HYUNDAI WELDING

SMT-4047

Aluminum Alloy Filler Metal for welding of
Base 6XXX alloys; aluminum alloys 1060, 1350, 3003, 3004, 3005, 5005, 5053, 6053, 6061, 6951, 7005; Cast alloys 710.0, 711.0.

HYUNDAI WELDING CO., LTD.

SMT-4047

❖ PRODUCT SPECIFICATIONS

AWS A5.10 / ASME SFA5.10 ER4047
EN ISO 18273 S Al 4047 (Al Si 12)

❖ DESCRIPTION & APPLICATION

Silicon-Aluminum alloy for welding and brazing.
This alloy is characterized by low melting point and narrow freeing range. It has a higher silicon content than ER4043, which provides an increased Fluidity and reduced shrinkage: it can actually been used as a substitute for ER4043 to increase silicon in the weld metal and produce higher fillet Weld shear strength.
Excellent wetting action and excellent corrosion resistance. Hot cracking Is significantly reduced when using 4047 as filler alloy in most applications. This alloy produces bright and almost smut-free welds. It is also Characterized by low shrinkage rate.
Non-heat treatable. After anodizing, the weld will assume a different color
This grade may be used for

- welding or brazing of several aluminum alloys and cast alloys
- applications with sustained elevated temperatures;
- applications such as thin sections where its higher fluidity and lower shrinkage rate are important for distortion control;
- applications such as joint sealing of pressurized fluids and gases, due to its excellent wetting action;
- applications such as radiators and air conditioning components, general repair and maintenance, water and gas tight applications, etc.

❖ ALL-WELD METAL MECH. PROPERTIES

Tensile strength (Rm) : ≥ 130 N/㎟ Yield Strength (Rp0.2) : ≥ 60 N/㎟
Elongation : ≥ 5 %

❖ CHEMICAL COMPOSITION

Si	Fe	Cu	Mn	Mg	Zn	Ti	Be
11.00	Max	Max	Max	Max	Max	Max	Max
13.00	0.60	0.30	0.15	0.10	0.20	0.15	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)