

Technical Data Sheet

UGIALLOY® 825

Chemical composition (%)

C	Si	Mn	Ni	Cr	Mo	Cu	Fe	Ti	Al
≤ 0.01	≤ 0.5	≤ 1.0	38.0 – 46.0	19.5 – 23.5	2.5 – 3.5	1.5 – 3.0	≥ 22.0	0.6 – 1.2	≤ 0.2

04-10-2021 – REV 05

Classification

Nickel Chromium Iron grade

Designation

Material No.

Europe – EN ISO 18274	USA – AWS A5.14	Europe – WNr.
Ni 8065 – NiFe30Cr21Mo3	ERNiFeCr-1	2.4858

Recommended welding parameters

- » Argon (+helium)
- » Current 100 - 200 A
- » Voltage 10 - 20 V

Welding parameters:

- » Current 100 - 200 A
- » Voltage 10 - 20 V

MIG welding

Recommended shielding gases:

- » Argon (+helium)

A very slight amount of O₂ or CO₂ (≤0.5%) to stabilize the welding arc.

Short-Arc

- » Current 60 / 150 A
- » Voltage 15 / 20 V

Spray-Arc

- » Current 140 / 350 A
- » Voltage 26 / 30 V

UGIALLOY® 825 is suited for pulsed arc welding.

Water-cooled torch is recommended for high current, above 250 A.

Interpass must be controlled to less than 150°C.



Swiss Steel Group

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

Technical Data Sheet

UGIALLOY® 825

Chemical composition (%)

C	Si	Mn	Ni	Cr	Mo	Cu	Fe	Ti	Al
≤ 0.01	≤ 0.5	≤ 1.0	38.0 – 46.0	19.5 – 23.5	2.5 – 3.5	1.5 – 3.0	≥ 22.0	0.6 – 1.2	≤ 0.2

04-10-2021 – REV 05

MIG cladding

Recommended shielding gas:

» Argon (+helium)

The best solution is to use MIG pulsed device with the following parameters (wire 1.2mm)

» Current: base100-150 A

Peak300-400 A

» Voltage: base25 V

Peak35

Water-cooled torch is recommended for high current, above 250 A.

Interpass must be controlled to less than 150°C.

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
		0.8 – 1.2 mm	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

Solid rod used to weld Nickel-Iron-Chromium which has a good resistance to oxidizing and reducing acids like sulfuric and phosphoric acid as well as sea water.

Base materials: type UNS N08825.



Swiss Steel Group

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