

TOOL STEELS

HARDENABLE CORROSION RESISTANT STEEL

Application Segments

Plastic Mould

Cold Work

Mevcut Ürün Şekilleri

Uzun Ürünler

Ürün Tanımı

Martensitic chromium steel with high carbon content and molybdenum addition.

Özellikler

- > Tokluk ve Süneklik : iyi
- > Aşınma Direnci : çok yüksek
- > İşlenebilirlik : iyi
- > Boyutsal kararlılık : iyi
- > Cilalanabilirlik : iyi
- > Korozyon direnci : iyi

Uygulamalar

- > Enjeksiyon kalıplama
- > Pharmaceutical industry like pill punches and -dies
- > Extrusion screws for plastic processing
- > Foodindustry like extrusion screws, can closing rolls
- > Hotrunner systems
- > Standard Parts (Molds, Plates, Pins, Punches)

Teknik veriler

| Malzeme Tanımı | | |
|----------------|------|--|
| 1.4125 | SEL | |
| X105CrMo17 | EN | |
| 440C | AISI | |

Kimyasal Bileşim

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

Teslimat durumu

Annealed

| | |
|--------------|-----------|
| Sertlik (HB) | maks. 265 |
|--------------|-----------|

Isıl işlem

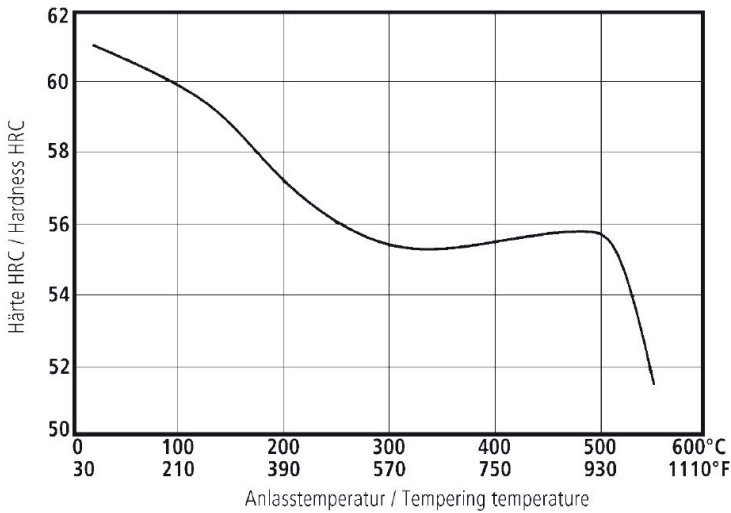
Stress relieving

| | | |
|----------|--------|---|
| Sıcaklık | 650 °C | After through heating, keep at temperature for 1 to 2 hours in a neutral atmosphere. Slow furnace cooling |
|----------|--------|---|

Sertleştirme ve Temperleme

| | | |
|----------|-------------------------|--|
| Sıcaklık | 1.000 kadar 1.050 °C | Holding time after complete soaking, max. 30 minutes / 25 mm cross section |
| Sıcaklık | 150 kadar 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



Fiziksel özellikler

| | |
|---|------|
| Sıcaklık (°C) | 20 |
| Yoğunluk (kg/dm ³) | 7,7 |
| Termal iletkenlik (W/(m.K)) | 15 |
| Özgül ısı kapasitesi (kJ/kg K) | 0,43 |
| Spes. elektrik direnci (Ohm.mm ² /m) | 0,8 |
| Elastikitey modülü (10 ³ N/mm ²) | 215 |

Termal genleşmeler

| Sıcaklık (°C) | 100 | 200 | 300 | 400 | 500 |
|--|------|------|------|------|------|
| Termal genleşme (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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