

## 316LSi

### Comparable specifications

**ASME SFA A 5.9:** ER316LSi  
**EN ISO 14343-A:** 19 12 3 L Si  
**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, while increasing the resistance to intergranular corrosion without the use of stabilizers such as niobium or titanium. The higher silicon content improves the usability of the filler metal in the gas metal arc welding process.

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

This grade may be used for:

- welding low-carbon molybdenum-bearing austenitic alloys;
- joining and surfacing of stainless steels type 316, 316L and 316Ti;
- applications as capweld for the clad side of plates having equivalent coating;
- applications for food processing and chemical industry; applications for household (e.g. hot water tanks), building (e.g. architectural and roofing) and ship building;
- applications where a very good corrosion resistance is required, such as in acid media a/o in chlorinated solutions.

### Weldable base materials\*

\* *Illustrative, not-exhaustive list*

All 300 series austenitic stainless steel, particularly 316 and 316L

### All-weld metal mech. properties\*

\* *For reference only values*

**Tensile strength (R<sub>m</sub>):** ≥ 510 N/mm<sup>2</sup>      **Yield Strength (R<sub>p0.2</sub>):** ≥ 320 N/mm<sup>2</sup>  
**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	0.65	max	max	11.00	18.00	2.50	max
0.03	2.50	1.00	0.020	0.030	14.00	20.00	3.00	0.50

### Lot classification

Class S3 acc. to EN ISO 14344.

