

SOĞUK İŞ ÇELİKLERİ

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 K700 corresponds to the material 1.3401 (X120Mn12) and belongs to the group of austenitic hard manganese steels. Unlike most tool steels, BÖHLER K700 is not used in the hardened and tempered condition. Due to the forces occurring in service, the resulting work hardening of the surface results in a high resistance to abrasive wear. BÖHLER K700 is weldable. However, the heat input must be kept as low as possible to avoid embrittlement of the material. The material is used in abrasive blasting and mining applications such as crusher jaws, beater bars, grate bars, linings, excavator teeth and chain rollers.

Erime rotası

Airmelted

Özellikler

- > Tokluk ve Süneklik : yüksek
- > Basınç Dayanımı : iyi
- > Boyutsal kararlılık : iyi
- > Kenar Stabilitesi : iyi

Uygulamalar

- > Standard Parts (Molds, Plates, Pins, Punches)
- > Wear parts
- > Makine Mühendisliği için Genel Parçalar

Teknik veriler

Malzeme Tanımı	
1.3401	SEL
X120Mn12	EN
~SCMNH2	JIS
~SCMNH3	

Kimyasal Bileşim

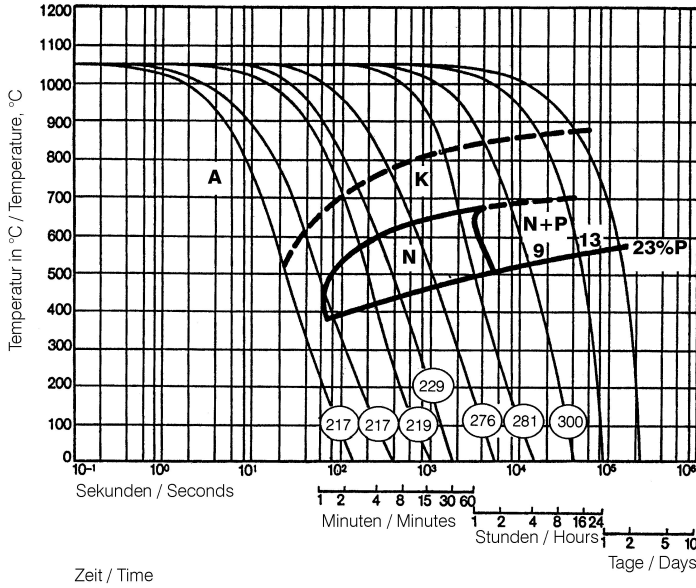
C	Si	Mn
1,23	0,40	12,50

Teslimat durumu

Air Quenched

Sertlik (HB)	maks. 200 Approx. hardness value!! ; quenched from 1832 - 1922°F (1000 - 1050°C) - Air / Water
Çekme dayanımı (UTS) (MPa)	780 kadar 1130

Continuous cooling CCT curves



Austenitising temperature: 1050°C (1922°F)
Holding time: 15 minutes

O Vickers hardness
K... Grain boundary martensite
N... Acicular carbide
P... Pearlite

Fiziksel özellikler

Sıcaklık (°C)	20
Yoğunluk (kg/dm ³)	7,9
Termal iletkenlik (W/(m.K))	13
Özgül ısı kapasitesi (kJ/kg K)	0,5
Spes. elektrik direnci (Ohm.mm ² /m)	0,68
Elastikiyet modülü (10 ³ N/mm ²)	190

Termal genleşmeler

Sıcaklık (°C)	100	200	300	400	500
Termal genleşme (10 ⁻⁶ m/(m.K))	18,2	19,4	20,8	21,7	20,8

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.