



ALUMINUM ALLOY WELDING WIRE

The series of our Aluminium Alloy and Pure Aluminium Wires give high quality of welds.

ER1050A

Description

Aluminium wires and rods for welding alloys with mostly pure aluminium basis (maximum 0.5% of alloyed elements). Application in chemistry, electronics, construction and food industries.

Chemical composition :

Si <0.30, Fe <0.40, Cu <0.05, Mn <0.05, Mg <0.05, Zn <0.07, Ti < 0.05, Al >99.50

Minimal Values of the Mechanical Properties (Welded Metal)

Tensile strength : Rm : 65 N/mm²
Yield Strength : Rp 0,2 : 20 N/mm²
Elongation : L=5d 35%

Shielding Gases for GMAW/GTAW

Ar 99, 95% min

Materials to be welded

Al. 99,0, AL. 99, 5
AL. 99, 7, E-AL

Description

Aluminium wires and rods for welding pure aluminium. Applications in the electronic, chemistry and food industries, in which a higher purity degree of deposit material is needed.

Chemical composition :

Si <0.15, Fe <0.15, Cu <0.02, Mn <0.02, Mg <0.02, Zn <0.06, Ti < 0.02, Al >99.80

Minimal Values of the Mechanical Properties (Welded Metal)

Tensile strength : Rm : 60 N/mm²
Yield Strength : Rp 1,0 : 22 N/mm²
Elongation : L=5d 40%

Shielding Gases for GMAW/GTAW

Ar 99, 95% min

Materials to be welded

Al. 99, 8, AL. 99, 7
AL. 99, 5, E-A1

ER 1080A

Description

Aluminium wires and rods for welding alloys with maximum 2% alloying elements and for aluminium alloys containing upto 7% of Si. Excellent flowability and penetration characteristics. Applications in the construction sector and in the automotive industry.

Chemical composition :

Si 4.5 - 5.5, Fe <0.40, Cu <0.05, Mn <0.05, Mg <0.05, Zn <0.10, Ti < 0.15, Al remainder

Minimal Values of the Mechanical Properties (Welded Metal)

Tensile strength : Rm:120 N/mm²
Yield Strength : Rp 0, 2 : 40 N/mm²
Elongation : L=5d : 8%

Shielding Gases for GMAW/GTAW

Ar 99, 95% min

Materials to be welded

Al Si 5, Al Mg Si 0, 5, Al Mg Si 0, 8
Al Mg Si 1, Al Zn Mg, Al cu Mg.
(After anodizing welding will be of a dark grey colour)

ER 4047

ER 4043

Description

Aluminium wires and rods for welding and brazing. Good mechanical characteristics, their excellent corrosion resistance and low melting point ensure a very low number of deformations in the origin metal. This material is generally used for brazing aluminium sheets, for extrusions and castings. (After anodizing the welding will be of a different colour)

Chemical composition :

Si 11.0-13.0, Fe <0.50, Cu <0.05, Mn <0.15, Mg <0.05, Zn <0.10, Ti < 0.15, Al remainder

Minimal Values of the Mechanical Properties (Welded Metal)

Tensile Strength : Rm : 130 N/mm²
Yield Strength : Rp 0, 2 : 60 N/mm²
Elongation : L=5d : 5%
Melting range : 573-585 deg. C

Shielding Gases for GMAW/GTAW

Ar 99, 95% min

Materials to be welded

G-Al Si 10 Mg, G-A1 Si 11, G-A1 Si 12 (Cu), G-A1 Si 7 Mg,
G-A1 Si 6 Cu 4, Al Mg Si 0.8, Al Mg Si 1,
(use flux when brazing oxyacetylene)

ER 5356



ALUMINUM ALLOY WELDING WIRE

Description

Aluminium wires and rods for welding alloys with aluminium and magnesium basis, with maximum 5% Magnesium. High corrosion resistance. Applications in the construction of ships, storage tanks, railway and in the automotive industry.

Chemical composition

Si <0.25, Fe <0.40, Cu <0.05, Mn 0.10-0.20, Mg 4.5-5.6, Cr 0.10-0.30, Zn <0.10, Ti 0.07-0.15, Al remainder

Minimal Values of the Mechanical Properties (Welded Metal)

Tensile strength : Rm: 240 N/mm²
Yield strength : Rp 0, 2: 110 N/mm²
Elongation : L=5d : 17%

Shielding Gases for GMAW/GTAW

Ar 99, 95% min
Ar 75% + He 25%
Ar 50% + He 50%

Materials to be welded

Al Mg 3, Al Mg 5, Al Mg Mn, Al Zn Mg 1, G-A1 Mg3 Si,
G-Al Mg 5 Si, G-A1 Mg 10, Al Mg 1 Si Cu, Al Mg Si 0, 7.

Description

Welding wires and rods to be used when very high seawater corrosion resistance is needed. Applications in the construction of ships, offshore, cryogenic plants, railway and in the automotive industry.

Chemical composition

Si <0.25, Fe <0.40, Cu <0.05, Mn 0.60-1.00, Mg 4.3-5.2, Cr 0.05-0.25, Zn <0.25, Ti 0.07-0.15, Al remainder

Minimal values of the Mechanical Properties (Welded Metal)

Tensile Strength : Rm: 275 N/mm²
Yield Strength : Rp 0, 2 : 125 N/mm²
Elongation : L=5d : 17%

Shielding Gases for GMAW/GTAW

Ar 99, 95% min
Ar 75% + He 25%
Ar 50% + He 50%

Materials to be welded

Al Mg 4, 5 Mn, Al Mg 5, Al Mg 2 Mn 0, 8, Al Zn Mg 1,
Al Zn Mg Cu 0, 5, Al Mg Si 0, 5, Al Mg Si 1, G-A1 Mg 10,
G-Al Mg 5, G-Al Mg 3 Si, G-Al Mg 5 Si.

ER 5183

AVAILABLE SIZES :

MIG 6-7 Kg in D 300 Spools

Diameter of the wire
0,80mm 1,00mm 1,20mm 1,60mm 2,00mm
2,40mm 3,20mm

TIG box of 5/10 Kg

Diameter of the rods (x 1000 mm length)
1,60mm 2,00mm 2,40mm 3,20mm 4,00mm 5,00mm

