

# Technical Data Sheet

## UGIWELD™ 308LT

### Chemical composition (%)

C	Si	Mn	Ni	Cr	Mo	Cu
≤ 0.03	≤ 0.65	1.0 – 2.5	9.0 – 11.0	19.5 – 21.0	≤ 0,5	≤ 0,5

29-09-2021 – REV 05

### Classification

Austenitic grade

### Designation

#### Material No.

Europe – EN ISO 14343-A	USA – AWS A5.9	Europe – WNr.
19 9 L	ER308L	1.4316

### Approvals

	MIG	TIG	SAW
TÜV (Germany)	X	X	
CE	X	X	X
DB	X	X	

### Mechanical properties

On All-Weld metal.

Temperature (°C)	Room Temperature
Tensile strength (MPa)	600
Yield strength (MPa)	360
Elongation (%)	35
Impact ISO V (J)	120

### Corrosion resistance

- » Good general corrosion resistance. This grade is particularly recommended where there is a risk of intergranular corrosion.
- » Very good atmospheric corrosion resistance in urban and rural media.
- » UGIWELD™ 308LT suits most food products and lot of chemical products such as cold alkaline solutions when diluted, cold organic acids when diluted, neutral and alkaline salt without holides...



**Swiss Steel Group**

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### Recommended welding parameters

#### MIG welding

Recommended shielding gases are:

- » Argon + Oxygen (1 to 3%)
- » Argon + CO<sub>2</sub> (1 to 2.5%)

□ Filler metal (mm)	0.8	1.0	1.2	1.6
Short-Arc Current (A) Voltage (V)	60/80 15/17	80/120 15/17	100/150 17/19	
Spray-Arc Current (A) Voltage (V)	140/210 25/28	180/250 26/29	200/290 26/29	250/350 27/30
Gas Flow (l/min)	12 / 18	12 / 18	12 / 18	12 / 18

Water-cooled torch is recommended for high current above 250 A.  
Interpass must be controlled to less than 150°C.  
UGIWELD™ 308LT is suited for pulsed arc welding.

#### TIG Welding

- » Shielding gas: Argon and/or Helium.
- Nitrogen and hydrogen are prohibited in shielding gases
- Follow the recommendations of the torch producer:
- » Current 50 – 250 A
- » Voltage 10 – 20 V
- Interpass must be controlled to less than 150°C.



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### Available products

Process	Shape	Diameter Range	Packaging	Weight
TIG	Rods	1.0 – 4.0 mm	Cardboard tubes	5 kg
		0.8 – 1.6 mm	Metallic spools – BS 300	15 – 18 kg
MIG	Wire	0.8 – 1.2 mm	Plastic spools – D 200	5 kg
			Plastic spools – D 300	15 kg
		1.0 – 1.6 mm	Plastic spools – D 350	25 – 27 kg
		0.8 – 1.2 mm	Pay off pack - Drums	250 – 500 kg
SAW	Wire	1.6 – 3.2 mm	Rims K415 / 300 / 94	20 – 25 kg
			Rims K435 / 300 / 70	

Contact us for dimensions

### Applications

UGIWELD™ 308LT is a filler metal well suited for welding of austenitic stainless steels type 304 and 304L, and also stabilized austenitic stainless steel type 321.

- » Equipment for chemical industry.
- » Equipment for food processing industry.
- » Pipes and tubes.
- » Boiler making.

UGIWELD™ 308LT may be used for welding of some ferritic steels such as 409: automotive exhaust systems.



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