

ACERINOX ROLDAN

ACX 915

DESIGNATION ASTM



DESCRIPTION:

Grade ACX 915 is an austenite-ferrite stainless steel (duplex). Thanks to this structure it combines excellent corrosion resistance with really interesting mechanical properties. In addition it is a low alloy grade (lean duplex), what makes it highly appreciated by civil engineers for long-term execution works.

A276

CHEMICAL COMPOSITION:

ACX 915	С	Mn			Si	Cr	Ni	Мо	Ν	Cu
EN 1.4362	≤0.030	≤2.00	≤0.035	≤0.015	≤1.00	22.0 - 24.0	3.5 - 5.5	0.1 - 0.6	0.05 - 0.20	0.1 - 0.6
UNS S32304	≤0.030	≤2.50	≤0.040	≤0.030	≤1.00	21.5 - 24.5	3.0 - 5.5	0.05 - 0.6	0.05 - 0.20	0.05 - 0.60
ACX915 Standard	0.020	1.600	0.025	0.01	0.550	22.80	4.25	0.200	0.160	0.300
	ACX 915 EN 1.4362 UNS S32304 ACX915 standard	ACX 915 C EN 1.4362 ≤0.030 UNS S32304 ≤0.030 ACX915 standard 0.020	ACX 915 C Mn EN 1.4362 ≤0.030 ≤2.00 UNS S32304 ≤0.030 ≤2.50 ACX915 Standard 0.020 1.600	ACX 915 C Mn P EN 1.4362 \$0.030 \$2.00 \$0.035 UNS \$32304 \$0.030 \$2.50 \$0.040 ACX915 \$tandard 0.020 1.600 0.025	ACX 915 C Mn P S EN 1.4362 \$0.030 \$2.00 \$0.035 \$0.015 UNS \$32304 \$0.030 \$2.50 \$0.040 \$0.030 ACX915 \$tandard 0.020 1.600 0.025 0.01	ACX 915 C Mn P S Si EN 1.4362 ≤0.030 ≤2.00 ≤0.035 ≤0.015 ≤1.00 UNS S32304 ≤0.030 ≤2.50 ≤0.040 ≤0.030 ≤1.00 ACX915 Standard 0.020 1.600 0.025 0.01 0.550	ACX 915 C Mn P S Si Cr EN 1.4362 \$0.030 \$2.00 \$0.035 \$0.015 \$1.00 \$2.0-24.0 UNS \$32304 \$0.030 \$2.50 \$0.040 \$0.030 \$1.00 \$21.5-24.5 ACX915 \$tandard 0.020 1.600 0.025 0.01 0.550 \$22.80	ACX 915 C Mn P S Si Cr Ni EN 1.4362 \$0.030 \$2.00 \$0.035 \$0.015 \$1.00 \$2.0 - 24.0 \$3.5 - 5.5 UNS \$32304 \$0.030 \$2.50 \$0.040 \$0.030 \$1.00 \$21.5 - 24.5 \$3.0 - 5.5 ACX915 \$tandard 0.020 1.600 0.025 \$0.01 0.550 \$2.80 \$4.25	ACX 915 C Mn P S Si Cr Ni Mo EN 1.4362 ≤0.030 ≤2.00 ≤0.035 ≤0.015 ≤1.00 22.0-24.0 3.5-5.5 0.1-0.6 UNS S32304 ≤0.030 ≤2.50 ≤0.040 ≤0.030 ≤1.00 21.5-24.5 3.0-5.5 0.05-0.6 ACX915 Standard 0.020 1.600 0.025 0.01 0.550 22.80 4.25 0.200	ACX 915 C Mn P S Si Cr Ni Mo N EN 1.4362 \$0.030 \$2.00 \$0.035 \$0.015 \$1.00 \$2.0-24.0 \$3.5-5.5 \$0.1-0.6 \$0.5-0.20 UNS \$32304 \$0.030 \$2.50 \$0.040 \$1.00 \$21.5-24.5 \$3.0-5.5 \$0.5-0.20 ACX915 \$tandard \$0.020 \$1.00 \$0.025 \$0.10 \$2.50 \$4.25 \$0.200 \$0.160

MECHANICAL PROPERTIES

TABLE:

International Standars:

Ilustrative mechanical properties	0.2 Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Hardness (HB)	
Reinforcement (3 - 50 mm)	530- 650	720-860	14-50	210-245	
Wire rod (5,5 - 41,5 mm)	440- 650	720-860	30- 60	210- 245	
Bar (5- 52 mm)	650- 880	830- 1070	12-40	240- 315	
ASTM A-276	≥ 400	≥ 600	≥ 25	≤ 290	
EN 20088-3 Wire rod	≥ 400	≥ 600	≥ 25	≤ 290	
BS 6744	≥ 500	≥ 550	14	-	

CORROSION RESISTANCE:

- Similar characteristics to 316
- Improves the corrosion resistance under stress in comparison to grades AISI 304L / 316 L $\,$

PRE (Pitting Resistance Equivalent)



MECHANICAL PROPIERTIES COMPARATIVE:

- The yield strength and the tensile strength are higher than in grades AISI 304L / 316L
- Satisfactory in temperature range from -40°C a 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	304	190	500	45	
1.4404/1.4571	316L	200	500	40	
1.4362	\$32304	400	600	25	

WELDING: APPLICATIONS: Same uses than steel grades AISI 304L/ 316L. • TIG Welding, Plasma, MIG, SMAW, ٠ Paper and Pulp industries. SAW, FCAW. • Organic acids (caustic solutions). Less sensibility to cracks at high . Food industry. temperatures, due to its duplex Construction purposes. structure. Desalinisations. Recommendation EN 1.4462. Oil Platforms. STANDARDS: XP A35-014 UNE 36067 BS 6744 ASTM A955 TC 104WI EC104031:2016

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