MasterWeld
The Welder's Ultimate Choice

TECHNICAL DATA SHEET
STAINLESS STEEL FILLER METAL

308L

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*

* *Illustrative, not-exhaustive list*

All 300 series austenitic stainless steel

All-weld metal mech. properties*

* *For reference only values*

Tensile strength (Rm): ≥ 510 N/mm^2
Yield Strength ($Rp_{0.2}$): ≥ 320 N/mm^2
Elongation: ≥ 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

Lot classification

Class S3 requirements acc. to EN ISO 14344.