

# PLASTIC MOULD STEELS

## PREHARDENED CORROSION RESISTANT STEEL

### Beschikbare uitvoeringen

Stafstaal\*

Plaat

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

### Product omschrijving

Hardened and tempered corrosion resistant plastic mould steel featuring excellent machinability and uniform strength over the entire cross section regardless of the tool size.

### Smeltroute

Airmelted

### Eigenschappen

- > Taaiheid & Vervormbaarheid : goed
- > Slijtageweerstand : goed
- > Bewerkbaarheid : zeer hoog
- > Dimensionale stabiliteit : goed
- > Corrosiebestendigheid : goed
- > No heat treatment necessary
- > Prehardened

### Toepassingen

- > Blaasvormen
- > Elektronica-industrie
- > Algemene componenten voor werktuigbouw
- > Spuitgieten
- > Verpakking
- > Extrusie van kunststoffen
- > Hot-runners (nl)

### Technische gegevens

Materiaal aanduiding	
1.2085	SEL
X33CrS16	EN

### Chemische samenstelling

C	Si	Mn	S	Cr	Mo	Ni
0,32	0,35	1,1	0,1	16	0,15	+

## Leveringsconditie

Hardened and Tempered	
Hardheid (HB)	290 naar 330

## Warmtebehandeling

Stress relieving		
Temperatuur	600 °C	Stress relieving after machining in the pre-hardened condition. After through-heating, soak for minimum 2 hours in a neutral atmosphere. Slow cooling in furnace with 20 °C/hr (68 °F/hr) down to 200 °C (390 °F), then cool down in an all-air environment.

## Fysische eigenschappen

Temperatuur (°C)	20
Soortelijk gewicht (kg/dm <sup>3</sup> )	7,65
Thermische conductiviteit (W/(m.K))	23,9
Soortelijke warmte (kJ/kg K)	0,461
Specifieke elektrische weerstand (Ohm.mm <sup>2</sup> /m)	0,65
Elasticiteitsmodus (10 <sup>3</sup> N/mm <sup>2</sup> )	212

## Thermische expansie

Temperatuur (°C)	100	200	300	400	500
Thermische expansie (10 <sup>-6</sup> m/(m.K))	10,25	10,61	10,96	11,24	11,63

**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.

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