

# PLASTIC MOULD STEELS - HEAT TREATABLE STEELS AND PRECIPITATION HARDENING STEELS

## Available Product Shapes

Plates

## Product Description

Large and medium-sized moulds for plastic processing, mould frames for the injection moulding and die casting industries, components for general mechanical engineering.

## Properties

- Good toughness & ductility
- Good wear resistance
- Very good machinability
- Good dimensional stability
- Good polishability
- No heat treatment necessary
- Pre-paid

Material designation	
1.2312	SEL
40CrMnMoS8-6	EN
~P20	AISI

## Chemical composition

C	Si	Mn	S	Cr	Mo
0.40	0.40	1.50	0.08	1.90	0.20

## Material characteristics

	Etchability	Grindability	Machinability in as supplied condition	Polishability	Through hardenability	Toughness	Wear resistance
<b>BÖHLER M200</b>	★	★★	★★★★★	★★	★	★★	★★
<b>BÖHLER M238</b>	★★		★★★	★★★	★★★★	★★★★	★★
<b>BÖHLER M238 HIGH HARD</b>	★★★★		★★	★★★★	★★★★	★★★	★★★★
<b>BÖHLER M268 VMR®</b>	★★★★★		★★	★★★★★	★★★★	★★★★★	★★★★
<b>BÖHLER M261</b>	★★		★★★★	★★	★★★	★★	★★★
<b>BÖHLER M461</b>	★★★		★★★	★★★	★★★	★★★	★★★

## Physical Properties at 20°C / 68°F

### Thermal Expansions

Temperature (°C / °F)	100 / 212	200 / 392	300 / 572	400 / 752	500 / 932
Thermal expansion (10 <sup>-6</sup> m/(m.K) / 10 <sup>-6</sup> inch/(inch.F))	12.8 / 7.111	13 / 7.222	13.8 / 7.667	14 / 7.778	14.2 / 7.889

For more information see [www.voestalpine.com/boehler-edelstahl](http://www.voestalpine.com/boehler-edelstahl)

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ONE STEP AHEAD.