

## 308L-N

### 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.

Its chemical composition, with limits stricter than the common ER308L, has been specifically designed in order to satisfy the requirements of main WPS of nuclear projects.

This grade may be used, in particular, 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 into nuclear 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):  $\geq 510$  N/mm<sup>2</sup>  
Elongation:  $\geq 25\%$

Yield Strength (Rp<sub>0.2</sub>):  $\geq 320$  N/mm<sup>2</sup>  
Charpy-V Impact (R.T.):  $\geq 80$  J

### Chemical composition\*

\* For reference only values

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
max	1.30	0.30	max	max	9.90	19.60	max	max
0.015	1.60	0.60	0.014	0.015	11.00	21.00	0.30	0.08

### 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.

### Lot classification

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