

TECHNICAL DATA SHEET

ALUMINUM ALLOY FILLER METAL



308AWS

Comparable specifications

ASME SFA A 5.9: ER308L

EN ISO 14343-A: 19 9 L

Werkstoff Nr.: 1.4316

Description and applications*

* Illustrative, not-exhaustive list

Austenitic stainless steel filler metal with a low carbon content, which reduces the possibilities of intergranular carbide precipitation, while increasing the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium.

Good general corrosion resistance and good resistance to nitric acid.

Strength down to -196°C.

This grade may be used for:

welding and overlay of base metals of similar composition such as AISI 304 and 304L;

applications where a good atmospheric corrosion resistance in urban and rural medias is expected;

applications for food processing and chemical industry;

pipes/tubes and boiler engineering.

Weldable base materials*

All 300 series austenitic stainless steel

* Illustrative, not-exhaustive list

All-weld metal mech. properties*

* For reference only values

Tensile strength (Rm): ≥ 510 N/mm²

Yield Strength (Rp_{0.2}): ≥ 320 N/mm²

Elongation: $\geq 25\%$

Charpy-V Impact (R.T.): ≥ 80 J

Chemical composition*

* For reference only values

| C | Mn | Si | S | P | Ni | Cr | Mo | Cu |
|------|------|------|-------|-------|-------|-------|------|------|
| max | 1.00 | 0.30 | max | max | 9.00 | 19.50 | max | max |
| 0.03 | 2.50 | 0.65 | 0.020 | 0.030 | 11.00 | 21.00 | 0.50 | 0.50 |

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.

 marking type-testing performed and available.

Customized labels are available upon request.

Type approvals

Canadian Welding Bureau Cert. nr. NOV308L (GMAW / GTAW)

DB Zulassungs nr. 43.097.04 (GMAW / GTAW)

TUV Nord Kennblatt nr. 10235 (GMAW) TUV Nord Kennblatt nr. 10236 (GTAW)

Lot classification

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