



AUSTENITIC STAINLESS STEEL ACX 126	
EN DESIGNATION	AISI DESIGNATION
1.4301	304
X5CrNi18-10	



DESCRIPTION ACX 126 belongs to the range of austenitic Cr-Ni steels. These steels are the most versatile steels on the market making them suitable for a multitude of applications. These steels combine good corrosion resistance in a wide range of environments with outstanding mechanical properties. ACX 126, in particular, presents an improvement in its mechanical properties with respect to ACX 125 thanks to the greater addition of Ni.

CHEMICAL COMPOSITION

C	Si	Mn	P	S	N(ppm)	Cr	Cu	Mo	Ni	Ti
≤0.07	≤0.75	≤2.00	≤0.045	≤0.030	≤700	18.00-19.00	-	-	8.50-9.50	-

APPLICATIONS

- Pipes
- Aeronautical industry
- Resistors
- Automobile exhaust system

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	Densidad
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:

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

This type of ACX does not require heat treatment after welding. If the welding process involves sensitisation risks and will be exposed to aggressive environments that may cause intergranular corrosion, it is recommended to select type ACX 226 or ACX 227.

PITTING CORROSION

ACX 126 is used satisfactorily in environments with a chloride concentration of less 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 show corrosion rates of less than 0.10 mm/year in the following environments:

- 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 126 | AUSTENITIC STAINLESS STEEL



SPECIFICATIONS | Can be supplied in accordance with the requirements of standard 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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