

# Cor-A-Rosta® P316L

## TOP FEATURES

- Improved quality of welds, higher current density coming from the nature of cored wires eliminates typical disadvantages of GMAW and SMAW welding
- Reduced welding cost compared to GMAW
- Very good weld appearance and regularity, optimal slag system helps to achieve best results.

## TYPICAL APPLICATIONS

- Steel construction
- Shipbuilding
- Chemical industry
- Food processing and brewery

## CLASSIFICATION

AWS A5.22 E316LT1-1/-4  
 EN ISO 17633-A T 19 12 3 L P C/M 2

## CURRENT TYPE

DC+

## WELDING POSITIONS

All except vertical down

## SHIELDING GASES (ACC. EN ISO 14175)

M21 Mixed gas Ar+ (>15-25%) CO<sub>2</sub>  
 C1 Active gas 100% CO<sub>2</sub>  
 Gas flow 15-25l/min

## APPROVALS

ABS	DNV	TÜV
+	+	+

## CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, ALL WELD METAL

Shielding gas	C	Mn	Si	Cr	Ni	Mo	FN (acc.WRC 1992)
M21/C1	0.03	1.3	0.5	19	12	2.7	6

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-110°C
Required: AWS A5.22			not specified	min. 485	min. 30		
EN ISO 17633-A			min. 320	min. 510	min. 20		
Typical values	M21/C1	AW	440	580	38	70	40

\* AW = As welded

## PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.2	SPOOL (S200)	5.0	585353
	SPOOL (S300)	15.0	585322

### TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing.  
Please refer to [www.lincolnelectric.eu](http://www.lincolnelectric.eu) for any updated information.