

Technical Data Sheet

UGIWELD™ 308LM

Chemical composition (%)

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

30-09-2021 – REV 05

Classification

Austenitic grade

Designation

Material No.

Europe – EN ISO 14343-A	USA – AWS A5.9	Europe – WNr.
19 9 L Si	ER308LSi	1.4316

Approvals

	MIG	TIG	SAW
TÜV (Germany)	X	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™ 308LM 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 halogen.



Swiss Steel Group

Production sites: Ugitech SA
www.swisssteel-group.com

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Recommended welding parameters

MIG welding

Shielding gas:

Recommended shielding gases are:

» Argon + Oxygen (1 to 3%)

» Argon + CO₂ (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™ 308LM 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
		1.0 – 1.6 mm	Plastic spools – D 300	15 kg
		0.8 – 1.2 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™ 308LM is a filler metal well suited for welding of austenitic stainless steels type 304, 304L and also stabilized austenitic stainless steel type 321.
 - » Equipment for chemical industry.
 - » Equipment for food processing industry.
 - » Pipes and tubes.
 - » Boiler engineering.
- UGIWELD™ 308LM may be used for welding of some ferritic steels such as 409: automotive exhaust systems.



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