

HEAT TREATABLE STEELS AND PRECIPITATION HARDENING 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 (Aerosp)

> Other Aerospace Comps.

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

Annealed

Hardness (HB)	max. 197 Bars from 5 to 250 mm diameter
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Hardened and Tempered

Tensile Strength (MPa ksi)	min. 700 102 from 5 to 250 mm diameter
Yield Strength (MPa ksi)	min. 550 80 from 5 to 250 mm diameter

Hardened and Tempered

Tensile Strength (MPa ksi)	980 to 1,180 143 to 172 from 5 to 100 mm diameter
Yield Strength (MPa ksi)	min. 790 115 from 5 to 100 mm diameter

Hardened and Tempered

Tensile Strength (MPa ksi)	1,080 to 1,250 157 to 182 from 5 to 100 mm diameter
Yield Strength (MPa ksi)	min. 930 135 from 5 to 100 mm diameter

Round Bars and Wire Rod (if any)

Diameter		MOQ ex mill		Length		Tolerance
mm	inch	kg	lbs	m	ft	
ROLLED						
5.01	- 12.49	0.197	- 0.492	850	1,874	3.00 - 4.00 9.84 - 13.12 IT h/k 11
12.50	- 55.00	0.492	- 2.165	1,000	2,205	3.00 - 4.00 9.84 - 13.12 IT h/k 11
55.01	- 69.00	2.166	- 2.717	1,200	2,646	3.00 - 4.00 9.84 - 13.12 IT h/k 11
69.01	- 72.00	2.717	- 2.835	1,000	2,205	3.00 - 4.00 9.84 - 13.12 IT h/k 11
72.01	- 82.00	2.835	- 3.228	1,150	2,535	3.00 - 4.00 9.84 - 13.12 IT h/k 11
82.01	- 120.00	3.229	- 4.724	1,400	3,086	3.00 - 4.00 9.84 - 13.12 IT h/k 11
120.01	- 150.00	4.725	- 5.906	1,400	3,086	3.00 - 5.00 9.84 - 16.40 IT h/k 14
FORGED						
150.01	- 152.00	5.906	- 5.984	1,200	2,646	2.00 - 5.00 6.56 - 16.40 IT h/k 14
152.01	- 192.00	5.985	- 7.559	950	2,094	2.00 - 5.00 6.56 - 16.40 IT h/k 14
192.01	- 203.20	7.559	- 8.000	1,440	3,175	2.00 - 5.00 6.56 - 16.40 IT h/k 14

For additional specifications and other sizes please contact BÖHLER Edelstahl - Special Materials Aerospace & Land Based Turbine

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.