Universal, High-Strength, Joining Cored Wire for Use on Difficult to Weld Steels

EnDOtec®DO*685







- Exceptional Weldability with Improved Bead Appearance
- Highest Quality Welds that are Strong, Ductile, Crack Resistant and Excellent for Applications Involving Highly Loaded Structures
- Weld Deposits Resist Heat, Corrosion, Impact and Frictional Wear
- Machines Easily Using Standard Practices for Austenitic Steels
- Improved Productivity Due to Increased Deposition Rate over Covered Electrodes and Solid Wires



DESCRIPTION:

EnDOtec DO*68S is a multi-purpose alloyed wire was formulated and tested for joining and building-up virtually with all types of steels, from low-carbon to high alloy steels, tool steels, spring steels, difficult-to-weld steels, steels of unknown composition and dissimilar combinations. It is a key product to select when difficulties such as cracking, fissuring or time delayed cracking are experienced.



TYPICAL APPLICATIONS

For joining and build-up on frames, gears, dies, die rings, augers, rails, cement mixers, buckets, bucket teeth, arms, chutes, wearplates, housings, impellers, journals, journal boxes, rolling mill frames, pig iron molds, screens, clutch plates, dryer flights, scraper blades, spindles, shafts, hydraulic frames

TECHNICAL DATA:

Typical Tensile Strength: 125,000 psi (862 MPa) Typical Yield Strength: 94,000 psi (648 MPa)

Typical Elong. (1=5d) min: 26%

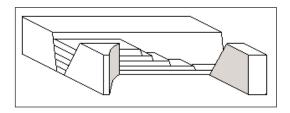
Typical Hardness: HRB 90-100 As-Welded

Current & Polarity: DCEP (+)

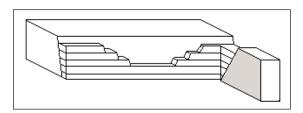
PROCEDURE FOR USE:

Preparation: Remove all contaminants, particularly oil and grease. Lightly grind surface to remove superficial oxides. Preheat according to the base metal make-up and potential to air harden. For high hardenability steels use the recommended preheat & interpass temperatures for the grade and type.

Technique: Always use the lowest amperage necessary to achieve fusion to minimize dilution. Apply with stringer beads or 2x to 3x weave, taking care to tie-in as smoothly as possible. A block or cascade deposit technique is highly recommended for heavy sections and circular weldments.



Cascade Sequence: Weld metal is deposited in overlapping layers.



Block Sequence: Weld metal is deposited in intervening increments.

Post-welding: For air-hardening steels slow cool using available insulating materials. For less sensitive base metals, slow cool out of drafts.

TYPICAL WELDING PARAMETERS

0.045" (1.2MM)	VOLTAGE	AMPERAGE	STICK-OUT	SHIELD GAS	GAS FLOW
Globular	22-32	140-250 (Large parts)	5/8" ± 1/8"	Primary: 100% CO ₂ Secondary: Ar+25% CO ₂	35-40 SCFH
Fine Globular (Out of Position)	17-24	80-150 (Lighter parts)	1/2" ± 1/8"	Primary: 100% CO ₂ Secondary: Ar+25% CO ₃	30-40 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.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



EUTECTIC CORPORATION N94 W14355 Garwin Mace Drive Menomonee Falls, WI 53051 USA Tel.: +1 (800) 558-8524 eutectic.com EUTECTIC CANADA 428, rue Aimé-Vincent Vaudreuil-Dorion, Québec J7V 5V5 Canada Tel.: +1 (800) 361-9439 eutectic.ca

