FERRITIC STAINLESS STEEL ACX 560	
EN DESIGNATION	ASTM DESIGNATION
1.4526	AISI 436
X6CrMoNb17-1	S43600

DESCRIPTION

ACX 560 is a ferritic stainless steel stabilized with niobium and with an addition of molybdenum. It offers a remarkable combination of resistance to high temperatures and good formability and weldability properties, together with a high resistance to localized corrosion, thanks to its alloy with molybdenum.

CHEMICAL COMPOSITION

C	Si	Mn	P	S	Cr	Mo	Nb
≤0.025	≤1.00	≤1.00	≤0.040	≤0.015	16.00-18.00	0.80-1.40	[0.10 + 7(C+N)] a 1.00

APPLICATIONS

- Exhaust systems
- Pipes
- Home appliances

MECHANICAL PROPERTIES AFTER COLD ROLLING AND FINAL ANNEALING

$Rp_{0.2}$	>280 N/mm²
Rm	480 - 560 N/mm²
Elongation	> 25%
Hardness	< 180 HV

PHYSICAL PROPERTIES

At 20ºC it has a density of 7.7 kg/dm³ and a specific heat of 460 J/kg·K

	20ºC	100ºC	200ºC	300ºC	400ºC	500ºC
Modulus of elasticity (GPa)	300	270	210	205	195	-
Mean coefficient of linear expansion between 20ºC (10^{-6} x K^{-1}) and	-	10	10.5	10.5	10.5	11
Thermal conductivity (W/m·K)	25	-	-	-	-	-
Electrical resistivity (Ω·mm²/m)	0.70	-	-	-	-	-

WELDING

The recommended consumables:

Shielded electrodes	Wires and rods	Hollow electrodes
E 23 12 L ER 308 L ER 316 L	W 23 12 L (G.T.A.W) P 23 12 L (P.A.W) S 23 12 L (S.A.W) ER 308 L ER 316 L	T 23 12 L 308 L ER 316 L

CORROSION RESISTANCE

ACX 560 has high resistance to localized pitting corrosion due to the addition of chromium and molybdenum, which makes this steel competitive with AISI 304 grade.
The ACX 560 is resistant to the industrial atmosphere. This stainless can withstand condensation even on the pipes of the exhaust system.

RESISTANCE TO OXIDATION

ACX 560 has good resistance to oxidation in an oxidizing and sulfur-free atmosphere above 950ºC.

SPECIFICATIONS

ACX 560 can be supplied according to the requirements of EN-10088-2 and ASTM A240 / A240M standards.