



## Eutectic 14

Brazing Rod for Cast iron

### Description:

A Cast Iron filler rod typical of a flake cast iron structure, where deposits require high strength for the repair of cracks, blow-holes, casting defects and building up of worn and missing sections.

Good resistance to cracking

Good machinability

Colour match to cast iron

High Strength

### Technical Data :

	<i>Minimum</i>	<i>Typical</i>
Tensile Strength (N/mm <sup>2</sup> )	200	290
Hardness (HB)	210	240
Bonding Temperature (°C)	-	~900

### Applications :

Repair and Reclamation of grey and nodular cast iron components.

Pump housings, exhaust manifolds, cylinder heads, foundry defects.

### Procedure for use :

#### Preparation :

Ensure that areas to be welded are free from contaminants, oxides, grease etc. Remove all casting defects such as sand inclusions, blowholes, damaged and fatigued base material, this may be achieved by using – ChamferTrod 03/04. For the repair of cracks prepare by forming 'V' 'U' or 'X' joint preparations using ChamferTrod 03 /04

#### Preheating :

For oxy/acetylene, preheating between 350°C-500°C is recommended, preferably in a furnace if facilities exist, heating should be achieved in a slow uniform manner.

### Welding :

When the preheat temperature has been reached, recognised as a dull red heat, apply a small amount of E+C 14 Flux to the joint area, continue heating with the oxy/acetylene flame employing a neutral or slightly oxidising flame, melt off a small droplet of filler rod to the joint, continue heating till the weld metal flows. Use a weave technique and deposit a flat bead approximately 3x the diameter of the rod, apply flux liberally at regular intervals. Due to the low bonding temperature of the alloy, melting of the base metal is not required.

On completion, continue heating along the weld area in order to balance the base metal temperature, followed by covering the component with fire bricks etc. Or immerse into warm dry sand or lime to allow slow cooling to take place.

If heating has been applied by an oven then without loss of heat, transfer the component back to the heating facility to allow slow cooling.

### Flux Removal :

Remove Flux residues by scraping or wire brushing, avoid impact.

### Storage and Handling :

Safely stack and store products in a dry location to avoid humidity pick up or coating damage.

### Rod identification & Pack size :

14 Bare Rod : 4.0mm, 5.0mm

10 Rod packs, 1.0Kg, 2.5kg, 5.0kg

# DIGITALWELD

J.D.M Holdings Ltd

Unit D/17 Hobill Avenue, Wiri, Manukau, 2104. P.O Box 97622 Manukau City, Manukau 2241, New Zealand  
Ph: +64 (09) 263 7099 Fax: +64 (09) 263 5062 Email: sales@digitalweld.co.nz Website: www.digitalweld.co.nz