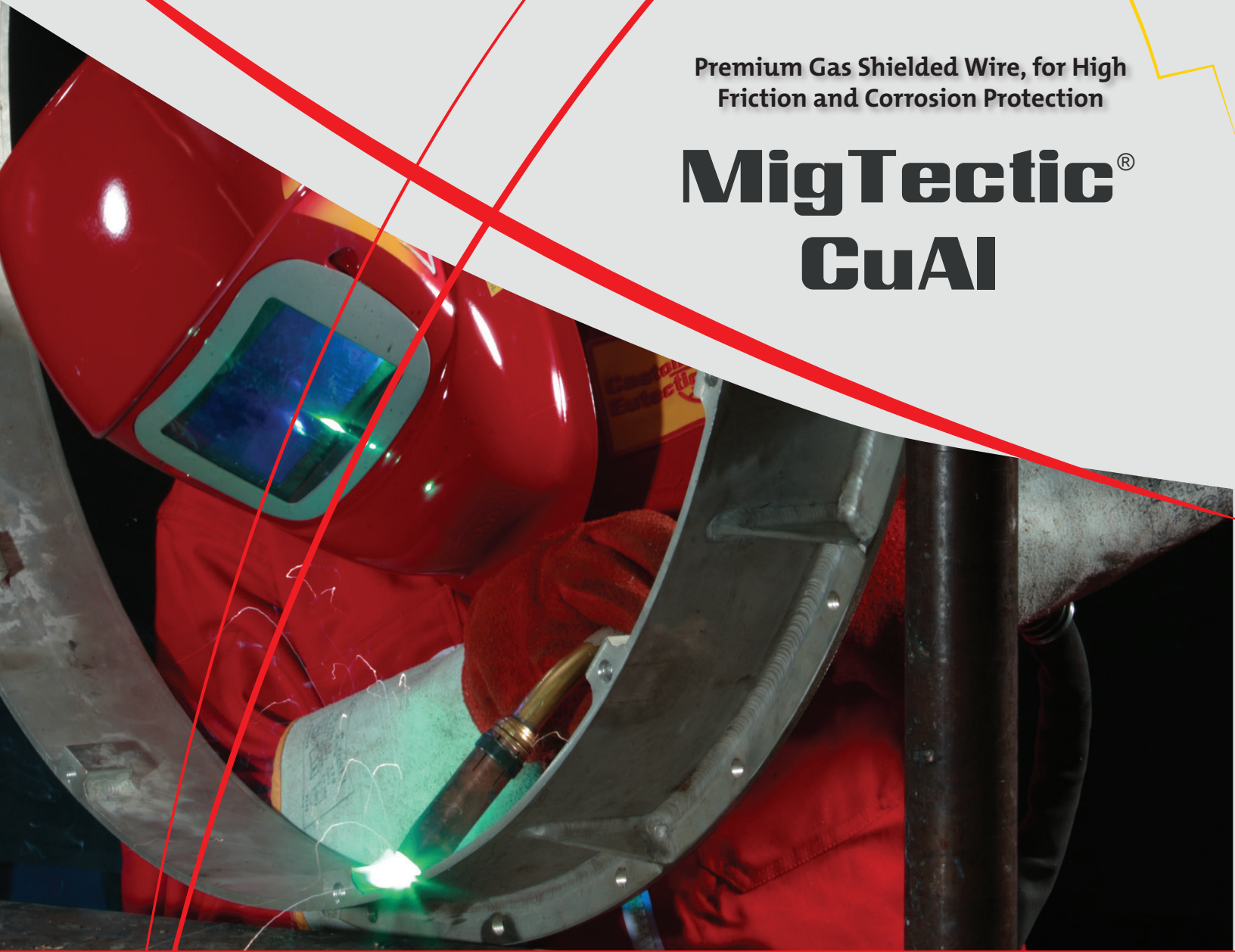




Premium Gas Shielded Wire, for High
Friction and Corrosion Protection

MigTectic®

CuAl



- User-friendly, all-position wire
- Excellent against metal-to-metal wear
- Unlimited build-up potential on most copper based alloys
- Dissimilar joining between many ferrous and copper based alloys

MigTectic® CuAl

MigTectic CuAl can be used to weld many copper-based alloys such as aluminum bronzes (particularly when grade A-2 is called for), manganese bronzes, silicon bronzes and selected copper nickel alloys. The wire can be used for joining and depositing frictional wear-resistant surfaces on steel and cast iron parts.

TECHNICAL DATA

Typical Values	
Tensile Strength:	79,000 psi
Yield Strength:	35,000 psi
Hardness:	140 BHN
Elongation:	28%
Shielding Gas:	Argon
Current:	DC (+) electrode positive

SUGGESTED WELDING PARAMETERS:

Diameter	Voltage	Amperage	Argon (cfh)
0.045"	26 - 28	185 - 250	30
1/16"	28 - 30	250 - 400	40

PROCEDURE FOR USE

Step 1: Remove all "old" cracked or spalled weld metal down to a sound base.

Step 2: MigTectic CuAl has unlimited build-up potential.

Step 3: Preheat the part to be hardfaced/joined depending on the alloy type.

Step 4: After checking that the welding conditions are optimal by testing on scrap metal, position the gun head at a 70-80° angle and use a "push" technique for downhand welding. For fully automated welding such as hardfacing cement crusher rolls, the wire should exit at about a 10° lagging angle from top dead center. Using this technique will assure a smooth and regular weld deposit profile with the optimum level of fusion.

Step 5: Slow cooling is advised using silicone blankets, vermiculite, or other environmentally suitable heat-retardant material.

Note: If welding is interrupted and the part being welded cools to room temperature, make sure to reheat to the original preheat temperature. Slow cooling is advised using silicone blankets, vermiculite, or other environmentally suitable heat-retardant material.

TYPICAL APPLICATIONS

APPLICATIONS

- Propellers, Pumps
- Bearings, Sleeves, Valves
- Cast Iron Housings, Pumps
- Marine Hardware
- Steel to Bronze Joining

INDUSTRY

- Ship Building
- Ship Building
- Steel
- Transportation
- Various

Observe normal welding practices, respiratory protection and proper air flow pattern advised. For general welding practices, see AWS publications Z49.1 "Safety in Welding and Cutting and Allied Process". Welding is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before beginning welding operations. DO NOT operate welding equipment or use welding materials before you have thoroughly read the proper instruction manual(s). Please refer to the Eutectic internet site for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS, AND/OR THE INSTRUCTIONS OF WELDING EQUIPMENT OR MATERIAL MANUALS, MAY BE HAZARDOUS TO YOUR HEALTH.



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