

KOUDVERVORMSTAAL

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

BÖHLER K360 ISODUR is een verderontwikkeling van 8%-chromstalen en wordt vaak op de behoeften van onze klanten aangepast. De buitengewoon hoge slijtvastheid samen met goede drukbelastbaarheid maken dit staal tot een probleemoplosser.

Smeltroute

Airmelted + Remelted

Eigenschappen

- > Taaiheid & Vervormbaarheid : goed
- > Slijtageweerstand : hoog
- > Samenpersende sterkte : goed
- > Dimensionale stabiliteit : goed
- > Slijpbaarheid : zeer hoog

Toepassingen

- > Machinale messen (voor fabrikanten)
- > Coining
- > Schroeven en vaten
- > Algemene componenten voor werktuigbouw
- > Componenten voor de recyclingindustrie
- > Walsen
- > Fijn stanswerk / ponsen / stampen
- > Slijtstukken
- > Rollen
- > Pill punching dies
- > Cold Forming
- > Persen van poeders
- > Thread rolling (NL)
- > Comp. voor uitrustingen onder de grond (boorgaten, schachten enz.)

Chemische samenstelling

C	Si	Mn	Cr	Mo	V	Al	Nb
1,25	0,90	0,35	8,75	2,70	1,18	+	+

Materiaaleigenschappen

	Drukbelastingcapaciteit	Dimensionale stabiliteit tijdens warmtebehandeling	Taatheid	Slijtvast abrasief	Slijtvaste lijm
BÖHLER K360 ISODUR®	★★★	★★★★	★★★	★★★★	★★★★
BÖHLER K100	★★	★★	★	★★★	★★
BÖHLER K105	★★	★★	★	★★	★★
BÖHLER K107	★★	★★	★	★★★	★★
BÖHLER K110	★★	★★★	★	★★★	★★
BÖHLER K190 MICROCLEAN®	★★★★	★★★★★	★★★★	★★★★	★★★★
BÖHLER K294 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K340 ECOSTAR®	★★★	★★★	★★	★★	★★
BÖHLER K340 ISODUR®	★★★	★★★★	★★★	★★★	★★★★
BÖHLER K346	★★★	★★★	★★★	★★★★	★★
BÖHLER K353	★★	★★★	★★	★★	★★
BÖHLER K390 MICROCLEAN®	★★★★★	★★★★★	★★★★	★★★★★	★★★★★
BÖHLER K490 MICROCLEAN®	★★★★	★★★★★	★★★★	★★★★	★★★★
BÖHLER K497 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K888 MATRIX	★★★★	★★★★★	★★★★★	★★	★★
BÖHLER K890 MICROCLEAN®	★★★★	★★★★★	★★★★★	★★★	★★★

Leveringsconditie

gegloeid

Hardheid (HB)	max. 250
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Warmtebehandeling

Annealing

Temperatuur	800 naar 850 °C	Slow, controlled cooling in furnace at a rate of 10 to 20 °C/hr down to approx. 600 °C, further cooling in air.
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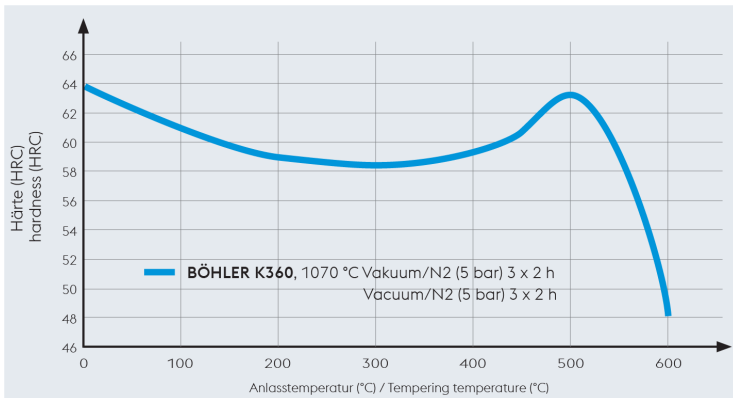
Stress relieving

Temperatuur	560 naar 650 °C	Slow cooling in furnace to relieve stresses due to extensive machining or in complex shapes. After through-heating, hold in neutral atmosphere for 1 - 2 hours.
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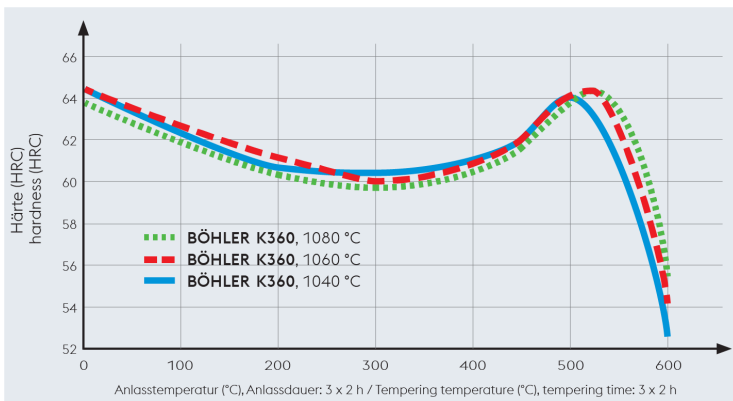
Harden en ontlaten

Temperatuur	1.040 naar 1.080 °C	Oil, salt bath, compressed air, air After through-heating, hold for 15 to 30 minutes. After hardening, tempering to the desired working hardness, see tempering chart.
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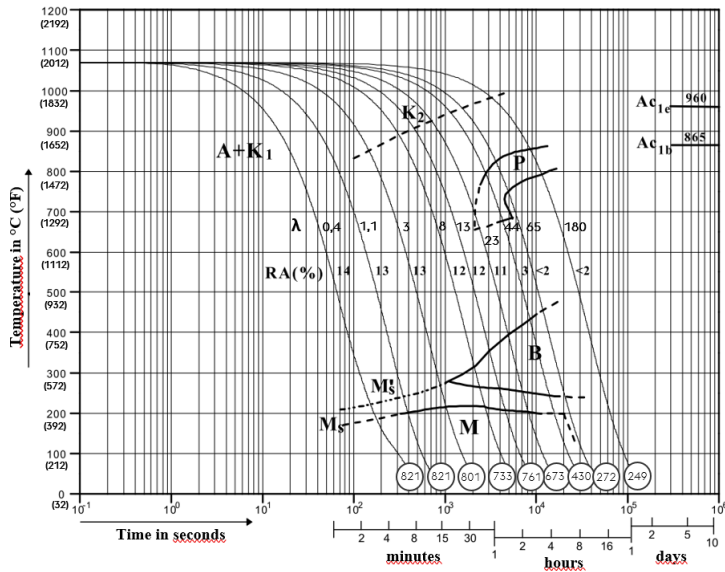
Tempering chart - Tempering curve in the vacuum furnace



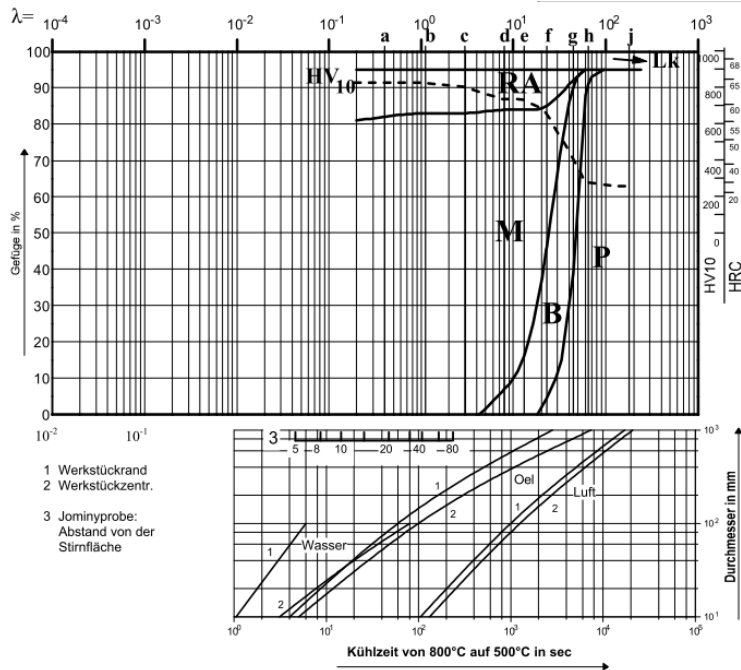
Tempering chart - Comparison of different austenitising temperatures (salt-bath / oil)



Continuous cooling CCT curves



Quantitative phase diagram



Fysische eigenschappen

Temperatuur (°C)	20
Soortelijk gewicht (kg/dm ³)	7,7
Thermische conductiviteit (W/(m.K))	16,3
Soortelijke warmte (kJ/kg K)	0,46
Specifieke elektrische weerstand (Ohm.mm ² /m)	0,64
Elasticiteitsmodulus (10 ³ N/mm ²)	212

Thermische expansie

Temperatuur (°C)	100	200	300	400	500
Thermische expansie (10 ⁻⁶ m/(m.K))	11,2	11,5	11,8	12,3	12,7

Long Products: For additional specification 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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