# EnDOtec DO\*201



- Exceptionally tough deposits with superior crack resistance
- Excellent impact and fatigue resistance
- Good machinability
- Can be used as a buildup under hardfacing
- High deposition rate



## **DESCRIPTION:**

EnDOtec DO\*201 is an iron based, cored wire designed for build up on carbon and alloyed steel parts and components. Ideal for providing support for subsequent layers of hardfacing alloys.

EnDOtec DO\*201 is recommended for rebuilding parts subjected to impact, fatigue, and metal to metal contact and friction.

Deposits are exceptionally tough, exhibit superior crackresistance and are fully machinable using carbide tools.

## **TYPICAL APPLICATIONS:**

Rebuilding worn trunnions, shunting wheels on rail yard locomotives, steel mill wobblers & pods, shovel burns, cast steel parts, rollers, idlers.

## **TECHNICAL DATA:**

Typical hardness:	36 HRC
Current & polarity:	DC (+) electrode positive
Typical chemistry:	Iron based alloy containing Mn,
	Cr, Mo, Si, C
Power Source:	Use with constant current and constant voltage welding equipment.

# **PROCEDURE FOR USE:**

#### EQUIPMENT

EnDOtec continuous electrodes are compatible with most conventional power sources. Eutectic recommends using wire drive systems fitted with 4 feed-rollers as well as polyamide liners.

#### PREPARATION

Remove old welding deposits and worn metal completely by grinding or with ChamferTrode.

#### PREHEATING

Preheating depends on steel's Carbon Equivalent, and the workpiece size, thickness and geometry. Eutectic recommends:

 CE< 0.2:</th>
 preheat not essential

 CE 0.2 - 0.4:
 preheat 100° - 200°C

 CE 0.4 - 0.8:
 preheat 200° - 350°C

WELDING PARAMETERS Current: DCEP (+)

#### WELDING TECHNIOUE

For single pass applications, push or pull the electrode at an angle of 70°-80° to ensure optimal fusion. If required, a second pass should only be executed while the weld is still hot. Use stringer beads normally to maximum 3 x's weave to reduce localized heat buildup.

#### MACHINING

The deposit is machinable.

## **OPERATING PARAMETERS:**

DIAMETER	RANGE*	TRANSFER MODE	AMPERAGE	VOLTAGE	STICK-OUT (mm ± 2)	SHIELDING GAS		
(mm/in)						Preferred	Alternative	Flow (cfh)
1.2mm / 0.045in	Α	Short circuit	100-220	18-24	14	75% Ar + 25%CO <sub>2</sub>	100% CO <sub>2</sub>	20-30
	В	Spray	150-270	20-28	16	98% Ar + 2% O <sub>2</sub>	75% Ar + 25%CO <sub>2</sub>	25-40
1.6mm / 1/16in	Α	Short circuit	140-260	18-24	14	75% Ar + 25%CO <sub>2</sub>	100% CO <sub>2</sub>	20-30
	В	Spray	200-350	22-30	16	98% Ar + 2% O <sub>2</sub>	75% Ar + 25%CO <sub>2</sub>	30-50

\*A: For small parts and out-of-position welding.

\*B: For large parts, flat position welding.

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