

For further reading about our M-steel concept see our home page.

Chemical composition

Variant	Cast	Di	Weldability		C%	Si%	Mn %	P%	S%	V%
2720	CC	0.8	CEV 0.43 _{max}	Min	0.10	0.15	1.00	0.000	0.090	0.020
			Pcm 0.26 _{max}	Max	0.20	0.55	1.60	0.035	0.150	0.090

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}
2720	+AR	Round bar	25 < 40	345*	490-630	22	45	< 180 HB	-20 °C 27 J (long)
		Round bar	40 < 80	335*	490-630	21	45	< 180 HB	-20 °C 27 J (long)
		Round bar	80 < 90	315*	490-630	20	45	< 180 HB	-20 °C 27 J (long)
		Round bar	95 < 200	315	490-630	20	45	< 180 HB	0 °C 27 J (long)

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

Transformation temperatures

	Temperature °C
MS	417
AC1	692
AC3	842

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

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