

ACERINOX ROLDAN



ACX 917

DESIGNATION ASTM

A276

DESCRIPTION: Grade ACX 917 is an austenite-ferrite stainless steel (duplex). Thanks to this structure it combines excellent corrosion resistance with really interesting mechanical properties. Its chemical composition includes Molybdenum which increases its corrosion resistance against pitting. This grade is the perfect solution for extreme environments where durability is a must.

CHEMICAL COMPOSITION

L I	ACX 917	С	Mn			Si	Cr	Ni	Мо	Ν
•.	EN 1.4462	≤0.030	≤2.00	≤0.035	≤0.015	≤1.00	21.0 - 23.0	4.5 - 6.5	2.5 - 3.5	0.10 - 2.22
	UNS \$32205	≤0.030	≤2.00	≤0.030	≤0.020	≤1.00	22.0 - 23.0	4.5 - 6.5	3.0 - 3.5	0.14 - 0.20
	ACX917 Standard	0.020	1.60	0.025	0.01	0.40	22.40	4.75	3.3	0.180
										A CONTRACTOR

MECHANICAL
PROPERTIES
TABLE:

Roldan Stardar Property Internation Standar

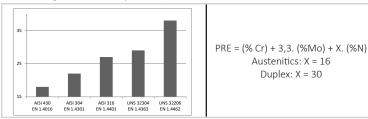
0.2 Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Hardness (HB)	
650	820	35	245	
600	800	35	240	
660- 850	840 - 1040	15 - 35	240-290	
≥ 450	≥ 655	≥ 25	≤ 290	
≥ 450	≥ 650	≥ 25	≤ 270	
≥ 500	R _{p0.2%} ≥ 1.1	14		
	(MPa) 650 600 660-850 ≥ 450 ≥ 450	(MPa) (MPa) 650 820 600 800 $660-850$ $840-1040$ ≥ 450 ≥ 655 ≥ 450 ≥ 650	(MPa) (MPa) (%) 650 820 35 600 800 35 $660-850$ $840-1040$ $15-35$ ≥ 450 ≥ 655 ≥ 25 ≥ 450 ≥ 650 ≥ 25	

CORROSION

Superior characteristics to AISI 316 grade.

RESISTANCE:

Corrosion resistance improved due to the increase content of Cr with respect to Austenitics grades. The N and Cr content improved crevice corrosion resistance as well as by pitting. PRE (Pitting Resistance Equivalent)



MECHANICAL **PROPIERTIES:**

Yield strength and tensile strength are higher than AISI 304L / 316L and UNS 32304 grades Suitable for temperature ranges from -50°C to 300°C

Mechanical properties according to standard EN10088

EN	Grade (equivalent)	Re 0,2% min. N/mm ² (Yield strength)	Rm min. N/mm² (Tensile strength)	A5 Mini.% (Elongation)	
1.4301	1.4301 304 190 1.4404/1.4571 316L 200		500	45	
1.4404/1.4571			500	40	
1.4362	2304	400	600	25	
1.4462	2205	450	655	25	

USES:	 S: Where AISI 316L grade does not reach the necessary WELDING corrosion resistance level. Under the sea. Pulp & Paper Industry. Tubing and storage in chemical products tanks. Mining. Structural. Desalination Plants. Oil drilling platform. Heat interchange. 						Good weldability (except oxy-fuel). Less sensitive to hot craking due to duplex structure. Recommendation EN 1.4462
STANDARDS:	XP A35-014	UNE 36067	BS 6744	ASTM A955	TC 104WI EC104031:2	016	III 1 1 1 1 1 1 1 1 1 1



DISCLAIMER. The content of this technical datasheet has been made as a quide for ACERINOX customers, however, the material within does not pretend to replace the procedures of any person, and should not be used for any specific or general applicati DISCLAMMER. The content of this technical datasheet has been made as a guide for ACERINOX customers, however, the material within does not pretend to replace the procedures of any person, and should not be used for any specific org eneral applicable without previous competent advising. Also, ACERINOX denia myrespons, however, the material within does not pretend to replace the procedures of any person, and should not be used for any specific of or any particular purpose, or the yielding or selection of the steel grade, unless ACERINOX and the used for any particular purpose, or the yielding or selection of the steel grade, unless ACERINOX and the use of the steel prade unless ACERINOX and the use of the purpose. selection, The material within this data sheet does not pretend to be a complete and thorough statement of all of the relevant material applicable to steel products in general, neither a representation, condition or guarantee, either explicit or implicit, is give by ACERINOX in regard to the accuracy or integrity of this data sheet. ACERINOX will not be held responsible for any direct information, indirect or consequent los, damage or injury suffered by any person, caused as a result of trusting in any declaration or mainsion in this data sheet, and any other responsibility is expressly adued. ACERINOX will not be held responsible for breakdowns, malfunctions, or errors, due to a defective design, material or use of the steel grade, either based on the information with this document or not, and will not be, under any circumstance, responsible for any damage, whether direct or indirect, particularly the latter, including, but not limited to damages or loss of earnings.