

316L

Comparable specifications

ASME SFA A 5.9: ER316L
EN ISO 14343-A: 19 12 3 L
Werkstoff Nr.: 1.4430

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, and thereby increases the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium.

The presence of molybdenum provides creep resistance in a halide atmosphere. It is slightly magnetic.

This grade may be used for:

- welding low-carbon molybdenum-bearing austenitic alloys;
- joining and surfacing of stainless steels of similar composition (CrNi and CrNiMo steels/cast steels);
- joining of all austenitic stainless steels;
- applications as capweld for the clad side of plates having equivalent coating;
- applications for food processing and dairy industry.

Weldable base materials*

* *Illustrative, not-exhaustive list*

All 300 series austenitic stainless steel, mainly low-carbon molybdenum-bearing

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	0.30	max	max	11.00	18.00	2.50	max
0.03	2.50	0.65	0.020	0.030	14.00	20.00	3.00	0.50

Lot classification

Class S3 acc. to EN ISO 14344.

