CORROSIONS-RESISTANT STEELS - AUSTENITIC STEELS AND NON MAGNETIC STEELS

Application Segments

Oil & Gas / CPI

Available Product Variants

Long Products*

Semi-Finished Products / Billet

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

Product Description

BÖHLER A959 (Alloy 28, UNS N08028, W. Nr. 1.4563) is a nickel-iron-chromium alloy with additions of molybdenum and copper. It has excellent resistance to both reducing and oxidizing acids, to stress-corrosion cracking, and to localized attack such as pitting and crevice corrosion. The alloy is especially resistant to sulphuric and phosphoric acid. Equipment used for chemical processing, pollution control equipment, oil and gas well piping ,natural gas and oil transportation, nuclear fuel reprocessing and transportation, acid production and pickling equipment and transportation
The alloy was originally developed for use in the manufacture of phosphoric acid, especially for heat exchangers in the concentration unit, where corrosive conditions are at their worst.

Process Melting

Airmelted

Applications

- Chemical industry - general
- Heat Exchanger
- Paper and Pulp Industry / Printing
- Wellhead, X-mas trees and Manifolds (incl. Tubing hangers), BOPs
- Components for Chemical plants (incl. LNG, FGD, Urea, LDPE, etc.)
- Oil & Gas / CPI
- Well Completion Tools
- Oil & Gas, CPI & Renewables
- CPI (incl. LNG, Urea)
- Other Oil and Gas + CPI components
- Well Logging Tools

Technical data

Material designation	
Alloy 28	Market grade
1.4563	SEL
X1NiCrMoCu31-27-4	EN
N08028	UNS

Standards	
10088-3	EN ISO

Chemical composition (wt. %)

C	Si	Mn	P	S	Cr	Mo	Ni	Cu	N
max. 0.020	max. 0.70	max. 2.00	max. 0.030	max. 0.010	26.0 to 28.0	3.0 to 4.0	30.0 to 32.0	0.70 to 1.50	max. 0.10

Refers to DIN EN 10088-3 1.4563.

Delivery condition

Solution Annealed + Quenched

Hardness (HB)	max. 230
Tensile Strength (MPa)	500 to 750
Yield Strength (MPa)	min. 220

Round Bars and Wire Rod (if any)

Diameter mm		
ROLLED		
12.50	-	130.00
FORGED		
130.10	-	203.20

More information regarding MOQ, lengths and tolerances upon request.

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ONE STEP AHEAD.