



FERRITIC STAINLESS STEEL ACX 535	
EN DESIGNATION	ASTM DESIGNATION
1.4113	434
X6CrMo17-1	S43400

**DESCRIPTION** | ACX 535 is a variation of ACX 500 with molybdenum content, which increases its pitting and atmospheric corrosion resistance.

CHEMICAL COMPOSITION	C	Si	Mn	P	S	Cr	Mo
	≤0.08	≤1.00	≤1.00	≤0.040	≤0.015	16.00-18.00	0.90-1.25

**APPLICATIONS** |  
 - Façades  
 - Exhaust systems  
 - Household electrical appliances

MECHANICAL PROPERTIES AFTER COLD ROLLING AND FINAL ANNEALING	Property	Value
	<b>Rp<sub>0.2</sub></b>	>280 N/mm <sup>2</sup>
	<b>Rm</b>	450 - 630 N/mm <sup>2</sup>
	<b>Elongation</b>	> 22%
	<b>Hardness</b>	< 185 HB

**PHYSICAL PROPERTIES** | At 20°C it has a density of 7.7 kg/dm<sup>3</sup> and a specific heat of 460 J/kg·K

	20°C	100°C	200°C	300°C	400°C	500°C
<b>Modulus of elasticity (GPa)</b>	220	215	210	205	195	-
<b>Mean coefficient of linear expansion between 20°C (10<sup>-6</sup> x K<sup>-1</sup>) and</b>	-	10	10.5	10.5	10.5	11
<b>Thermal conductivity (W/m·K)</b>	25	26.5	28	30	31.5	32.5
<b>Electrical resistivity (Ω·mm<sup>2</sup>/m)</b>	0.70	0.75	0.80	0.90	1.00	1.10

**WELDING** | The recommended consumable electrodes are:

Shielded electrodes	Wires and rods	Hollow electrodes
E 19 12 L	G 19 12 3 L (GMAW) W 19 12 3 L (GTAW) P 19 12 3 L (PAW)	E 19 12 3 Nb
ER 316L	S 19 12 3 L (SAW) ER 316L	ER 316L

**PITTING CORROSION** | ACX 535 exhibits better pitting corrosion resistance than ACX 500, due to its molybdenum addition.

**STRESS CORROSION CRACKING** | As ferritic stainless steel, ACX 535 has good stress corrosion cracking resistance.



ATMOSPHERIC CORROSION | ACX 535 has good resistance in rural environments.

HIGH-TEMPERATURE OXIDATION RESISTANCE | This type of ferritic stainless steel shows good oxidation resistance at high temperature. Its maximum scale-breaking temperature is 815°C in continuous working.

SURFACE CLEANING | Wash the surface with neutral soap and water applied with a cloth or a brush without scratching the stainless steel. Then, always rinse the stainless steel with water to remove completely the cleaning agent. Finally, it is recommended to dry the surface to preserve a good superficial condition. In severe environments, a frequent cleaning is strongly recommended.

SPECIFICATIONS | It can be delivered according to EN 10088-2 and ASTM A-240 standard requirements.