

PLASTIC MOULD STEELS

PREHARDENED CORROSION RESISTANT STEEL

Formatos disponibles

Productos largos*

Chapas

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

Descripción

Stainless martensitic chromium steel. Moulds for chemically aggressive plastics (e. g. PVC).

Método de obtención

Convencional

Propiedades

- > Dureza y Ductilidad : alto
- > Resistencia al desgaste : alto
- > Maquinabilidad : muy alta
- > Estabilidad dimensional : buena
- > Pulibilidad : buena
- > Resistencia a la corrosión : muy alta
- > No heat treatment necessary
- > Prehardened

Aplicaciones

- > Extrusión de plástico
- > Componentes generales de ingeniería mecánica
- > Embalaje
- > Industria electrónica
- > Canales calientes
- > Moldeo por soplado
- > Industria de procesamiento de alimentos
- > Moldeo por inyección
- > Tornillos y cilindros

Datos técnicos

| Designación | |
|-------------------------|-----|
| 1.2316 | SEL |
| X36CrMo17 ~X38CrMo16 | EN |

Composición Química

| C | Si | Mn | Cr | Mo | Ni |
|------|-----|------|----|----|-----|
| 0,38 | 0,4 | 0,65 | 16 | 1 | 0,8 |

Estado de suministro

Endurecido y templado

| | |
|-------------|-----------|
| Dureza (HB) | 290 a 330 |
|-------------|-----------|

Tratamiento térmico

Alivio de tensiones

| | | |
|-------------|-------------|---|
| Temperatura | máx. 550 °C | After through-heating, soak for 1 to 3 hours in a neutral atmosphere. Slow cooling in furnace with 20°C/h (68°F/h) down to 300°C (570°F), then cool down in an all-air environment. |
|-------------|-------------|---|

Propiedades físicas

| Temperatura (°C) | 20 | 100 | 200 | 300 | 400 | 500 |
|--|-------|-------|-------|-------|-------|-------|
| Densidad (kg/dm ³) | 7,71 | 7,71 | 7,71 | 7,71 | 7,71 | 7,71 |
| Conductividad térmica (W/(m.K)) | 20,3 | 21,9 | 20 | 20,7 | 24,4 | 25,1 |
| Calor específico (kJ/kg K) | 0,442 | 0,442 | 0,442 | 0,442 | 0,442 | 0,442 |
| Resistencia eléctrica específica (Ohm.mm ² /m) | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 | 0,8 |
| Módulo de elasticidad (10 ³ N/mm ²) | 219 | 219 | 215 | 213 | 210 | 210 |

Expansión térmica

| Temperatura (°C) | 100 | 200 | 300 | 400 | 500 |
|--|-------|-------|-------|-------|-------|
| Expansión térmica (10 ⁻⁶ m/(m.K)) | 10,38 | 10,78 | 11,11 | 10,45 | 11,77 |

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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