Specially formulated to protect forming tools against abrasion and severe impact

# EnDOtec DO\*15



- Excellent arc stability for coating edges and precision coatings
- High deposition rate for reduced labor costs
- Hard, tough deposit with no slag or scales
- Very low dilution with base metal
- Non "sticking" of electrode or inclusions



## **DESCRIPTION:**

**EnDOtec DO\*15** has been developed for protective coatings of parts subject to combined wear phenomena: pressure, abrasion and severe impact.

The slag free deposit is forgeable and can be heat treated. It is ideal for coating carbon steels, both low and high alloy steels, and manganese steels. The deposit can be finished by grinding.

## Main features:

- · Magnetic deposit
- · Hard, tough deposit with no scaling
- · No "sticking" of electrode or inclusions
- · Low heat input for low dilution
- · Maximum weld metal recovery
- · Excellent bead appearance, no spatter, high arc stability
- · Exceptional all-positional weldability
- · High deposition rate for reduced labour costs

### **TYPICAL APPLICATIONS**

Designed for the protective coating of:

- · Drills
- · Conveyor chains
- · Gravel pumps
- · Hot and cold forming tools

# **TECHNICAL DATA:**

Hardness as-deposited: 55-60 HRC Current polarity: DCEP (DC+)

# PROCEDURE FOR USE:

### Preparation

Clean weld area of scale and/or oxide. A nominal preheat of 65°C (150°F) is advised if part is below 5°C (40°F) or over 25 mm (1") thick. For higher carbon steels higher preheats will be needed. Do not preheat manganese steel castings above 205°C (400°F) as this will cause time-temperature embrittlement.

## **Technique**

Maintain the optimum electrode stickout and hold a 75° angle from the vertical in the direction of travel. Do not weave excessively. Wide beads can cause porosity, excessive base metal overheating, and degrade the weld deposit wear properties. Back whip craters to reduce cracking tendencies and potential out-gassing.

## Post-welding

Allow parts to slow cool in still air. High carbon steels and air hardenable steels should be covered with a heat-retardant blanket or by other means. If steel composition is unknown, slow cool at a rate of 38°C (100°F) per hour.

DIAMETER	SHIELDING GAS	AMPERAGE	VOLTAGE	WIRE STICKOUT
1.2 mm (0.045") spray	Argon + 2% O <sub>2</sub>	150-250	24-29	12mm - 15mm (5/8 ± 1/8")
1.2 mm (0.045") short arc	75% Argon + 25% CO <sub>2</sub>	100-180	14-18	9mm - 16mm (9/16 ± 1/16")
1.6 mm (1/16") spray	Argon + 2% O <sub>2</sub>	220-330	25-30	12mm - 15mm (5/8 ± 1/8")
1.6 mm (1/16") short arc	75% Argon + 25% CO <sub>2</sub>	130-200	15-19	14mm - 16mm (9/16 ± 1/16")

## YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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