

ER316LCF

SAW

SOLID WIRE FOR CRYOGENIC 316L APPLICATIONS

PRODUCT DESCRIPTION

Solid wire for sub-arc welding.

CLASSIFICATIONS

AWS A5.9M	ER316L
ISO 14343-A	S 19 12 3 L
ISO 14343-B	SS316L

ASME IX QUALIFICATION

QW432	F-No 6
QW442	A-No 8

CHEMICAL COMPOSITION (WIRE WT %)

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	FN
Min.	--	1.0	0.30	--	--	18.0	11.0	2.5	--	3
Max.	0.025	2.0	0.65	0.020	0.030	20.0	14.0	3.0	0.3	8
Typical	0.01	1.4	0.5	0.01	0.015	18.5	12.8	2.6	0.15	6

ALL-WELD MECHANICAL PROPERTIES

As welded	Min.	Typical SAW + P2007
Tensile strength (MPa)	510	560
0.2% proof strength (MPa)	320	400
Elongation (%) 4d	30	41
5d	25	37
Impact ISO-V(J) -130°C	--	> 45
-196°C	--	40
Lateral expansion * (mm) -196°C	0.38	0.5

* ER316LCF SAW wire batch tested, with P2007 flux for Charpy lateral expansion >0.38mm at -196°C.

TYPICAL OPERATING PARAMETERS

Flux	Current	Diameter (mm)	Voltage
P2007	DC+	2.4	350A, 28V

PACKAGING DATA

Diameter (mm)	Weight (kg)	Packaging	Item number
2.4	25	B415	SAER316LCF24
3.2	25	B415	SAER316LCF-32

STAINLESS STEELS