PLASTIC MOULD STEELS

PREHARDENED STEEL

Application Segments

Mucegai din plastic

Available Product Variants

Long Products* | Plates

* Datele prezentate se referă exclusiv la produsele lungi. Vă rugăm să respectați explicațiile detaliate de la sfârșitul fișei tehnice (pdf).

Product Description

BÖHLER M200 is a prehardened, non-corrosion-resistant chromium-manganese-molybdenum alloyed plastic mould steel with very good machinability and uniform strength over the entire cross-section of medium-sized dimensions.

Process Melting

Aer topit

Properties

- Rezistență și ductilitate : good
- Rezistență la uzură : good
- Machinability : very high
- Stabilitatea dimensională : good
- Poluabilitate : good
- No heat treatment necessary
- Prehardened

Applications

- Piese standard (matrițe, plăci, pini, perforatoare)
- Sisteme Hotrunner
- Wear Applications
- Suporturi de scule
- Drilling
- Turnare prin injecție
- Clamping

Technical data

Material designation	
1.2312	SEL
40CrMnMoS8-6	EN
~P20	AISI

Chemical composition (wt. %)

C	Si	Mn	S	Cr	Mo
0.4	0.4	1.5	0.08	1.9	0.2

Delivery condition

Durificat și temperat

Hardness (HB)	290 to 330

Heat treatment

Eliminarea stresului

Temperature	max. 550 °C	Prehardened material: When stress-relieving the material after processing, keep the material, after complete heatening, at temperature in a neutral atmosphere for at least 2 hours, then slowly cool the oven at 20°C [68°F]/hour to 200°C [392°F], then cool in air.
Temperature		Newly hardened and tempered material: Carry out the stress relief heat treatment at approx. 50°C [122°F] below the tempering temperature. After complete heating, hold at temperature for 1 to 2 hours in a neutral atmosphere, then slowly cool down the furnace.

Physical Properties

Temperature (°C)	**20**
Density (kg/dm³)	7.85
Thermal conductivity (W/(m.K))	33
Specific heat (kJ/kg K)	0.46
Spec. electrical resistance (Ohm.mm²/m)	0.19
Modulus of elasticity (10³N/mm²)	210

Thermal Expansions between 20°C | 68°F and ...

Temperature (°C)	**100**	**200**	**300**	**400**
Thermal expansion (10⁻⁶ m/(m.K))	12.8	13	13.8	14

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, please contact our regional voestalpine BÖHLER sales companies. 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.