

# SUNMIG 316L

Low Carbon Austenitic Stainless Steel Solid Welding Wire



## CLASSIFICATION

AWS/SFA 5.9 : ER316L

## CHARACTERISTICS

SUNMIG 316L is a solid bare filler wire, typically produces weld metal containing 19% Cr, 12.5% Ni and 2.5% Mo. Presence of Molybdenum creep resistance at elevated temperatures upto 850°C. Offers improved corrosion and pitting resistance in marine and industrial environment. Low amount of Carbon (0.03% max) in the weld metal ensures freedom from intergranular cracking. It provides radiographic quality welds.

## APPLICATIONS

SUNMIG 316L is suitable for welding of austenitic alloys represented by AISI 316, 316L, 317, 317L, 318 types and welding of stainless steel in similar composition in wrought or cast form and for overlay application to resist heat and corrosion. It is suitable for industries like rayon, dye, paper and pulp, paint, chemical, fertilizers, petrochemical etc.

## **SPECIFIED CHEMICAL COMPOSITION OF BARE SOLID WIRE (%):**

C	Mn	Si	Cr	Ni	Mo	S	P
0.03 max	1.0-2.5	0.30-0.65	18.0-20.0	11.0-14.0	2.0-3.0	0.03 max	0.03 max

## **SPECIFIED MECHANICAL PROPERTIES OF ALL WELD METAL:**

Ultimate Tensile Strength (N/mm <sup>2</sup> )	Elongation (%) GL=5d
490.0 min	30.0 min

Mechanical properties will vary with the type of shielding gas used.

## **PACKING DATA:**

Diameter (mm)	KG/spool
0.80	12.5 Kg
1.20	12.5 Kg
1.60	12.5 Kg
2.00	12.5 Kg

**SHIELDING GAS** : 98% Argon – 2%O<sub>2</sub> or Argon-1%-5% CO<sub>2</sub>

**GAS FLOW** : 15-22 L/min

**CURRENT** : DCEP