

# SOĞUK İŞ ÇELIKLERI

## Mevcut Ürün Şekilleri

Uzun Ürünler\*

Levhalar

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

## Ürün Tanımı

BÖHLER K601 corresponds to the material 1.2746 (45NiCrMoV16 6). The alloy concept of this tool steel is similar to 1.2767. With its high nickel content, this material offers a very good combination of through hardenability and toughness. Additional alloying with vanadium and molybdenum achieves higher resistance to abrasive wear. This material is used where high resistance to impact and shock loads is required and the wear resistance of a 1.2767 material is insufficient. The material is used in applications such as highly stressed industrial knives in the recycling industry.

## Erime rotası

Airmelted

## Özellikler

- > Tokluk ve Süneklik : yüksek
- > Boyutsal kararlılık : iyi

## Uygulamalar

- > Machine knife (for producers)
- > Cold Forming
- > Coining
- > Fine Blanking, Stamping, Blanking
- > Standard Parts (Molds, Plates, Pins, Punches)
- > Makine Mühendisliği için Genel Parçalar
- > Geri Dönüşüm Endüstrisi için Parçalar

## Teknik veriler

Malzeme Tanımı		
1.2746	SEL	
~ 45NiCrMoV16-6	EN	

## Kimyasal Bileşim

C	Si	Mn	Cr	Mo	Ni	V
0,45	0,30	0,80	1,50	0,80	4,00	0,50

## Malzeme özellikleri

	Basınç Dayanımı	Isıl işlem sırasında boyutsal kararlılık	Sertlik	Aşındırıcı aşınma direnci
BÖHLER K601	★	★★★	★★★★★	★★
BÖHLER K305	★★★★★	★★★	★★	★★★★★
BÖHLER K306	★★★★★	★★★	★★★★★	★★★
BÖHLER K313	★★★★★	★★★	★★★	★★★
BÖHLER K320	★★★	★★★	★★★	★★★
BÖHLER K329	★★★	★★★	★★★★★	★★★★★
BÖHLER K600	★	★★★	★★★★★	★
BÖHLER K605	★★	★★★	★★★★★	★

## Teslimat durumu

## Annealed

Sertlik (HB)	maks. 295
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## Isıl işlem

## Annealing

Sıcaklık	610 kadar 650 °C	Slow controlled cooling in furnace at a rate of 50 to 68°F/hr (10 to 20°C/hr) down to approx. 1112°F (600°C), further cooling in air.
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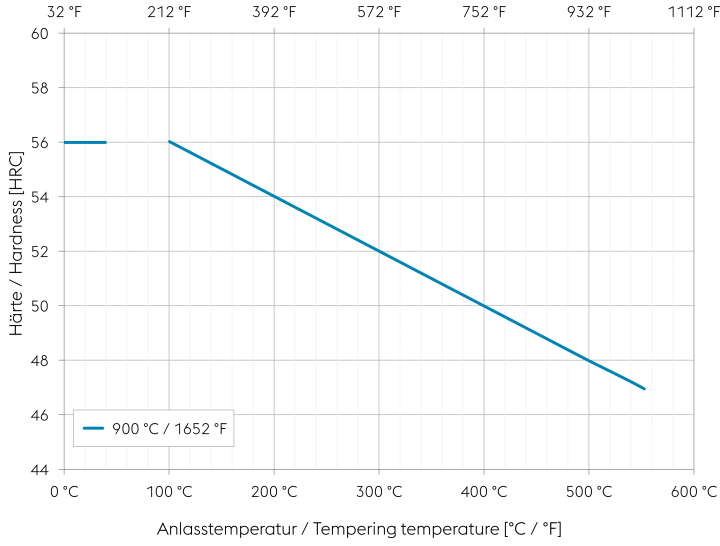
## Stress relieving

Sıcaklık	650 °C	Slow cooling in furnace; intended to relieve stresses set up by extensive machining, or in complex shapes. After through heating, hold in neutral atmosphere for 1-2 hours..
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## Sertleştirme ve Temperleme

Sıcaklık	880 kadar 910 °C	Oil, salt bath 572 to 752°F (300 to 400°C), air. Holding time after temperature equalization: 15 to 30 minutes. After hardening, tempering to the desired working hardness, see tempering chart.
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## Tempering chart



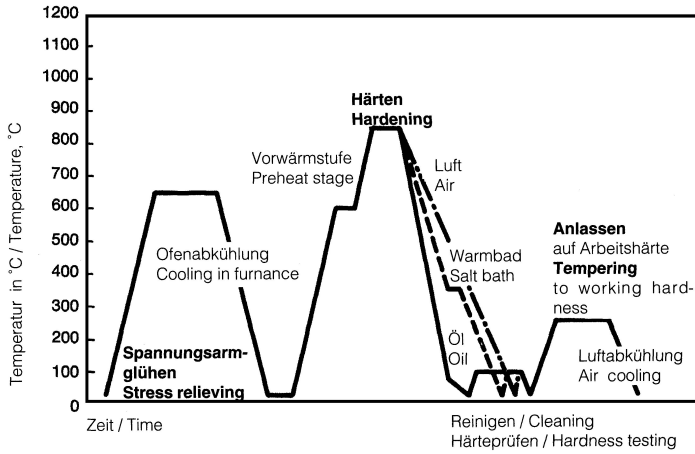
### Tempering:

Hardening temperature:

900°C/1652°F

Specimen size: square 20 mm

## Heat treatment sequence



## Fiziksel özellikler

Sıcaklık (°C)	20
Yoğunluk (kg/dm <sup>3</sup> )	7,85
Termal iletkenlik (W/(m.K))	28
Özgül ısı kapasitesi (kJ/kg K)	0,46
Spes. elektrik direnci (Ohm.mm <sup>2</sup> /m)	0,3
Elastikiyet modülü (10 <sup>3</sup> N/mm <sup>2</sup> )	210

## Termal genişmeler

Sıcaklık (°C)	100	200	300	400	500
Termal genişme (10 <sup>-6</sup> m/(m.K))	11	12,5	13	13,5	14

**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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