

ALUFIL AIMg4.5MnZr

MIG/MAG solid wires-TIG rods Aluminum alloys

ALUFIL AIMg4.5MnZr is a 5087 type aluminum solid MIG welding wire, supplied precision layer wound, depositing Al-4.5Mg0.8Mn0.1Zr weld metal. Suitable for use with Ar, or Ar+He mixed shielding gases.

ALUFIL AIMg4.5MnZr is suitable for welding of 3-5% Mg-content aluminum.

Due to the Zirconium alloying the weld metal has a very good hot cracking resistance. Zr promotes grain refinement and increases the mechanical properties and corrosion characteristics.

Classification	Approvals	Grade
EN ISO 18273: S Al 5087 (AlMg4.5MnZr)	DB	●
	GL	
	LRS	
	TÜV	●
	CE	

Chemical analysis (Typical values in %)

Al	Si	Mn	Mg	Cr	Zr	Ti	Cu	Fe
Rem	0.2	0.9	4.5	0.1	0.15	0.1	0.02	0.1

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)
As Welded	≥125	≥275	≥17


Gas test: 70% Ar+30% He

Shielding Gas - EN ISO 14175 : I1, I3

Materials

AlMg3, AlMg5, AlMgMn, AlZn4.5Mg1, AlZnMg4.5Mn, AlMgSiCu

G-AlMg 3 Si, G-AlMg 5 Si, G-AlMg 10

Storage	Current condition and welding position
Keep dry and avoid condensation.	DC+
	

Packaging data

Packaging Type	BS300
Diam(mm) / weight(kg)	7
1.0	●
1.2	●
1.6	●