

317L

Comparable specifications

ASME SFA A 5.9: ER317/317L
EN ISO 14343-A: 18 15 3 L
Werkstoff Nr.: 1.4438

Description and applications*

* *Illustrative, not-exhaustive list*

Austenitic stainless steel filler metal usually used for welding alloys of similar composition. It is utilized in severely corrosive environments where crevice and pitting corrosion are of concern.

The low carbon content reduces the possibilities of intergranular carbide precipitation: this increases the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium. This low-carbon alloy, however, may not be as strong at elevated temperature as the niobium-stabilized alloy or Type 317.

Weld deposit is similar to 316L, with a high molybdenum content.

This grade may be used for:

- joining stainless CrNiMo steels e.g. 317L or similar;
- applications in chemical and petrochemical industries, as well as in marine environments, papermaking and food processing.

Weldable base materials*

* *Illustrative, not-exhaustive list*

Stainless CrNiMo steels e.g. 317L or similar.

All-weld metal mech. properties*

* *For reference only values*

Tensile strength (Rm): $\geq 480 \text{ N/mm}^2$ **Yield Strength (Rp_{0.2}):** $\geq 300 \text{ N/mm}^2$
Elongation: $\geq 25\%$

Chemical composition*

* *For reference only values*

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
max	1.00	0.30	max	max	13.00	18.50	3.00	max
0.03	2.50	0.65	0.030	0.030	15.00	20.50	4.00	0.75

Standard packaging data*

Welding process	Product type	Ø mm (inches)	Packing type	Weight kg (lbs)	Length mm (inches)
GMAW **	filler wire	0.80 - 1.20 (0.030 - 0.047)	spools BS300 / D300	15 (33)	n.a.
GTAW **	filler rod	1.60 - 4.00 (1/16 - 5/32)	cardboard boxes / tubes	5 (11)	1000 (39.4)
SAW **	filler wire	1.60 - 4.00 (1/16 - 5/32)	basket rims B450	25 (55)	n.a.

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

** *GMAW: gas metal arc welding; GTAW: gas tungsten arc welding; SAW: submerged arc welding*

Marking

Each filler rod for GTAW welding is durably marked with an identification traceable to the unique product type. Welding filler materials wound on spools or in coils are durably marked on the coil or spool with an identification traceable to the unique product type.

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.

Type approvals

Canadian Welding Bureau Cert. nr. NOV317L (GMAW / GTAW)

Lot classification

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