

TOOL STEELS

HARDENABLE CORROSION RESISTANT STEEL

Application Segments

Plastic Mould

Cold Work

Dostupne varijante proizvoda

Šipkasti proizvodi

Opis proizvoda

Martensitic chromium steel with high carbon content and molybdenium addition.

Karakteristike

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

Korištenje

- > Lijevanje ubrizgavanjem
- > Pharmaceutical industry like pill punches and -dies
- > Extrusion screws for plastic processing
- > Foodindustry like extrusion screws, can closing rolls
- > Sustav za vruće spajanje
- > Standardni dijelovi (kalupi, ploče, klinovi, probijači)

Technički podaci

Oznaka materijala	
1.4125	SEL
X105CrMo17	EN
440C	AISI

Kemijski sastav

C	Si	Mn	Cr	Mo
1,05	0,4	0,4	16,7	0,5

Isporuka

Annealed

Tvrdoća (HB)	max. 265
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Toplinska obrada

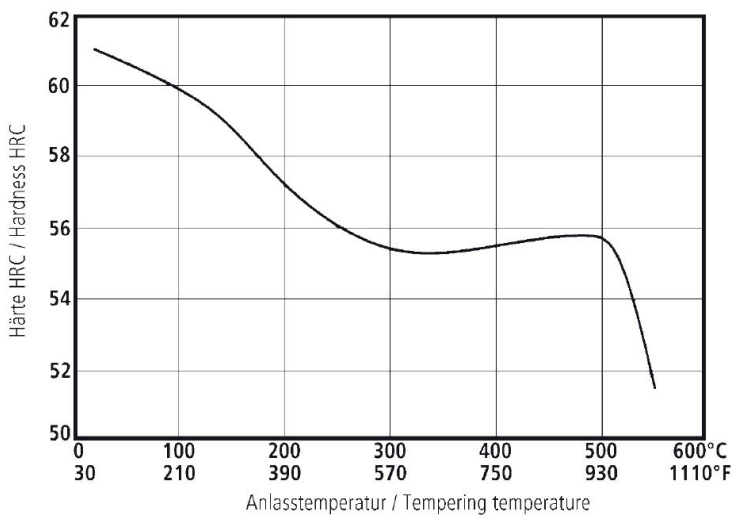
Stress relieving

Temperatura	650 °C	After through heating, keep at temperature for 1 to 2 hours in a neutral atmosphere. Slow furnace cooling
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Hardening and Tempering

Temperatura	1.000 do 1.050 °C	Holding time after complete soaking, max. 30 minutes / 25 mm cross section
Temperatura	150 do 350 °C	Tempering treatment required after hardening to the desired working hardness - see tempering chart. Tempering of min. 2h after complete soaking. Tempering shall be made immediately after hardening. After each tempering a cooling RT shall be done.

Tempering chart



Hardening temperature: 1030°C / 1886°F
Specimen size: square 20 mm

Hardness up to 58 - 60 HRC

Fizička svojstva

Temperatura (°C)	20
Gustoća (kg/dm ³)	7,7
Toplinska vodljivost (W/(m.K))	15
Specifični toplinski kapacitet (kJ/kg K)	0,43
Spec. Otpornik (Ohm.mm ² /m)	0,8
Modul elastičnosti (10 ³ N/mm ²)	215

Toplinska ekspanzija

Temperatura (°C)	100	200	300	400	500
Toplinska ekspanzija (10 ⁻⁶ m/(m.K))	10,4	10,8	11,2	11,6	11,9

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

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