

# HOT WORK TOOL STEELS

## Available Product Shapes

Open Die Forgings

## Product Description

Liners for containers and pressure pads for the extrusion of copper and copper alloys. (billet temperature higher than 750°C).

## Properties

Highly creep and corrosion resisting, precipitation hardening austenitic steel. Modified A286 for extrusion tools.

## Applications

> Extrusion

Material designation	
~1.2779	SEL
~X6NiCrTi26-15	EN

## Chemical composition (wt. %)

C	Si	Mn	Cr	Mo	Ni	V	Ti	Al
0.02	≤ 0,20	1.40	15.00	1.30	25.00	0.30	2.60	0.25

## Delivery condition

### Solution annealed + precipitation hardened

Hardness	310 to 370 HB
Ultimate tensile strength (UTS)	1000 to 1150 MPa

## Physical Properties

Temperature (°C   °F)	20   68
Density (kg/dm <sup>3</sup>   lb/in <sup>3</sup> )	7.95   0.29
Thermal conductivity (W/(m.K)   BTU (IT) ft/hr/ft <sup>2</sup> /F)	13   7.51
Specific heat (J/(kg.K)   BTU (IT) lb/F)	420   100.32
Spec. electrical resistance (Ohm.mm <sup>2</sup> /m   10 <sup>-4</sup> Ohm.inch <sup>2</sup> /ft)	0.91   4.3
Modulus of elasticity (10 <sup>3</sup> N/mm <sup>2</sup>   10 <sup>3</sup> ksi)	208   30.17

## Thermal Expansions

Temperature (°C   °F)	100   212	200   392	300   572	400   752	500   932	600   1112	700   1292
Thermal expansion (10 <sup>-6</sup> m/(m.K)   10 <sup>-6</sup> inch/(inch.F))	16.5   9.167	16.8   9.333	17.1   9.5	17.3   9.611	17.5   9.722	17.7   9.833	18   10

For more information see [www.voestalpine.com/boehler-edelstahl](http://www.voestalpine.com/boehler-edelstahl)

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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ONE STEP AHEAD.