



REFRACTORY AUSTENITIC STAINLESS STEEL ACX 325	
EN DESIGNATION	ASTM DESIGNATION
EN 1.4841	-
X15CrNiSi25-21	-

DESCRIPTION Refractory austenitic stainless steels have high mechanic resistance, tenacity, and excellent oxidation resistance in high temperature up to 1150 °C, due to its high chromium and nickel content. Low carbon content enables to reduce carbides precipitation while welding or high temperatures applications.

CHEMICAL COMPOSITION	C	Si	Mn	P	S	Cr	Ni	N
	≤0.80	1.50 - 2.50	≤2.00	≤0.045	≤0.015	24.00 - 26.00	19.00-22.00	≤0.11

APPLICATIONS

- Furnaces
- High temperature applications
- Air heaters
- Electrical resistors

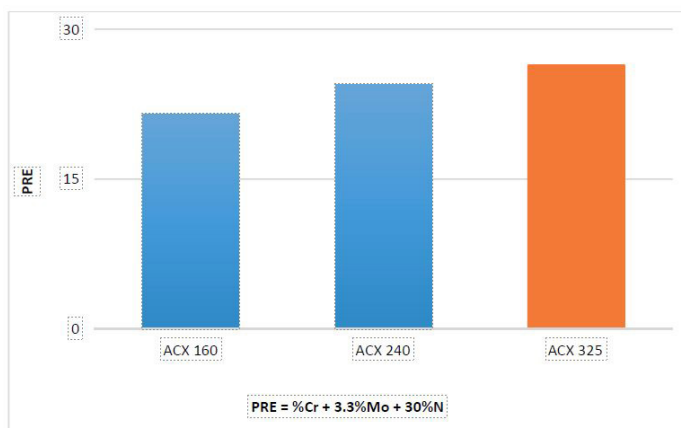
MECHANICAL PROPERTIES IN ANNEALING STATE	Annealing state
	ACX 325
R_{p0.2}	> 250 N/mm ²
R_m	450 - 650 N/mm ²
Elongation	> 30%

PHYSICAL PROPERTIES Density of 7.9 kg/dm³ and specific heat of 500 J/kg·K at 20°C

EN 10088-1	20°C	400°C	600°C	800°C	1000°C
Elasticity Modulus (GPa)	-	-	-	-	-
Mean coefficient of linear expansion between 20°C (10 x K)	15.5	17.0	17.5	18.0	19.0
Thermal conductivity (W/m·K)	15	-	-	-	-
Electrical resistivity (Ω·mm²/m)	0.90	-	-	-	-

WELDING ACX 325 is suitable for almost every conventional welding techniques, like MMA/SMAW, TIG, MIG, SAW, FCAW, laser, etc. Recommended welding material to ACX 325 are ER 310 (ACX 610) or ER 310S (ACX 610S).

CORROSION RESISTANCE Good corrosion resistance. Its relative pitting corrosion resistance inside the austenitic family is shown in the graph.



This stainless steel has good interstitial corrosion resistance due to its high nickel content.



**SURFACES
CLEANING**

Adequate cleaning practice to preserve surfaces indefinitely and obtain the best stainless steel performances is essential.

The use of water and neutral soap, applied with a cloth or a brush without scratching the stainless steel is recommended for proper cleaning. This process must end rinsing with water to obtain the complete cleaning product disposal. Chlorine products must be avoided. When its use is essential, the contact must be minimum and material has to be just rinsed with plenty of water.

SPECIFICATIONS

May be supplied according to standard requirements EN, ASTM, ASME, AMS, QQS, MILS.