

# HEAT TREATABLE STEELS AND PRECIPITATION HARDENING STEELS

## Application Segments

- Aerospace
- Automotive

## Available Product Variants

- Long Products

## Product Description

BÖHLER V132 is a premium aircraft-quality, low-alloy Ni-Cr-Mo steel in the form of bars, forgings and forging stock requiring high tensile and toughness values, particular in large cross sections in the hardened and tempered condition.

These products have been used typically for parts requiring a through-hardening capability up to 3.5 inches (89 mm) in nominal thickness at time of heat treatment but usage is not limited to such applications. E.g. highly stressed components and parts for the aircraft industry, Tracks, helicopter shafts, bolts and screws.

## Process Melting

- Airmelted + VAR

## Applications

- > Structural parts (Aerosp)
- > Other Aerospace Comps.
- > Automotive Racing
- > Automotive

## Technical data

Material designation		Standards	
300M	Market grade	6417	AMS
K44220	UNS		

## Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	V	Cu
0.38 to 0.43	1.45 to 1.80	0.60 to 0.90	max. 0.010	max. 0.010	0.70 to 0.95	0.30 to 0.50	1.65 to 2.00	0.05 to 0.10	max. 0.35

Related to AMS 6417

## Delivery condition

### Annealed

Hardness (HB)	max. 311   Hot finished and annealed, above 12.7 mm diameter
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### Annealed

Tensile Strength (MPa   ksi)	max. 1,027   149   Cold finished and annealed, max 12.7 mm diameter
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### Round Bars and Wire Rod (if any)

Diameter		MOQ ex mill		Length		Tolerance
mm	inch	kg	lbs	m	ft	
<b>ROLLED</b>						
12.50	- 55.00	0.492	- 2.165	1,200	2,646	3.00 - 4.00 9.84 - 13.12 IT h/k 11
55.01	- 120.00	2.166	- 4.724	2,500	5,512	3.00 - 4.00 9.84 - 13.12 IT h/k 11
120.01	- 140.00	4.725	- 5.512	2,500	5,512	3.00 - 5.00 9.84 - 16.40 IT h/k 14
<b>FORGED</b>						
140.01	- 203.20	5.512	- 8.000	2,200	4,850	2.00 - 5.00 6.56 - 16.40 IT h/k 14
203.21	- 254.00	8.000	- 10.000	3,500	7,716	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

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