Supercore™ 316LCF

TOP FEATURES

- Controlled Low Ferrite (Range 2-5)
- Charpy V-Notch test results capable of exceeding 27 J @ -196°C
- Exceeds 0.38 mm of lateral expansion @ -196°C

TYPICAL APPLICATIONS

- Cryogenic Applications
- LPG & LNG Storage Vessels
- Power Generation

CLASSIFICATION

AWS A5.22	E316LT1-1/4J
EN ISO 17633-B	TS316L-FM1*

* Nearest classification

CURRENT TYPE

DC+

WELDING POSITIONS

All

SHIELDING GASES (ACC. EN ISO 14175)

M21	Mixed gas Ar+ 15-25% CO_2
Flow rate	15-25 l/min

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

	C	Mn	Si	S	P	Cr	Ni	Mo *	Cu	FN
Typical	0.03	1.4	0.6	0.01	0.02	18.0	12.4	2.2	0.1	3

*Does not conform to ISO 17633-A which requires Mo 2.5 – 3.0%.

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	0.2% Proof strength (MPa)	Tensile strength (MPa)	Elongation (%)		Reduction of area (%)	Impact ISO-V (J)			Lateral expansion (mm) -196°C
				4d	5d		+20°C	-20°C	-50°C	
Required: AWS A5.22		320	510	30	25	-	-	-	-	0.38
Typical values	AW	410	550	40	38	45	75	45	34	0.70

AW = As welded

- = not specified

Batch tested for Charpy lateral expansion >0.38mm at –196°C.

AVAILABLE SIZES AND PACKAGING INFORMATION

Wire diameter (mm)	Packaging	Weight (kg)	Item number
1.2	SPOOL (S300)	15.0	SC316LCF-12

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 for any updated information.