COLD WORK STEELS

Available Product Variants

Long Products

Product Description

Shock resisting steel with high toughness and good wear resistance. Universally usable. Hardened and tempered to 145,03 - 159,53 ksi (1000 - 1100 MPa). Normally no further heat treatment is required.

Process Melting

Airmelted

Applications

> Cold Forming

> Coining

Technical data

Material designation	
~1.2358	SEL
~60CrMoV18-5	EN

Chemical composition (wt. %)

C	Si	Mn	Cr	Mo	V
0.60	0.35	0.80	4.50	0.50	0.25

Delivery condition

Annealed

Hardness (HB)	max. 240

Hardened and Tempered

Hardness (HB)	280 to 311

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Heat treatment

Annealing

| Temperature	820 to 860 °C | 1,508 to 1,580 °F	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.

Stress relieving

Temperature	600 to 650 °C | 1,112 to 1,202 °F	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.

Hardening and Tempering

Temperature	950 to 980 °C | 1,742 to 1,796 °F	Air, oil Holding time at hardening temperature: 15 to 30 minutes. After hardening, tempering to the desired working hardness, see tempering chart.

Tempering chart
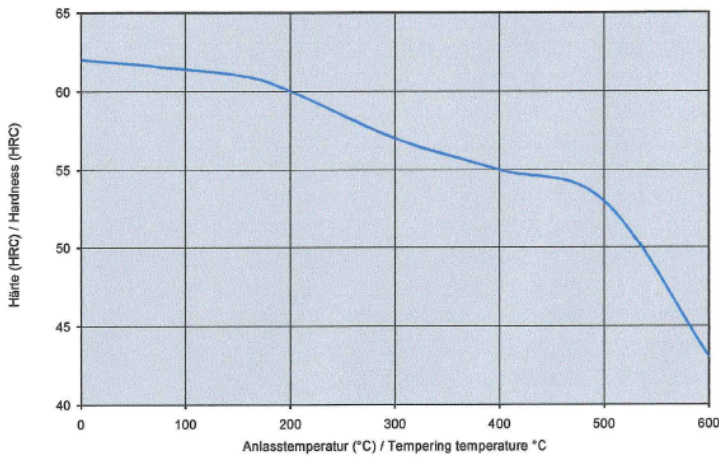
For additional specifications and technical requirements, please contact our regional voestalpine BÖHLER sales companies.

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.

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