BÖHLER

BÖHLER K294
MICROCLEAN®

ACCIAI DA UTENSILI PER LAVORAZIONE A FREDDO

Granulometria disponibile

Prodotti lunghi* | Lamiere

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

Descrizione del prodotto

Acciaio per lavorazione a freddo prodotto mediante processo di metallurgia delle polveri, con eccellente resistenza ad usura, buona tenacità ed elevata resistenza a compressione.

Percorso di fusione

Powder metallurgy

Proprietà

- Durezza e duttilità : buono
- Resistenza all'usura : molto alto
- Resistenza alla compressione : molto alto
- Stabilità dimensionale : molto alto

Applicazioni

- Lame automatiche (per produttori)
- Viti e cilindri
- Stampaggio a freddo
- Componenti per il settore ingegneria meccanica
- Tranciatura / Tranciatura fine / Stampaggio

Dati tecnici

Corrispondenze	
1.2395	SEL
T30111	UNS
PM A11	AISI

Analisi chimica

C	Si	Mn	Cr	Mo	V
2,45	0,90	0,50	5,20	1,30	9,70

Proprietà del materiale

	Resistenza alla compressione	Stabilità dimensionale durante il trattamento termico	Tenacità	Abrasivo resistente all'usura	Adesivo resistente all'usura
BÖHLER K294 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K100	★★	★★	★	★★★	★★
BÖHLER K105	★★	★★	★	★★	★★
BÖHLER K107	★★	★★	★	★★★	★★
BÖHLER K110	★★	★★★	★	★★★	★★
BÖHLER K190 MICROCLEAN®	★★★★	★★★★★	★★★★	★★★★	★★★★
BÖHLER K340 ECOSTAR®	★★★	★★★	★★	★★	★★
BÖHLER K340 ISODUR®	★★★	★★★★	★★★	★★★	★★★★
BÖHLER K346	★★★	★★★	★★★	★★★★	★★
BÖHLER K353	★★	★★★	★★	★★	★★
BÖHLER K360 ISODUR®	★★★	★★★★	★★★	★★★★	★★★★
BÖHLER K390 MICROCLEAN®	★★★★★	★★★★★	★★★★	★★★★★	★★★★★
BÖHLER K490 MICROCLEAN®	★★★★	★★★★★	★★★★	★★★★	★★★★
BÖHLER K497 MICROCLEAN®	★★★★★	★★★★★	★★★	★★★★★	★★★★★
BÖHLER K888 MATRIX	★★★★	★★★★★	★★★★★	★★	★★
BÖHLER K890 MICROCLEAN®	★★★★	★★★★★	★★★★★	★★★	★★★

Condizioni di consegna

Ricotto

Durezza (HB)	max. 277

Trattamento termico

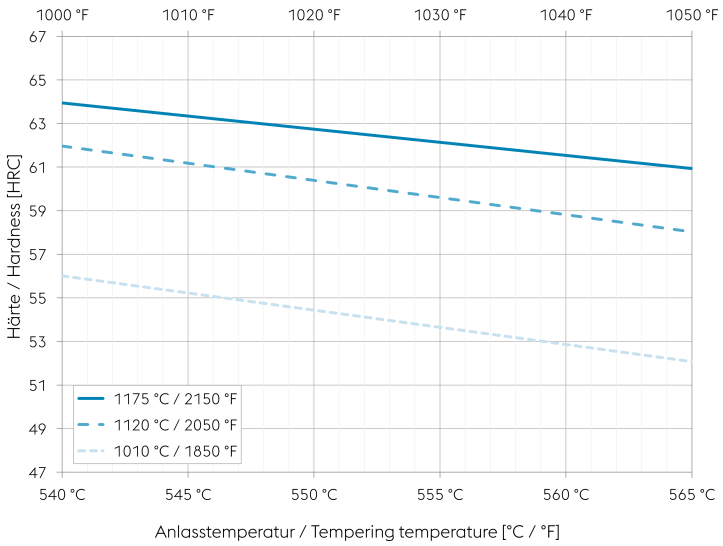
Annealing

Temperatura	570 a 870 °C	Protect steel from scaling and/or decarburization. Heat through to 1600°F (870°C). Control cool at 30°F (15°C) maximum per hour to 1000°F (540°C), then furnace or ait cool to room temperature.

Alleviare lo stress

Temperatura	595 a 700 °C	If required after Rough machining to minimize distortion during final heat treatment, heat to 1100-1300°F (595-700°C) and hold for 2 hrs followed by furnace. Cool slowly to 930°F (500°C), then air cool.

Tempering chart



Tempering:

Specimen size: square 0,787 inch (20 mm)

Slow heating to tempering temperature immediately after hardening.

Time in furnace 1 hour for each 0,787 inch (20 mm) of workpiece thickness but at least 2 hours/cooling in air.

Slow cooling to room temperature after each tempering step is recommended.

Please refer to the tempering chart for guide values for the hardness achievable after tempering.

It is recommended to temper at least three times above the secondary hardness maximum.

Tempering for stress relieving 86 to 122 °F (30 to 50 °C) below the highest tempering temperature.

Proprietà fisiche

Temperatura (°C)	**20**
Densità (kg/dm^3)	7,42
Conducibilità termica (W/(m.K))	20,39
Capacità termica specifica (kJ/kg K)	0,46
Resistenza elettrica specifica (Ohm.mm^2/m)	-
Modulo di elasticità (10^{3}N/mm^2)	221

Espansioni termiche

Temperatura (°C)	**93**	**260**	**427**	**593**
Espansione termica (10^{-6} m/(m.K))	10,7	11,1	11,8	12,3

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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ONE STEP AHEAD.