

AMTEC 430 MAGNESIUM TIG ROD OR MIG WIRE

FOR USE WITH OXY-ACETYLENE TORCH, TIG OR MIG

General Characteristics

Amtec 430 is a specially alloyed magnesium rod for torch or tig welding. Can be used on all weldable grades of magnesium. Deposits have good color match to magnesium, and have high strength and good electrical conductivity. This tig rod welds and machines easily, and weld strengths are up to 95% of the strength of the parent metal, which results in strong, sound welds with minimum porosity and rejects. The weld will resist corrosion and chemical attack. The magnesium is 36% lighter than aluminum, 73% lighter than zinc, and 77% lighter than steel.

Procedure

Clean joint area preferably by mechanical means. For best results, a maximum of .010 inch joint clearance should be maintained. When brazing, use a carburizing flame to pre-heat part broadly to 300-400°F. Heat end of rod, dip in Amtec 430 Flux and transfer to joint area. Make sure to use lots of flux when brazing. Continue heating until flux liquefies, then melt a small amount of rod onto the joint and continue to heat until the alloy flows through the entire joint. Add sufficient alloy to completely fill the joint, and use ample flux at all times to prevent contamination from the atmosphere. Allow the part to cool slowly, then remove the flux residue with a stiff brush and warm water. For TIG welding no flux is necessary. For TIG welding or MIG welding use a.c. equipment, with high frequency current super-imposed and argon shielding gas. This is the preferred method.

Application

Ideal for welding of all common magnesium such as structural shapes, sheet and castings, shipping dock plates and motor housings that contain magnesium.

Tensile Strength:

Meets Mil Spec:

Hardness: (HB)

Melting Point:

30,000 PSI

R-6944

1140°F

Available in TIG and BRAZING wire in 1/16, 3/32, and 1/8 x 36" lengths.

MIG WIRE in 1/16 and 3/64" x 12 oz. spools or 9 lb. spools.

CONFIDENTIAL INFORMATION
Subject to change without notice

Tip Color – Plain No Imprint – Bare Rod