

# Technical Data Sheet

## UGIWELD™ 4370M

### Chemical composition (%)

C	Si	Mn	Ni	Cr	Mo	Cu
≤ 0.20	≤ 1.2	5.0 – 8.0	7.0 – 10.0	17.0 – 20.0	≤ 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.
18 8 Mn	** (307Si)	1.4370

\*\* Usual naming not referenced in the standard AWS A5.9

### 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)	620
Yield strength (MPa)	420
Elongation (%)	35
Impact ISO V (J)	130

### Corrosion resistance

- » Corrosion resistance of this type of steel is equivalent to that of austenitic stainless steels type 304 (18Cr 8Ni)
- » In case of heterogeneous, corrosion resistance has no effective importance.



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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 25/29	180/250 26/29	200/290 26/29	250/350 27/29
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™ 4370M 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™ 4370M is a very well adapted filler metal for the following applications:

- » Armor plate welding.
- » High manganese austenitic stainless steel welding.
- » Welding of steels used for high temperature up to 850°C.
- » Welding of austenitic and ferritic stainless steels for automotive exhaust system, type 304, 309, 409 and others.
- » Heterogeneous welding.



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