

CORROSION RESISTANT STEELS - MARTENSITIC, SEMI-MARTENSITIC AND FERRITIC STEELS

Application Segments

Automotive

Available Product Variants

Long Products

Product Description

BÖHLER N114 is a modified 13% chromium steel with special soft magnetic properties, namely very low coercive force and high electrical resistance. Due to the high sulphur content, the material can be machined very well, for example on automatic machining centres. BÖHLER N114 has very good hot and cold extrusion properties.

It is used for stainless parts for mechanical and electrical engineering, for example solenoid valves, pistons, back-locking parts, pole cores, shieldings and magnetic armatures.

Delivery condition mill annealed. A final annealing treatment for magnetic properties is to be carried out after cold reforming, such as extrusion, upsetting or extensive machining operations.

Process Melting

Airmelted

Applications

- > Automotive
- > Motorsport industry
- > Civil and mechanical engineering
- > Injection Components
- > Valves and Actuators

Technical data

Material designation	Standards
BÖHLER Trademark	10088-1 EN ISO
Market grade	

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Al
max. 0.08	max. 1.25	max. 1.00	max. 0.040	max. 0.23	12.00 to 14.00	0.20 to 0.80

Refers to EN-ISO 10088-1, 1.4002 modified

Delivery condition

Annealed | Dimension max. 60 mm

Hardness (HB)	120 to 180
Tensile Strength (MPa)	400 to 600

Others | Annealed + cold worked

Hardness (HB)	150 to 220
Tensile Strength (MPa)	450 to 650

Round Bars and Wire Rod (if any)

Diameter*		
mm		
ROLLED		
5.00	-	13.50
12.50	-	50.00

* Diameter 5.00 - 13.50 mm available as Wire Rod.

Diameter 12.5 - 50 mm round bars.

More information regarding MOQ, lengths and tolerances upon request.

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.