

ACIERS AUSTÉNITIQUES

Segment d'application

Oil & Gas/CPI

Variantes de produits disponibles

Produit long*

Produit semi-fini

*) Presented data refer exclusively to long products. Please observe the detailed explanations at the end of the data sheet (pdf).

Description du produit

BÖHLER P513 is a weldable, non-magnetic austenitic stainless steel with resistance to seawater and intergranular corrosion. Does not require post-weld heat treatment. It offers best galling resistance of all stainless steels and high pitting resistance. The oxidation resistance of BÖHLER P513 is far superior to common Cr-Ni austenitic stainless steels (Type 304) but not quite as good as for Cr-Ni-Mo Types (316), but it offers better chloride pitting resistance, stress corrosion cracking resistance and crevice corrosion resistance than Type 316 under standard testing conditions.

BÖHLER P513 is a high Silicon, high Manganese, Nitrogen strengthened austenitic stainless alloy that was originally designed as a temperature alloy and therefore performs well at high temperature around 1800°F. The additions of silicon and manganese assist to inhibit wear, galling and fretting even in the annealed condition. Through cold working BÖHLER P513, it is possible to attain higher strengths, however it does not enhance the anti-galling properties

It is used in the Aerospace, Food and Drug, Oil Field, Petrochemical, Surgical and Chemical Processing Industries for e.g. Valve Stems, Seats and Trim, Fastening Systems, Screening, Chain-drive Systems, Pins, Bushings and Roller Bearings, Pump Components (Wear Rings and Lobes), Food-Contact applications.

Procédé d'élaboration

Airmelted

Applications

- > Composants pour l'industrie agro-alimentaire
- > Eléments de fixation, vis et écrous
- > Matricage (BSTG/EBW)
- > Autres composants pour l'industrie pétrolière, gazière et chimique
- > Valves et actionneurs
- > Câbles
- > Distributeurs pour applications composants
- > Conduites et raccords
- > Mécanique générale / machines-outils
- > Sidérurgie
- > Outils pour la réalisation de puits
- > Autres composants
- > Distributeurs et producteurs de pièces standards sans connaissance des applications finales
- > Industrie agro-alimentaire
- > Industrie pétrolière et gazière
- > Tubes, brides et raccords
- > Tête de forage / BOPs / bloc collecteur
- > Outils pour carottage

Données techniques

Désignation normalisée		Normes	
Nitronic 60	Market grade	A193	ASTM
S21800	UNS	A194	
		A276/A276M	
		A479/A479M	

Composition chimique

C	Si	Mn	P	S	Cr	Ni	N
max. 0,10	3,5 jusqu'à 4,5	7,0 jusqu'à 9,0	max. 0,060	max. 0,030	16,0 jusqu'à 18,0	8,0 jusqu'à 9,0	0,08 jusqu'à 0,18

Related to ASTM A193 B8S,B8SA

Condition de livraison

Solution annealed	
Dureté (HB)	max. 271
Résistance à la traction (N/mm ²)	min. 656
Yield Strength (MPa)	min. 345

Barres rondes et fil machine (le cas échéant)

Diamètre* mm	
CERCLE	
5,00	13,50
5,00	130,00
FORMÉ	
130,10	304,80

* Diameter 5.00 - 13.50 mm available as Wire Rod.

Diameter 5.00 - 130 mm round bars.

Further information on MOQ, lengths and tolerances on request.

Long Products: For additional specifications, technical requirements, and other dimensions, please contact our regional voestalpine BÖHLER sales companies.

Semi-Finished Products: Product Variant may differ in terms of melting process, technical data, delivery, and surface condition as well as available product dimensions. Please contact the business unit Semi Finished Products of voestalpine BÖHLER Edelstahl GmbH & Co KG.

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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voestalpine

ONE STEP AHEAD.