

Technical Data Sheet

UGIALLOY® 276

Chemical composition (%)

C	Si	Mn	Ni	Cr	Mo	Cu	Fe	W	Co	V
≤ 0.02	≤ 0.08	≤ 1.0	≥ 50.0	15.0 – 16.5	15.0 – 17.0	≤ 0.5	4.0 – 7.0	3.2 – 4.2	≤ 1.0	≤ 0.35

01-10-2021 – REV 05

Classification

Nickel Chromium Molybdenum grade

Designation

Material No.

Europe – EN ISO 18274	USA – AWS A5.14	Europe – WNr.
Ni 6276 – NiCr15Mo16Fe6W4	ERNiCrMo-4	2.4886

Mechanical properties on as weld deposit (typical values)

Using the above mentioned recommended welding parameters, the mechanical properties will be as follows:

Temperature (°C)	Room Temperature
Tensile strength (MPa)	700
Yield strength (MPa)	400
Elongation (%)	25
Impact ISO V (J)	90

Corrosion resistance

Excellent corrosion resistance to oxidizing or reducing agents, in acid, chloride and saline environments.

Recommended welding parameters

Use pure Argon for both TIG and MIG, as well as on the back-side of the weld when carrying out the first pass. The heat input must not exceed 1.5 kJ/mm and the interpass temperature should remain below 120°C.



Swiss Steel Group

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

Technical Data Sheet

UGIALLOY® 276

Chemical composition (%)

C	Si	Mn	Ni	Cr	Mo	Cu	Fe	W	Co	V
≤ 0.02	≤ 0.08	≤ 1.0	≥ 50.0	15.0 – 16.5	15.0 – 17.0	≤ 0.5	4.0 – 7.0	3.2 – 4.2	≤ 1.0	≤ 0.35

01-10-2021 – REV 05

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

UGIALLOY® 276 is used for welding the 2.4819 (C276) alloy and according to the type of corrosion, for the 2.4602 (C22) and 2.4610 (C4) alloys.

It is also suited for repairing the coating of clad plates.



Swiss Steel Group

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