

SMT-5087

Aluminum Alloy Filler Metal for welding of
AlMg4.5Mn, AlMg5Mn, AlMg3, AlMg5, AlMgMn, AlMgSi0.5, AlMgSi0.7,
AlMgSi1, AlMg1SiCu, AlZnMg1, etc.



❖ PRODUCT SPECIFICATIONS

AWS A5.10 / ASME SFA5.10 ER5087
EN ISO 18273 S Al 5087 (AlMg4.5MnZr(A))

❖ DESCRIPTION & APPLICATION

Aluminum alloy filler metal for welding aluminum alloys with up to 5% Mg and alloys where a higher tensile strength is required.

The alloying element Zr produces improved resistance to hot cracking During solidification. Zirconium acts as well to produce a fine-grained Weld-metal microstructure, improving both bending and corrosion Resistance.

This alloy allows achieving a superior wire surface finish for improved Feed-ability and arc performances Suitable especially for complicated Welding constructions with critical tensions.

This grade may be used for applications such as:

- marine fabrication and repair;
- cryogenic tanks;
- shipbuilding and other high strength structural aluminum applications;
- railway industry
- automotive industry
- offshore industry

❖ ALL-WELD METAL MECH. PROPERTIES

Tensile strength (Rm) : $\geq 275 \text{ N/mm}^2$ Yield Strength (Rp0.2) : $\geq 125 \text{ N/mm}^2$
Elongation : $\geq 17 \%$

❖ CHEMICAL COMPOSITION

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Zr	Be
Max	Max	Max	0.7	4.5	0.05	Max	Max	0.1	Max
0.25	0.4	0.05	1.1	5.2	0.25	0.25	0.15	0.2	0.0003

❖ STANDARD PACKING DATA

Welding Process	Ø mm (inches)	Packing type	Weight Kg (lbs)	Length mm (inches)
GMAW (filler wire)	0.80 - 1.20 (0.030 - 0.047)	spools BS300 / D300	7 (33)	N/A
GTAW (filler rod)	1.60 - 4.00 (1/16 - 5/32)	cardboard boxes / tubes	5 (11)	1000 (39.4)