

## 316L

### Comparable specifications

ASME SFA A 5.4: E316L  
ISO 3581A: E19 12 3 L

### Description and applications\*

\* *Illustrative, not-exhaustive list*

Austenitic stainless steel filler metal with a low carbon content, which reduces the possibility of intergranular precipitation on the weld metal deposited and thereby increases the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium. The presence of molybdenum provides creep resistance and increased ductility at elevated temperatures.

This grade may be used for welding and cladding on austenitic Cr-Ni-Mo stainless steels and clad plates, at service temperatures from -120°C up to 400°C, e.g. in the chemical and petrochemical industry, in refineries, in the food processing industry and for ship building to weld pipes, tanks, heat exchangers.

Intended use: core wire for electrodes.

### Weldable base materials\*

\* *Illustrative, not-exhaustive list*

All 300 series austenitic stainless steel, mainly low-carbon molybdenum-bearing

### All-weld metal mech. properties\*

\* *For reference only values*

Tensile strength (Rm):  $\geq 490 \text{ N/mm}^2$   
Elongation:  $\geq 30\%$

### Chemical composition\*

\* *For reference only values*

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	Co
max	1.60	0.05	max	max	11.20	18.20	2.50	max	max
0.020	1.80	0.15	0.120	0.018	11.80	19.00	2.80	0.10	0.10

### Standard packaging data\*

Welding process	Product type	Ø mm (inches)	Packing type	Weight kg (lbs)	Length mm (inches)
SMAW **	core wire for electrodes	1.60 - 5.00 (1/16 - 0.197)	wooden boxes	500 - 750 (1100 - 1650)	250 - 450 (10 - 18)

\* *Other sizes and packing types are available upon request*

\*\* *SMAW: shielded metal arc welding*

### Marking

The outside of each unit package is suitably labelled with at minimum the following data: grade, diameter, heat, lot no., classifications.

Customized labels are available upon request.

### Lot classification

All our productions fulfil the **Class S3** requirements acc. to EN ISO 14344.