



AUSTENITIC STAINLESS STEEL ACX 125	
EN DESIGNATION	AISI DESIGNATION
1.4301	304
X5CrNi18-10	



DESCRIPTION ACX 125 belongs to the range of austenitic Cr-Ni stainless steels. These stainless steels are the most versatile stainless steels on the market, making them suitable for a multitude of applications. These stainless steels combine good corrosion resistance in a wide range of environments with outstanding mechanical properties.

CHEMICAL COMPOSITION	C	Si	Mn	P	S	N(ppm)	Cr	Cu	Mo	Ni	Ti
	≤0.07	≤0.75	≤2.00	≤0.045	≤0.030	≤1000	18.00-19.00	-	-	8.00-9.00	-

APPLICATIONS

- Kitchenware
- Domestic appliances
- Industry
- Cutlery

MECHANICAL PROPERTIES EN 10088-3	Rp _{0,2} (MPa)	Rm (MPa)	Elongation (%)	Hardness (HB)
Wire rod	≥190	500-700	≥40	≤215
Bar	≥190	500-950	≥25	-

PHYSICAL PROPERTIES	Elastic modulus	Thermal expansion average coefficient (20°C-100°C)	Thermal conductivity	Electrical resistivity	Density
	200 Gpa	16 µm/m°C	15 W/m·k	0,73 Ω·mm ² /m	7,9 kg/dm ³

WELDING The consumables recommended are the following:

Coated electrodes	Wires & rods	Hollow electrodes
E 19 9 Nb	G 19 9 L (GMAW)	T 19 9 L
308L	W 19 9 L (GTAW)	308L
	P 19 9 L (PAW)	
	S 19 9 L (SAW)	
	308L	

If the welding process involves risks of sensitisation and will be exposed to aggressive environments which may cause intergranular corrosion, it is recommended to select stainless steel grades ACX226 o ACX227.

PITTING CORROSION ACX 125 is used efficiently in environments with a chloride concentration lower than 200 ppm.

CORROSION RESISTANCE The austenitic stainless steels of the Cr-Ni family provide good corrosion resistance performance in a large number of applications. As an example, these steels have corrosion rates of less than 0.10 mm/year in the following media:

- 20% acetic acid at 80°C.
- 90% formic acid at 20°C.
- 20% phosphoric acid at 60°C.
- Nitric acid 20% at 50°C.
- Sulphuric acid 90% at 20°C.



ACX 125 | AUSTENITIC STAINLESS STEEL



SPECIFICATIONS | Can be supplied in accordance with the requirements of international standards 10088-3 and ASTM A-276 "Condition: A".

CERTIFICATES



Sistema de Gestión
 ISO 9001:2015
 ISO 14001:2015
 ISO 50001:2018



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