

308LSi

Comparable specifications

ASME SFA A 5.9: ER308LSi
EN ISO 14343-A: 19 9 L Si
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. The high silicon content improves the usability of the filler metal in the gas metal arc welding process.

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*

* *Illustrative, not-exhaustive list*

All 300 series austenitic stainless steel

All-weld metal mech. properties*

* *For reference only values*

Tensile strength (Rm): $\geq 510 \text{ N/mm}^2$ **Yield Strength (Rp_{0.2}):** $\geq 320 \text{ N/mm}^2$
Elongation: $\geq 25\%$ **Charpy-V Impact (R.T.):** $\geq 80 \text{ J}$

Chemical composition*

* *For reference only values*

| C | Mn | Si | S | P | Ni | Cr | Mo | Cu |
|------|------|------|-------|-------|-------|-------|------|------|
| max | 1.00 | 0.65 | max | max | 9.00 | 19.50 | max | max |
| 0.03 | 2.50 | 1.00 | 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) |


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

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

DB Zulassungs nr. 43.097.11 (GMAW / GTAW)
Canadian Welding Bureau Cert. nr. NOV308LS (GMAW / GTAW)
TUV Nord Kennblatt nr. 04024 (GMAW) **TUV Nord** Kennblatt nr. 04025 (GTAW)

Lot classification

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