

ACERINOX	ROLDAN
<b>ACX 915</b>	
DESIGNATION ASTM	A276



**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.

**CHEMICAL COMPOSITION:**

ACX 915	C	Mn	P	S	Si	Cr	Ni	Mo	N	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

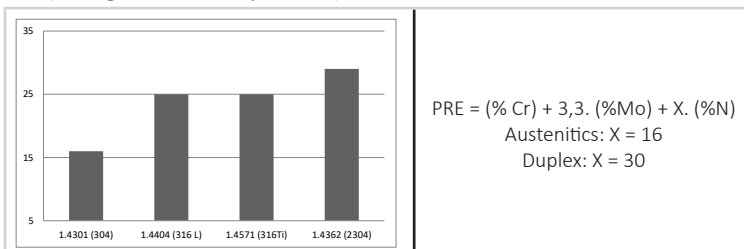
**MECHANICAL PROPERTIES TABLE:**

Illustrative 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 PROPERTIES 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 <sup>2</sup> (Yield strength)	Rm min. N/mm <sup>2</sup> (Tensile strength)	A5 Mini.% (Elongation)
1.4301	304	190	500	45
1.4404/1.4571	316L	200	500	40
1.4362	S32304	400	600	25

**APPLICATIONS:**

- Same uses than steel grades AISI 304L/ 316L.
- Paper and Pulp industries.
- Organic acids (caustic solutions).
- Food industry.
- Construction purposes.
- Desalinisations.
- Oil Platforms.

**WELDING:**

- TIG Welding, Plasma, MIG, SMAW, SAW, FCAW.
- Less sensibility to cracks at high temperatures, due to its duplex structure.
- Recommendation EN 1.4462.

**STANDARDS:**

XP A35-014	UNE 36067	BS 6744	ASTM A955	TC 104WI EC104031:2016
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