

Valbruna Grade

VAL4529

Steel type

Corrosion Resistant Alloys

Profile shapes

- Round EN 10060 / EN 10278
- Flat EN 10058 / EN 10278
- Square EN 10059 / EN 10278
- Hexagonal EN 10278
- Angle EN 10056

Bar steel, bright steel, wire, wire rod, billets, ingots, semi-finished products

Description of material

VAL4529 is a low-carbon austenitic stainless steel with higher Molybdenum, Nickel and Nitrogen contents than grade AN4. It offers a very high resistance to pitting and crevice corrosion together with a very good resistance to general corrosion and stress corrosion cracking.

Applications

VAL4529 is suitable for the fabrication of many products such as flanges, valves, bolting, pump shafts, offshore plant, heat exchangers, storage tanks, paper and pulping bleach equipment, oil & gas production, rural applications, many products used in chemical processes, sterilizing solutions, and parts working in corrosive environments where type 316 grades and AN4 do not provide a sufficient corrosion resistance. In particular, this grade, offering a very good resistance in sea water, is widely used in naval applications.

Designations

Commercial name	Alloy 926 / Alloy 367
International Designation	X1NiCrMoCuN25-20-7
W.N.	1.4529
UNS	N08926 / N08367

Chemical composition

Chemical element	C	Mn	Si	S	P	Cr	Ni	Cu	Fe	Mo	N
Minimum value %	-	-	-	-	-	20%	23,5%	-	47%	6%	0,15%
Maximum value %	0,03%	2%	1%	0,03%	0,04%	22%	25,5%	0,75%	-	7%	0,25%

Mechanical properties

Condition	Subtype	Rm [N/mm ²]	Rm [Ksi]	Rp0,2% [N/mm ²]	Rp0,2% [Ksi]	E4D [%]	HBW
Alloy 926 Hot worked - Solution Annealed	HW - A	650 min.	94 min.	295 min	43 min	35 min	316 max
Alloy 926 Cold worked - Solution Annealed	CW - A	800 min.	116 min.	600 min	87 min	35 min	316 max
Alloy 367 Hot worked - Solution Annealed	HW - A	650 min.	94 min.	295 min	43 min	35 min	316 max

Please send an e-mail to verkauf@valbruna.de to request the complete technical datasheet