



## **EnDotec® DO\*622 S**

Welding



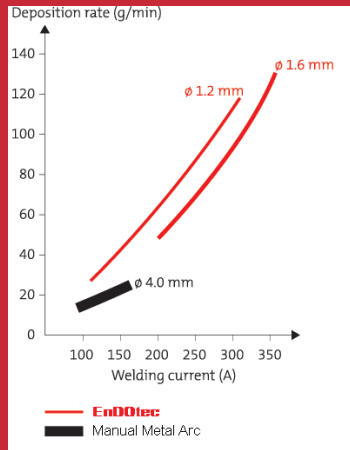
**Gas shielded welding cored wire for Safest Maintenance & Repair Welding**

- massive steel casting cracks and fractures
- repair welding and joining dissimilar ferrous and non ferrous alloys
- superior resistance to high temperature thermal shock cycles
- clean regular slag protected weld deposits
- saves costly post welding heat treatment procedures

## Higher weld deposition rates

EnDOTec®'s annular cross sectional design, automatically produces a higher current density in the electrode's metallic peripheral sheath. This ensures faster electrode fusion without sacrificing weld quality giving record weld deposition rates over Manual Metal Arc.

EnDOTec®'s peripheric cool arc concept produces a low heat input transfer, which means that welds have better bonding, lower dilution, superior microstructure properties and minimal heat affected zones for maximum service performance.



## Features & Benefits

**Alloy type** - Ni base alloy

**Microstructure** – Austenitic

- Specially formulated to avoid harmful phase formation in the dilution zone, even when the base metal is an alloy steel, stainless steel, nickel or copper-based alloy.
- Exceptionally crack resistant welds due to superior ductility combined with a thermal expansion coefficient closely matching carbon steels.
- The tough weld microstructure is resistant to prolonged high temperature service and thermal cycling fatigue stresses.

FEATURES	BENEFITS
Good resistance to corrosion, oxidation	Can be used on a wide range of applications
Excellent resistance to thermal shock cycles	Stable microstructural properties reduce cracking risks
Very high impact strength	Excellent in both hot and cold environments
Low heat input for low dilution	Improved HAZ properties reduces cracking risks
Maximized weld metal recovery	Cost effective weld deposit efficiency
Regular weld bead profile, virtually spatter free	Reduction in defects, less weld dressing
Versatile usage over wide parameter range	Adaptable for use over a wide range of components, large or small
Faster deposition rate	<b>Reduced labour costs</b>



Dangerous cracking problems require SAFEST SOLUTION

Regular welding bead details

A perfect job execution with DO\*622 S



### Mechanical Properties

Tensile strength $R_m(N/mm^2)$ :	630
Yield strength $R_{p0.2}(N/mm^2)$ :	390
Elongation $A_5(\%)$ :	40
Impact strength $AV (J/-196^\circ C)$ :	90
Hardness as welded (HV30):	165
Hardness after work hardening (HV30):	320

Red plastic recyclable spools in double thickness carton boxes

## Applications

Specifically developed for repair welding or joining large casting parts, subjected to high stresses and made of low alloy steels, high alloy steels, dissimilar steels, nickel alloys and pure copper.

Also suitable for protective coatings, offering excellent resistance to attack by most kinds of acids and alkalis, even in strong concentrations.

- Cement: Kiln tyres Ball mill couplings and clips.
- Railways: Rail brakes.
- Civil engineering: Mechanical arms - Chassis - Ripper teeth - Bucket arms.
- Chemical: Heat exchangers - Reservoirs - Boilers
- General: Transport equipment - Forging, extrusion and hot moulding tools.

Depending on size and shape of workpiece, DO\*622 S is an ideal complement to the following Castolin Eutectic manual EutecTrodes : Xuper 2222 and XHD 6822.

