

ČELICI ZA HLADNI RAD

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

BÖHLER K340 ISODUR, čelik s 8% kroma, proizvodi se postupkom električnog pretaljivanja pod troskom (ESR). Ovu tehnologiju pretaljivanja razvila je i etabrirala tvrtka BÖHLER, a njezina primjena osigurava iznimno nisku razinu mikro i makro segregacija što materijalu daje čistoću i homogenost neophodnu za izvrsne učinke u praktičnom radu.

Put taljenja

Airmelted + Remelted

Karakteristike

- > Žilavost i duktilnost : dobar
- > Otpornost na habanje : visok
- > Tlačna čvrstoća : dobar
- > Dimenzionalna stabilnost : dobar
- > Mogućnost brušenja : vrlo visoka

Korištenje

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> > Strojni mjerni noževi (za proizvodnju) > Coining > Vijci i cijevi > Valjci > Thread rolling (HR) | <ul style="list-style-type: none"> > Valjanje > Precizno štancanje / štancanje / pečačenje > Sklopovi za reciklažnu djelatnost > Potrošni dijelovi > Pill punching dies | <ul style="list-style-type: none"> > Cold Forming > Oblikovanje utiskivanjem praškastih materijala > Sklopovi za opremu Podzemna oprema (bušenje, vratila itd.) > Opći sklopovi za strojarstvo > Glasfibre reinforced plastics |
|---|---|--|

Kemijski sastav

C	Si	Mn	Cr	Mo	V	Al	Nb
1,10	0,90	0,40	8,30	2,10	0,50	+	+

Materijal

	Kapacitet tlaka	Dimenzionalna stabilnost u toplinskoj obradi	Žilavost	Abraziv otpora na habanje	Ljepilo za otpornost na habanje
BÖHLER K340 ISODUR®	★★★	★★★★	★★★	★★★	★★★★
BÖHLER K100	★★	★★	★	★★★	★★
BÖHLER K105	★★	★★	★	★★	★★
BÖHLER K107	★★	★★	★	★★★	★★
BÖHLER K110	★★	★★★	★	★★★	★★
BÖHLER K190 MICROCLEAN®	★★★★	★★★★★	★★★★	★★★★	★★★★
BÖHLER K294 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K340 ECOSTAR®	★★★	★★★	★★	★★	★★
BÖHLER K346	★★★	★★★	★★★	★★★★	★★
BÖHLER K353	★★	★★★	★★	★★	★★
BÖHLER K360 ISODUR®	★★★	★★★★	★★★	★★★★	★★★★
BÖHLER K390 MICROCLEAN®	★★★★★	★★★★★	★★★★	★★★★★	★★★★★
BÖHLER K490 MICROCLEAN®	★★★★	★★★★★	★★★★	★★★★	★★★★
BÖHLER K497 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K888 MATRIX	★★★★	★★★★★	★★★★★	★★	★★
BÖHLER K890 MICROCLEAN®	★★★★	★★★★★	★★★★★	★★★	★★★

Isporuka

Annealed

Tvrdoća (HB)	max. 235
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Toplinska obrada

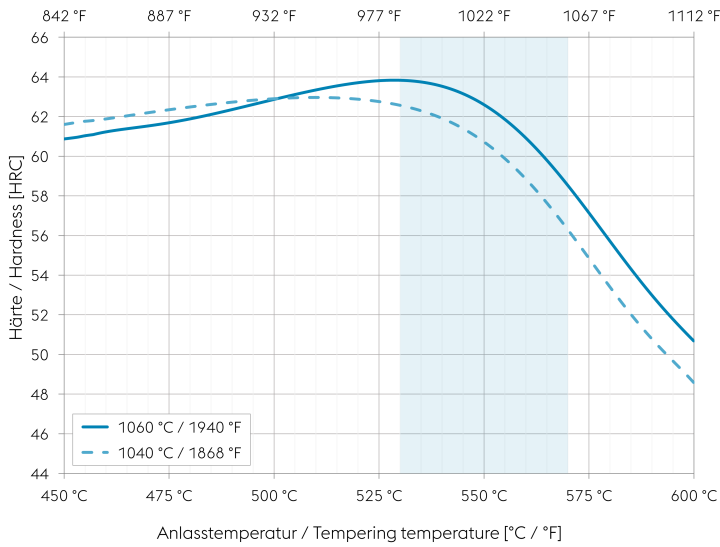
Stress relieving

Temperatura	650 °C	After through-heating, hold in neutral atmosphere for 1 - 2 hours. Slow cooling in furnace.
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Hardening and Tempering

Temperatura	1.040 do 1.060 °C	Oil, salt bath, compressed air, air, vacuum After through-heating, hold for 15 to 30 minutes. After hardening, tempering to the desired working hardness, see tempering chart.
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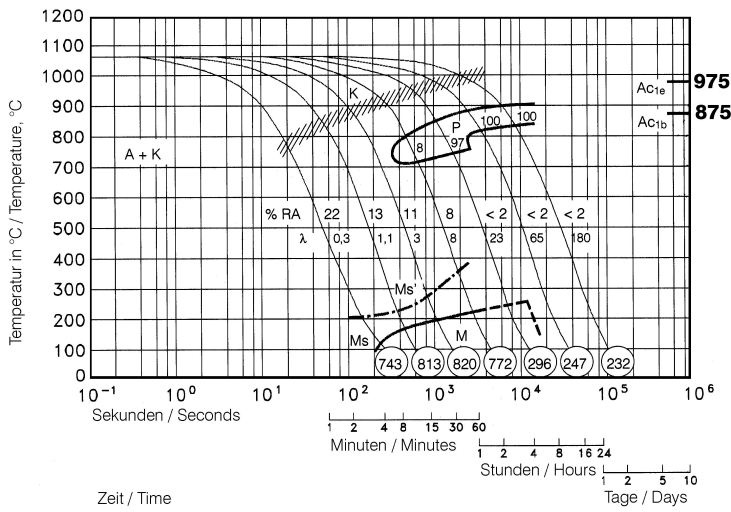
Tempering chart



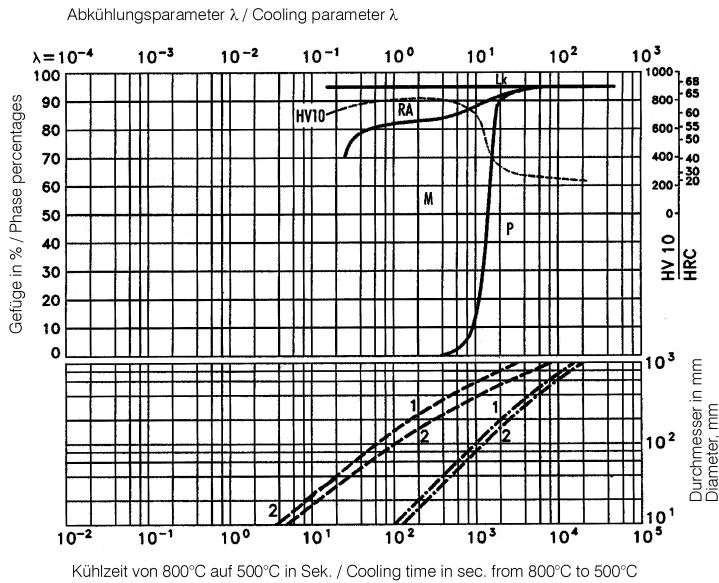
Tempering:

Hardening temperature:
 — 1040°C/1904°F
 - - - 1060°C/1940°F
 Specimen size: square 20 mm

CCT chart for continuous cooling



Quantitative phase diagram



LK... Ledeburitic carbides
RA... Retained austenite
M... Martensite
P... Perlite

Fizička svojstva

Temperatura (°C)	20
Gustoća (kg/dm ³)	7,68
Toplinska vodljivost (W/(m.K))	17,8
Specifični toplinski kapacitet (kJ/kg K)	0,49
Spec. Otpornik (Ohm.mm ² /m)	0,64
Modul elastičnosti (10 ³ N/mm ²)	206

Toplinska ekspanzija

Temperatura (°C)	100	200	300	400	500	600	700
Toplinska ekspanzija (10 ⁻⁶ m/(m.K))	11,2	11,8	12,3	12,7	12,9	13,1	13,1

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.