

# HOT WORK TOOL STEELS

## Available Product Shapes

Open Die Forgings

## Product Description

Vacuum remelted hot work tool steel with high temper resistance and therefore maximum resistance to heat checking.

## Properties

- High toughness & ductility
- High wear resistance
- Good machinability
- High hot hardness
- Mirror finish polishability
- Very high thermal conductivity
- Very high micro-cleanliness
- High resistance to fire cracking
- Excellent homogeneity and isotropy
- Coatable
- Lowest levels of unwanted trace elements
- Can be nitrated
- Very high thermal stability

Material designation		Standards	
~1.2367	SEL	#207	NADCA
~X38CrMoV5-3	EN		
C1885	NADCA		

## Chemical composition

C	Si	Mn	Cr	Mo	V
0.38	0.20	0.25	5.00	2.80	0.65

### Material characteristics

	High temperature strength	High temperature toughness	High temperature wear resistance	Machinability
<b>BÖHLER W403</b> <b>VMR®</b>	★★★★	★★★★	★★★★	★★★★
<b>BÖHLER W300</b> <b>ISOBLOC®</b>	★★	★★★★	★★	★★★★★
<b>BÖHLER W300</b> <b>ISODISC®</b>	★★	★★★	★★	★★★★★
<b>BÖHLER W302</b> <b>ISOBLOC®</b>	★★★	★★★★	★★★	★★★★★
<b>BÖHLER W302</b> <b>ISODISC®</b>	★★★	★★★	★★★	★★★★★
<b>BÖHLER W303</b> <b>ISODISC®</b>	★★★★	★★★	★★★★	★★★★★
<b>BÖHLER W350</b> <b>ISOBLOC®</b>	★★★	★★★★★	★★★	★★★★★
<b>BÖHLER W360</b> <b>ISOBLOC®</b>	★★★★★	★★★★	★★★★★	★★★★★
<b>BÖHLER W400</b> <b>VMR®</b>	★★	★★★★★	★★	★★★★

### Physical Properties at 20°C / 68°F

#### Thermal Expansions

Temperature (°C / °F)	100 / 212	200 / 392	300 / 572	400 / 752	500 / 932	600 / 1112
Thermal expansion (10 <sup>-6</sup> m/(m.K) / 10 <sup>-6</sup> inch/(inch.F))	10.63 / 5.906	10.83 / 6.017	12 / 6.667	12.92 / 7.178	14.13 / 7.85	14.34 / 7.967

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

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ONE STEP AHEAD.