ULTRACORE® STAINLESS FCP 308L, 309L, 316L

DOWNHAND AND ALL POSITION STAINLESS FLUX-CORED WIRE

LINCOLN ELECTRIC

Demanding Applications

Demand Dependable Welds

Corrosive industrial environments present unique demands on welds - causing dull, brittle, or pitted weld deposits. Our UltraCore® Austenitic Stainless FCP wires are up for this challenge.

UltraCore Stainless flux-cored wires deliver the performance needed in such demanding applications. Our design and formulation provide welds to withstand some of the harshest industrial conditions - and maintain their integrity in all positions.

The UltraCore family of stainless flux-cored wires is preferred by welders for effortless slag removal, shiny weld deposits, and trouble-free feeding, while producing high strength weld deposits.

Designed for quality, consistency and performance.

The superior weld performance of UltraCore flux-cored stainless wires appeal to *EVERY* welder.

Welders Choose UltraCore

Welders will enjoy minimal spatter, smooth arc, exceptional puddle wetting and control. In addition, you can expect consistent, trouble-free feeding throughout the weld cycle. The end result is shiny, smooth welds with both CO_2 and mixed shielding gas.

High Performance Welds

Weld with UltraCore flux-cored stainless products, and you will enjoy effortless slag removal, and very little residuals surrounding the weld deposit - minimizing post weld cleanup. There is no undercut with stringer and weave techniques. With its superior arc performance and bead shape, UltraCore stainless products are the choice for demanding applications.

Mechanical Robustness

UltraCore FCP 308/308L, 309/309L and 316/316L are dual-classified products that are low in carbon and high in strength. This dual-classification allows for one product to be used in high and low strength applications. All are Q2 Lot®-Certified, ensuring repeatable results. Q2 Lot certificates show actual deposit composition and ferrite number (FN) and are available online.

Welding Positions »

All

Shielding Gas »

100% CO_2
75% Argon / 25% CO_2

Conformances »

AWS A5.22/A5.22M: 2012 & ASME SFA-A5.22:

E308LT1-1, E308LT1-4, E308T1-1, E308T1-4

E309LT1-1, E309LT1-4, E309T1-1, E309T1-4

E316LT1-1, E316LT1-4, E316T1-1, E316T1-4

ABS:

E308LT1-1, E308LT1-4, E308T1-1, E308T1-4

E309LT1-1, E309LT1-4, E309T1-1, E309T1-4

E316LT1-1, E316LT1-4, E316T1-1, E316T1-4

CWB/CSA W48-06:

E308LT1-1, E308LT1-4
E309T1-1, E309T1-4
E316LT1-1, E316LT1-4

DIAMETERS / PACKAGING

Diameter in (mm)	ULTRACORE FCP 308L 25 lb (11.3 kg) Plastic Spool (Vacuum Sealed Foil Bag)	ULTRACORE FCP 309L 25 lb (11.3 kg) Plastic Spool (Vacuum Sealed Foil Bag)	ULTRACORE FCP 316L 25 lb (11.3 kg) Plastic Spool (Vacuum Sealed Foil Bag)
0.045 (1.1)	ED027949	ED033010	ED033012
1/16 (1.6)	ED027950	ED033011	ED033013

MECHANICAL PROPERTIES[1] *–As Required per AWS A5.22/A5.22M: 2012*

		Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Ferrite Number
ULTRACORE FCP 308L	**Requirements -** AWS E308LT1-1, E308LT1-4 AWS E308T1-1, E308T1-4	Not Specified Not Specified	520 (75) min 550 (80) min	35 min	Not Specified Not Specified
	Typical Results[3] - As-Welded with 100% CO_2 As-Welded with 75% Ar/25% CO_2	386 (56) 393 (57)	566 (82) 572 (83)	40 39	7-11 8-12
ULTRACORE FCP 309L	**Requirements -** AWS E309LT1-1, E309LT1-4 AWS E309T1-1, E309T1-4	Not Specified Not Specified	520 (75) min 550 (80) min	30 min	Not Specified Not Specified
	Typical Results[3] - As-Welded with 100% CO_2 As-Welded with 75% Ar/25% CO_2	434 (63) 450 (65)	565 (82) 593 (86)	33 33	* 21-30
ULTRACORE FCP 316L	**Requirements -** AWS E316LT1-1, E316LT1-4 AWS E316T1-1, E316T1-4	Not Specified Not Specified	520 (75) min 550 (80) min	30 min	Not Specified Not Specified
	Typical Results[3] - As-Welded with 100% CO_2 As-Welded with 75% Ar/25% CO_2	414 (60) 421 (65)	552 (80) 565 (82)	34 34	6-8 8-11

[1] Typical all weld metal, DC+. [2]Measured with 0.2% offset. [3]See test results disclaimer below. [*] A typical certification for UltraCore FCP 309L electrode under 100% CO2 shielding gas (per E309T1-1 classifications) is available on request NOTE: Increase voltage by 2V when using 100% CO_2

IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED

Fumes from the normal use of some welding products can contain significant quantities of components - such as chromium and manganese - which can lower the 5.0 mg/m^3 maximum exposure guideline for general welding fume.
BEFORE USE, READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET (MSDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

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.

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