

# ENGINEERING STEELS - HEAT TREATABLE AND NITRIDING STEELS

## Application Segments

Aerospace

## Available Product Variants

Long Products

## Product Description

BÖHLER V145 is a Cr-Ni-Mo- steel for applications requiring high tensile and toughness values, in particular in large cross sections in the quenched and tempered condition. The molybdenum addition prevents the steel from being susceptible to temper embrittlement.

Highly stressed components with large cross sections for aircraft, such as gear shafts and landing gear components.

## Process Melting

Airmelted

## Applications

&gt; Structural parts (Aerospace)

&gt; Other Aerospace Components

&gt; Aerospace

## Technical data

Material designation	
1.6604	Market grade SEL
30CND8 30CrNiMo8	EN

## Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni
0.26 to 0.34	0.15 to 0.40	0.30 to 0.60	max. 0.025	max. 0.025	1.80 to 2.30	0.30 to 0.50	1.80 to 2.30

Related to WL 1.6604

## Delivery condition

### Annealed

Hardness (HB)	max. 248   Bars from 5 to 250 mm diameter
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### Hardened and Tempered

Tensile Strength (MPa)	900 to 1,100   Bars from 5 to 250 mm diameter
Yield Strength (MPa)	min. 700

### Hardened and Tempered

Tensile Strength (MPa)	1,100 to 1,300   Bars from 5 to 100 mm diameter
Yield Strength (MPa)	min. 900

### Hardened and Tempered

Tensile Strength (MPa)	1,250 to 1,450   Bars from 5 to 40 mm diameter
Yield Strength (MPa)	min. 1,050

### Round Bars and Wire Rod (if any)

Diameter mm			MOQ ex mill kg	Length m			Tolerance
ROLLED							
5.01	-	12.49	850	3.00	-	4.00	IT h/k 11
12.50	-	55.00	1,000	3.00	-	4.00	IT h/k 11
55.01	-	69.00	1,200	3.00	-	4.00	IT h/k 11
69.01	-	72.00	1,000	3.00	-	4.00	IT h/k 11
72.01	-	82.00	1,150	3.00	-	4.00	IT h/k 11
82.01	-	120.00	1,400	3.00	-	4.00	IT h/k 11
120.01	-	150.00	1,400	3.00	-	5.00	IT h/k 14

If other available product variants are listed in addition to long products, please note that these may differ in terms of melting process, technical data, delivery and surface condition as well as available product dimensions. For mandatory technical specifications, other requirements and dimensions, 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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 ONE STEP AHEAD.