

ROALLOY-5356

ALUMINIUM FILLER WIRE WITH 5% MAGNESSIUM

BASIC ALLOY: AL, MG,
AWS/SFA-5.10: ER5356
UNS A95356

KEY FEATURES:

Roalloy-5356 is a 5% magnesium, all position, non-heat treatable wire which is chosen for its relatively high shear strength. In addition, it also offers excellent corrosion resistance when exposed to salt water.

APPLICATIONS

- Boats, Ships
- Bicycles
- Trucks
- Pressure Vessels
- Automotive
- Equipments

SHEILDING GAS:

- Welding with 100% Ar gas

WELDING NOTE:

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded

CHEMICAL COMPOSITION:

| Si | Mn | Mg | Cr | Al | Others |
|------|-----------|-----------|-----------|-----------|--------|
| 0.25 | 0.05-0.20 | 4.50-5.50 | 0.05-0.20 | Remainder | 0.15 |
| Fe | Zn | Ti | | | |
| 0.40 | 0.10 | 0.06-0.20 | | | |

MECHANICAL PROPERTIES:

| UTS (N/mm ²) | Proof strength (N/mm ²) | EL % (l=5d) |
|--------------------------|-------------------------------------|-------------|
| 200-310 | 83-207 | 10-18 |

WELDING POSITION



DIEMENSION, CURRENT CONDITION & PACKING DATA (FOR MIG WELDING)

| Size (mm) | Size (inch) | Current Condition (DC+) | Voltage (V) | Gas Flow Rate L/min | Spool packing 12.5 kg | Spool packing 15 kg | Drum packing 100/200kg |
|-----------|-------------|-------------------------|-------------|---------------------|-----------------------|---------------------|------------------------|
| 0.80 | 0.031 | 70-220 | 16-24 | 10-20 | ✓ | ✓ | X |
| 1.20 | 0.047 | 150-300 | 24-34 | 15-25 | ✓ | ✓ | ✓ |
| 1.60 | 1/16" | 150-350 | 28-36 | 15-30 | ✓ | ✓ | ✓ |

DIEMENSION, CURRENT CONDITION & PACKING DATA (FOR TIG WELDING)

| Size (mm) | Size (inch) | Length (mm) | Length (Inch) | Current Condition (DC-) | Voltage (V) | Tube packing 5 kg | Box packing 20 kg |
|-----------|-------------|-------------|---------------|-------------------------|-------------|-------------------|-------------------|
| 1.60 | 1/16" | 1000 | 36" | 40-80 | 10-16 | ✓ | ✓ |
| 2.0 | 5/64" | 1000 | 36" | 50-100 | 12-18 | ✓ | ✓ |
| 2.4/2.5 | 3/32" | 1000 | 36" | 60-120 | 14-20 | ✓ | ✓ |
| 3.2 | 1/8" | 1000 | 36" | 100-150 | 16-24 | ✓ | ✓ |