



1.4578/AISI 316Cu

CONFIDENTIAL

CHEMICAL COMPOSITION [% weight]

C	Si	Mn	P	S	Cr	Ni	Cu	Altri
0.04 max	1.00 max	1.00 max	0.045 max	0.015 max	16.5-17.5	10-11	3.0-3.5	N: 0.1 max

CHARACTERISTICS AND AREAS OF APPLICATION

1.4578 non-magnetic austenitic grade is essentially equal to 1.4404 with the high degree of deformation allowed thanks to the exceptional addition of copper, included between 3 and 3.5%.

Chemical applications, instruments manufacturing, cryogenic applications, food and beverage industry, electronic applications, shipbuilding industry, and the fastener devices industry are the typical application areas of 1.4578.

INDICATIVE MECHANICAL PROPERTIES

[ACCORDING TO EN10088-3 AT HARDENED STATE - ROOM TEMPERATURE]

Metallurgical condition	Rm [N/mm ²]	Rp 0.2 [N/mm ²]	A5 [%] min	Indic. hardness [HB] max
Solution Annealing	450-650	175	45 (Longitudinal)	215
Solution Annealing + Cold Drawn	720-760	-	-	-

WELDABILITY

The weldability of 1.4578 with or without the use of the metal material is good. In addition, heat treatment after welding is not required.

CORROSION RESISTANCE

This grade shows excellent corrosion resistance in most natural waters and atmospheric environments with low to medium concentrations of chloride and salt.

HEAT TREATMENT

SOLUTION ANNEALING > 1000-1100 °C / rapid water or air cooling

[*] The information on this sheet is of a general nature and reflects the contents of the technical regulations. For any specific request or clarification, please contact Eure inox Quality Department.