

PLASTIC MOULD STEELS - HEAT TREATABLE STEELS AND PRECIPITATION HARDENING STEELS

Available Product Shapes

Long Products

Product Description

BÖHLER M268 VMR is a hardened and tempered plastic mould steel with excellent cleanliness for best polishability. The hardness is constant over the entire cross-section of the steel block, even at large sizes, due to the addition of nickel.

Properties

- Very high toughness & ductility
- High wear resistance
- Good machinability
- Very good dimensional stability
- Mirror finish polishability
- Very high micro-cleanliness
- No heat treatment necessary
- Pre-paid

Material designation		
1.2738	SEL	
40CrMnNiMo8-6-4	EN	
~P20	AISI	

Chemical composition

C	Si	Mn	Cr	Mo	Ni
0.38	0.30	1.50	2.00	0.20	1.10

Material characteristics

	Etchability	Machinability in as supplied condition	Polishability	Through hardenability	Toughness	Wear resistance
BÖHLER M268 VMR	★★★★★	★★	★★★★★	★★★★★	★★★★★	★★★★★
BÖHLER M200	★	★★★★★	★★	★	★★	★★
BÖHLER M238	★★	★★★	★★★	★★★★★	★★★★★	★★
BÖHLER M238 HIGH HARD	★★★★	★★	★★★★	★★★★★	★★★	★★★★★
BÖHLER M261	★★	★★★★★	★★	★★★	★★	★★★
BÖHLER M461	★★★	★★★	★★★	★★★	★★★	★★★

Physical Properties

Temperature (°C / °F)	20 / 68
Density (kg/dm ³ / lb/in ³)	7.85 / 0.28
Thermal conductivity (W/(m.K) / BTU (IT) ft/hr/ft ² /F)	34.3 / 19.82
Specific heat (J/(kg.K) / BTU (IT) lb/F)	460 / 109.87
Spec. electrical resistance (Ohm.mm ² /m / Ohm.inch ² /ft)	-
Modulus of elasticity (10 ³ N/mm ² / 10 ³ ksi)	210 / 30.46

Thermal Expansions

Temperature (°C / °F)	100 / 212	200 / 392	300 / 572	400 / 752	500 / 932	600 / 1112	700 / 1292
Thermal expansion (10 ⁻⁶ m/(m.K) / 10 ⁻⁶ inch/(inch.F))	12.8 / 7.111	13 / 7.222	13.8 / 7.667	14 / 7.778	14.2 / 7.889	14.2 / 7.889	14.5 / 8.056

For more information see www.voestalpine.com/boehler-edelstahl

voestalpine BÖHLER Edelstahl GmbH & Co KG

Mariazeller Straße 25

8605 Kapfenberg, AT

T. +43/50304/20-0

E. info@boehler-edelstahl.at

www.voestalpine.com/boehler-edelstahl

voestalpine

ONE STEP AHEAD.