



钢铁之家

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全球钢号百科!

Global Steel Grade Encyclopedia



涵盖的行业或国家与地区类别



美国材料与试验协会

GJB

国家军用标准



动力机械工程师协会

EU

前欧洲标准化

AISI

美国钢铁学会



德国工业标准

AMS

航空航天材料规范



国际标准

JASO

日本汽车标准组织

EN

欧洲标准

JB

中国机械行业标准

UNS

统一编号系统

UNI

意大利标准



美国机械工程师协会

SS

瑞典标准



国家标准



日本工业标准

PLASTIC MOULD STEELS PRE-HEAT TREATED CORROSION RESISTANT STEEL

Available Product Shapes

Plates

Product Description

Stainless martensitic chromium steel. Moulds for chemically aggressive plastics (e. g. PVC) and plastics containing abrasive fillers.

Properties

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

Material designation

1.2316	SEL
X36CrMo17 ~X38CrMo16	EN

Chemical composition

C	Si	Mn	Cr	Mo	Ni
0.38	0.40	0.65	16.00	1.00	0.80

Material characteristics

	Corrosion resistance	Machinability in as supplied condition	Polishability	Toughness	Wear resistance
BÖHLER M300	★★★★	★★★	★★	★★★	★★★
BÖHLER M303	★★★★	★★★	★★★★★	★★★★★	★★★
BÖHLER M303 HIGH HARD	★★★	★★	★★★★★	★★★	★★★★★
BÖHLER M314	★★	★★★★★	★	★★	★★
BÖHLER M315	★★	★★★★★	★	★★	★★

PLASTIC MOULD STEELS PRE-HEAT
TREATED CORROSION RESISTANT
STEEL

M300

Physical Properties

Temperature (°C / °F)	20 / 68	100 / 212	200 / 392	300 / 572	400 / 752	500 / 932
Density (kg/dm ³ / lb/in ³)	7.71 / 0.28	7.71 / 0.28	7.71 / 0.28	7.71 / 0.28	7.71 / 0.28	7.71 / 0.28
Thermal conductivity (W/(m.K) / BTU (IT) ft/hr/ft ² /F)	20.3 / 11.73	21.9 / 12.65	20 / 11.56	20.7 / 11.96	24.4 / 14.1	25.1 / 14.5
Specific heat (J/(kg.K) / BTU (IT) lb/F)	442 / 105.57	442 / 105.57	442 / 105.57	442 / 105.57	442 / 105.57	442 / 105.57
Spec. electrical resistance (Ohm.mm ² /m / Ohm.inch ² /ft)	0.8 / <0.001	0.8 / <0.001	0.8 / <0.001	0.8 / <0.001	0.8 / <0.001	0.8 / <0.001
Modulus of elasticity (10 ³ N/mm ² / 10 ³ ksi)	219 / 31.76	219 / 31.76	215 / 31.18	213 / 30.89	210 / 30.46	210 / 30.46

Thermal Expansions

Temperature (°C / °F)	100 / 212	200 / 392	300 / 572	400 / 752	500 / 932
Thermal expansion (10 ⁻⁶ m/(m.K) / 10 ⁻⁶ inch/(inch.F))	10.38 / 5.767	10.78 / 5.989	11.11 / 6.172	10.45 / 5.806	11.77 / 6.539

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



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ONE STEP AHEAD.

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