

# ENGINEERING STEELS - HEAT TREATABLE AND NITRIDING STEELS

## Application Segments

Aerospace

## Available Product Variants

Long Products

## Product Description

BÖHLER V354 is an alloyed Cr-Mo-V quenched and tempered steel for high strength and high temperature requirements, good weldability and suitable for nitriding. Insensitive to tempering embrittlement due to Mo content.

Mainly for components in the aerospace industry to be welded and nitrided with high quenched and tempered strength, at operating temperatures from -75° C to 500° C.

## Process Melting

Airmelted

## Applications

> Structural parts (Aerospace)

> Other Aerospace Components

## Technical data

Material designation		Standards	
1.7734	Market grade	1.7734	WL
15CDV6			
1.7734	SEL		

## Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	V
0.12 to 0.18	max. 0.20	0.80 to 1.10	max. 0.020	max. 0.015	1.25 to 1.50	0.80 to 1.00	0.20 to 0.30

Related to WL 1.7734

Delivery condition

<b>Annealed</b>	
Hardness (HB)	max. 197   Bars from 5 to 250 mm diameter
<b>Hardened and Tempered</b>	
Tensile Strength (MPa)	min. 700   from 5 to 250 mm diameter
Yield Strength (MPa)	min. 550   from 5 to 250 mm diameter
<b>Hardened and Tempered</b>	
Tensile Strength (MPa)	980 to 1,180   from 5 to 100 mm diameter
Yield Strength (MPa)	min. 790   from 5 to 100 mm diameter
<b>Hardened and Tempered</b>	
Tensile Strength (MPa)	1,080 to 1,250   from 5 to 100 mm diameter
Yield Strength (MPa)	min. 930   from 5 to 100 mm diameter

Round Bars and Wire Rod (if any)

Diameter mm			MOQ ex mill kg	Length m			Tolerance
<b>ROLLED</b>							
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
<b>FORGED</b>							
150.01	-	152.00	1,200	2.00	-	5.00	IT h/k 14
152.01	-	192.00	950	2.00	-	5.00	IT h/k 14
192.01	-	203.20	1,440	2.00	-	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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