



American Welding Society
DISTRIBUTOR COMPANY MEMBER

Ficha Técnica

ER 5356

ALLOY DESCRIPTION AND APPLICATION;
5356 is a 5% magnesium aluminum filler recommended for welding of 5050, 5052, 5083, 5356, 5454 and 5456.

TYPICAL GMAW WELDING PROCEDURES; DCEP

| Wire Diameter | Amps | Volts | Travel speed (ipm) | Argon (cfh) |
|---------------|---------|-------|--------------------|-------------|
| 0.030 | 60-175 | 15-24 | 25-45 | 25-30 |
| 0.035 | 70-185 | 15-27 | 25-40 | 30-35 |
| 3/64 | 125-260 | 20-29 | 24-35 | 35-45 |
| 1/16 | 170-300 | 24-30 | 28-38 | 45-55 |
| 3/32 | 275-400 | 26-31 | 14-20 | 60-75 |

TYPICAL GTAW WELDING PROCEDURES; ACHF with Pure or Ziconiated

Hemisphere shape tungsten tip

| Filler Wire Size | Tungsten | Amps | Volts | Gas Cup Size | Argon (cfh) | Base thickness |
|------------------|----------|---------|-------|--------------|-------------|----------------|
| 1/16" | 1/16" | 60-80 | 15 | 3/8" | 20 | 1/16" |
| 3/32" | 3/32" | 125-160 | 15 | 3/8" | 20 | 1/8" |
| 1/8" | 1/8" | 190-220 | 15 | 7/16" | 20 | 3/16" |
| 5/32" | 5/32" | 200-300 | 15 | 1/2" | 25 | 1/4" |
| 3/16" | 3/16" | 330-380 | 15-20 | 5/8" | 25 | 3/8" |
| 1/4" | 1/4" | 400-450 | 25 | 5/8" | 25 | 1/2" |

Procedures are base on flat position and may vary with change in position, base metals, filler metals, equipment and other changes.

TYPICAL CHEMISTRY AND PROPERTIES;

| Magnesium | Titanium | Manganese | Chromium | Copper | Silicon | Zinc | Iron | Beryllium |
|-----------|-----------|-----------|-----------|--------|---------|------|------|-----------|
| 4.5-5.5 | 0.06-0.20 | 0.05-0.20 | 0.05-0.20 | 0.10 | 0.25 | 0.10 | 0.40 | 0.0008 |

Aluminum Remainder and others each 0.50 & total 0.15 All values are maximum percentage unless noted

Solidus:1060°F Liquidus:1175°F Density: 0.096 lbs./cu. In. Anodize color: White
Average Tensile Strength All weld metal (as welded) 38,000 psi (262 mpa)

AVAILABLE SIZES: TA 5356 = Spools of .023, .030, .035, .040, 3/64, 1/16, 3/32
TB 5356 = Cut lengths of .030, .035, 3/64, 1/16, 5/64, 3/32, 1/8, 5/32, 3/16, 1/4
Other sizes available – please inquire

SPECIFICATIONS; ANSI/AWS A5.10 ER/ R 5356
ASME SFA5.10 ER/ R 5356