

COLD WORK STEELS

Available Product Shapes

- Long Products
- Open Die Forgings
- Plates

Product Description

Cutting Tools, cold forming and bending dies, plastic moulding dies, shear blades. Hot work tools for service at moderate temperatures.

Properties

- Shock resisting steel
- High toughness
- Good wear resistance
- Universal application

Applications

- > Machine knife (for producers)
- > Rolling
- > Cold Forming
- > Fine Blanking, Stamping, Blanking
- > Powder Pressing

Material designation	
~1.2357	SEL
~50CrMoV13-14	EN
S7	AISI

Chemical composition

C	Si	Mn	Cr	Mo	V
0.53	0.30	0.60	3.25	1.45	0.25

Material characteristics

	Compressive strength	Dimensional stability during heat treatment	Toughness	Wear resistance abrasive
BÖHLER K320	★★★	★★★	★★★	★★★
BÖHLER K305	★★★★★	★★★	★★	★★★★★
BÖHLER K306	★★★★	★★★	★★★★	★★★
BÖHLER K313	★★★★	★★★	★★★	★★★
BÖHLER K329	★★★	★★★	★★★★★	★★★★★
BÖHLER K600	★	★★★	★★★★★	★
BÖHLER K601	★	★★★	★★★★★	★★
BÖHLER K605	★	★★★	★★★★★	★★

Delivery condition

Annealed

Hardness	max. 225 HB
----------	-------------

Heat treatment

Annealing

Temperature (°C / °F)	820 / 1508 - 850 / 1562	Slow controlled cooling in furnace at a rate of 10 to 20°C/hr down to approx. 600°C, further cooling in air.
-----------------------	-------------------------	--

Stress relieving

Temperature (°C / °F)	-	Slow controlled cooling in furnace at a rate of 10 to 20°C/hr down to approx. 600°C, further cooling in air. After through heating, hold in neutral atmosphere for 1 to 2 hours.
-----------------------	---	--

Hardening and Tempering

Temperature (°C / °F)	930 / 1706 - 950 / 1742	Air, oil Holding time after temperature equalization: 15 to 30 minutes. After hardening, tempering to the desired working hardness, see tempering chart.
-----------------------	-------------------------	--

For more information see www.voestalpine.com/boehler-edelstahl

voestalpine BÖHLER Edelstahl GmbH & Co KG

Mariazeller Straße 25

8605 Kapfenberg, AT

T. +43/50304/20-0

E. info@boehler-edelstahl.at

www.voestalpine.com/boehler-edelstahl

voestalpine

ONE STEP AHEAD.