

PLASTIC MOULD STEELS

HARDENABLE CORROSION RESISTANT STEEL

Dostupne varijante proizvoda

Šipkasti proizvodi*

Ploče

*) Presented data refer exclusively to long products. Please observe the detailed explanations at the end of the data sheet (pdf).

Opis proizvoda

Advanced martensitic stainless chromium steel for plastic molds. By electroslag remelting and optimization of the chemical composition, BÖHLER M310 ISOPLAST offers many advantages.

Put taljenja

Airmelted + Remelted

Karakteristike

- > Žilavost i duktilnost : dobar
- > Otpornost na habanje : dobar
- > Obradivost : vrlo visoka
- > Dimenzionalna stabilnost : vrlo visoka
- > Mogućnost poliranja : dobar
- > Otpornost na koroziju : visok
- > Mikro čistoća : visok

Korištenje

- > Sklopovi za prehrambenu industriju i hranu za životinje
- > Istiskivanje plastike
- > Potrošački proizvodi – općenito
- > Medicinski
- > Components for Displays
- > Sustav za vruće spajanje
- > Prehrambena industrija
- > Standardni dijelovi (kalupi, ploče, klinovi, probijači)
- > Opći sklopovi za strojarstvo
- > Pakiranje
- > Elektronička industrija
- > Glasfibre reinforced plastics
- > Lijevanje ubrizgavanjem
- > Lijevanje upuhivanjem u kalupe
- > Automobilska svjetla/leće
- > Camera lenses
- > Vijci i cijevi

Tehnički podaci

Oznaka materijala		Standardi	
~1.2083	SEL	4957	EN ISO
~SUS420J2	JIS	A681	ASTM
X40Cr13	EN	AFNOR Z40C14	Others
X40Cr14			
~420	AISI		

Kemijski sastav

C	Si	Mn	Cr	V
0,38	0,7	0,45	14,3	0,2

Isporučka

Soft annealed

Tvrdoća (HB)	max. 225
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Toplinska obrada

Hardening and Tempering

Temperatura	1.025 do 1.050 °C	For hardening hold at temperature for 15 to 30 min. An optional sub-zero treatment at -80°C/-112°F can be applied after hardening. For highest corrosion resistance, temper once for a minimum of 2h at 250-350°C/482-662°F. For balanced toughness and hardness, temper twice for a minimum of 2h at 490-520°C/914-968°F (without sub-zero treatment) or 480-510°C/896-950°F (with sub-zero treatment). After each heat treatment step, material should be cooled down to approx. 30°C!
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Stress relieving

Temperatura	50°C / 90°F below last tempering temperature.
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Fizička svojstva

Temperatura (°C)	20
Gustoća (kg/dm ³)	7,68
Toplinska vodljivost (W/(m.K))	19,5
Specifični toplinski kapacitet (kJ/kg K)	0,46
Spec. Otpornik (Ohm.mm ² /m)	0,65
Modul elastičnosti (10 ³ N/mm ²)	217

Toplinska ekspanzija

Temperatura (°C)	100	200	300	400	500
Toplinska ekspanzija (10 ⁻⁶ m/(m.K))	10,63	10,94	11,29	11,66	12

Long Products: For additional specifications and technical requirements, please contact our regional voestalpine BÖHLER sales companies.

Sheet & Plates: Product Variant may differ in terms of melting process, technical data, delivery, and surface condition as well as available product dimensions. Please contact voestalpine BÖHLER Bleche GmbH & Co KG.

The data contained in this brochure is merely for general information and therefore shall not be binding on the company. We may be bound only through a contract explicitly stipulating such data as binding. Measurement data are laboratory values and can deviate from practical analyses. The manufacture of our products does not involve the use of substances detrimental to health or to the ozone layer.

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ONE STEP AHEAD.