

# GRITINOX 316L

## IDENTIFICATION

GRITINOX 316L E 316L-17

## CLASSIFICATION

AWS/SFA 5.4: E316L-17

BS 2926-1984 19.12.3.LR DIN 8556 19.12.3 LR26

## DESCRIPTION

A rutile flux coated electrode intended for welding of low carbon, molybdenum alloyed, acid resisting austenitic stainless steel of similar composition (316L). Operability is excellent with a low spatter arc, producing an exceptionally good weld bead appearance. The deposited weld metal is of X-ray quality.

## WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	Cr	Ni	Cu	Mo	S	P
0.04 max	0.5 - 2.5	0.30 - 0.90	17 - 20	Nov-14	0.75 max	2.0 - 3.0	0.03 max	0.04 max

## MECHANICAL PROPERTIES (RANGE)

UTS (MPa)	EL (%) (L=4D)	CVN Impact Value	
		Temp	Joules
530 - 640	35 - 45	20°C	60 - 105

## TYPICAL APPLICATIONS

For welding ASTM/ASME 316, 316L, 316LN, Cast CF3M, CF8M, DIN 1.4404/1.4401, 1.4403, 1.4436, Nb or Ti stabilised 316 grade stainless steel provided service temperatures are below 400°C. Fabrication of stainless steel structures and assemblies such as plate, pipe work, vessels, tanks, forgings and castings in the chemical, power and pharmaceutical industries, food, drink and paper processing plant.

## CORROSION RESISTANCE

Good resistance to general and intergranular corrosion in the severe & non-oxidising environments e.g. dilute hot-acids. Good resistance to chloride pitting resistance.

**MICROSTRUCTURE** : Austenite with 3 to 9 FN (3-8% Ferrite) Typical 6 FN

**ASME IX QUALIFICATION** : QW-432 F-NUMBER 5, QW-442 A-NUMBER 8

**REDRYING** : 300°C / 2 hrs, max 5 cycles, 10 hr. total.

**WELDING POSITION** :

**PACKING PARAMETERS**

Size (mm)	Length (mm)	AMPS AC / DC (+)	Packing / Box (kg)	Packing / Box (Pcs)
2.5	350	50 - 75	2 x 5 = 10	94 x 5 = 470
3.15 / 3.20	350	80 - 120	2 x 5 = 10	60 x 5 = 300
4	350	100 - 160	2 x 5 = 10	38 x 5 = 190
5	350	130 - 210	2 x 5 = 10	24 x 5 = 120