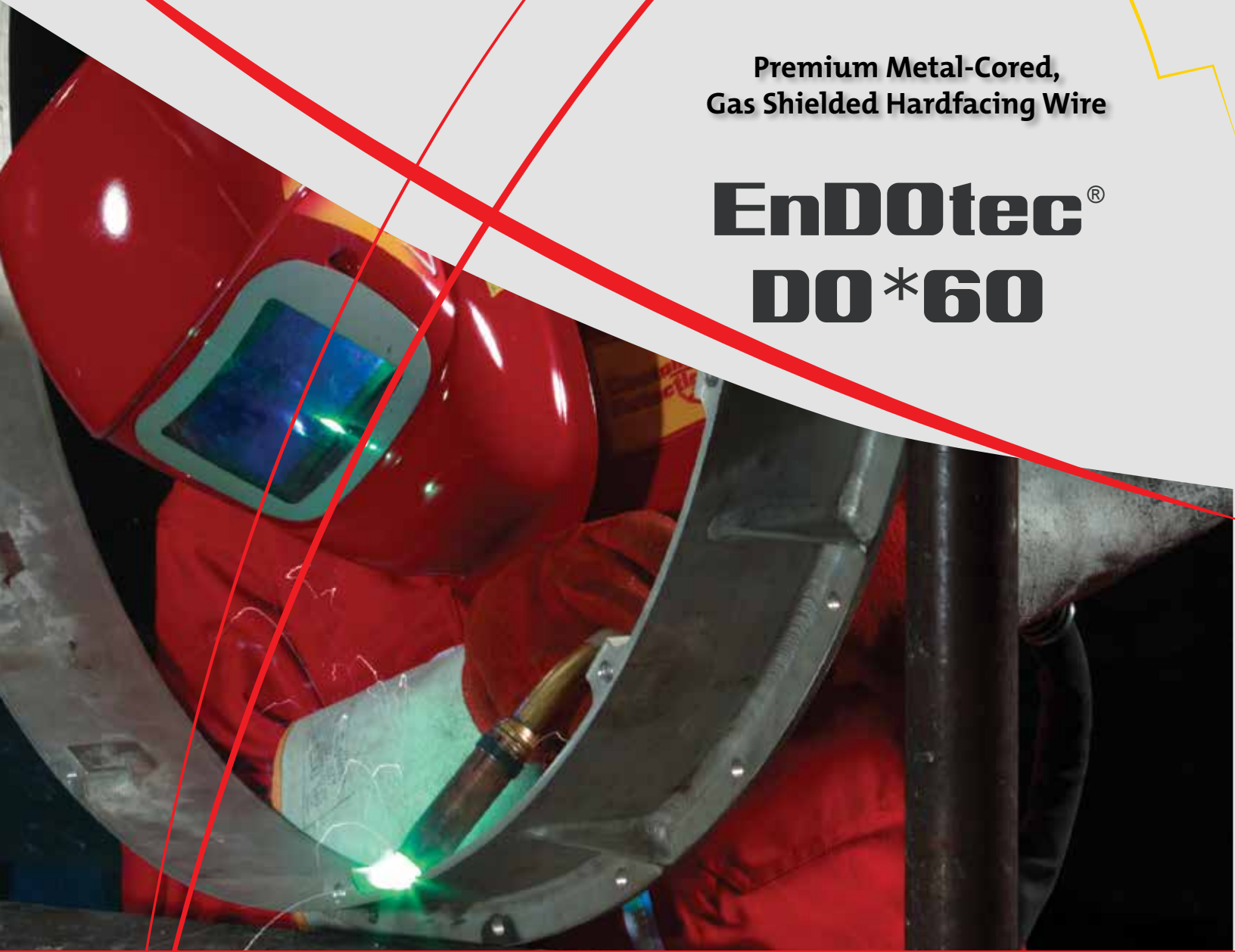




**Premium Metal-Cored,
Gas Shielded Hardfacing Wire**

EnD0tec®
D0*60



- Excellent against combined wear involving hot impact, erosion, cavitation and hot abrasion
- Excellent high temperature hardness
- Easy-to-use wire with low fuming and minimal spatter
- Deposits combat corrosion and oxidization

EnDotec® DO*60

EnDotec® DO*60 is designed for exacting applications involving elevated temperature service. Excellent broadbased mechanical properties with key attributes being high temperature hardness stability, excellent anti-galling features, and highly specific resistance to cavitation-erosion forces. Weld deposits have excellent resistance to oxidation and corrosion.

TECHNICAL DATA

Typical Values	
Typical hardness (2 passes):	HRC 38-40
Current & Polarity:	DC (+) electrode positive
Power Source Type:	Constant voltage & Integrated Wire Drive
Shielding Gases:	Argon (1st) Tri Mix® (90% Helium + 7.5% Ar + 2.5% CO ₂ (2nd))
Hot Hardness: (1200°F)	HRC 20 average
Compliance:	AWS A5.21 ERCCoCr-A

0.045" (1.2MM)	VOLTS	AMPS	STICK-OUT	GAS FLOW
Spray Arc	27-30	220-240 (Large parts)	1/2" ± 1/16" (Short nozzle)	35-40 SCFH
Low Range	17-20	140-175 (Lighter parts)	1/2" ± 1/16" (Long nozzle)	35-45 SCFH

Note: Parameter adjustments will be needed depending on the size, weight, and shape of the part to be welded. For optimum wear resistance, keep to the low end of the amperage & voltage ranges.

PROCEDURE FOR USE

Caution: Although a 2-roll wire drive assembly will work the optimum for maintaining arc voltage stability and consistent & smooth wire feeding is a serrated 4-roll drive assembly. Smooth drive rolls are not recommended!

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

Step 2: EnDotec DO*60 is for hardfacing. It is often field practice to deposit a base-coat depending on the type of wear, severity, and the total amount of build-up required.

Step 3: Preheat the part to be hardfaced depending on its air harden potential and/or carbon level. For most constructional steels, a nominal preheat of 150°F is suggested and for medium alloy steels, ~250°F.

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 cylindrical parts, 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.

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

TYPICAL APPLICATIONS

APPLICATIONS

Valve Plugs and Seats
Hot Work Dies - Upset Dies
Furnace Retorts
Hot Forming/Forging Dies
Hot Punches - Trim Dies
Coke Pusher Shoes

INDUSTRY

Thermal Power
Stamping, Forging
Cement, Power
Forging Steel Works
Stamping
Steel Works, Foundry

