



# Techniwear 55-E

## Flux Coated Hardfacing Electrode

### Features

- Flux-Coated Electrode
- All-position electrode for joining or overlaying for high impact.
- Operates on either AC or DC reverse.
- The arc is smooth and stable with low spatter loss.
- Slag removal is easy
- Deposits are very tough, and work-harden rapidly in service as plastic deformation occurs during impact.
- Designed for buildup, hardfacing and fabricating of manganese steel.

### Applications

- Coal crushing segments
- Shovel drive sprockets
- Dipper teeth and lips
- Gear teeth and attaching wear plates
- Crusher pads

### Diameters & Packages

Diameter	10 lb
0.125" (1/8")	✓
0.156" (5/32")	✓
0.187" (3/16")	✓

### Technical Specifications

- **Hardness as Deposited:** 16-22 HRC
- **Work Hardened:** 50+ HRC
- **Deposit Thickness:** As required
- **Tensile Strength:** 125,000 psi
- **Yield Strength:** 80,000 psi
- **Elongation:** 34%
- **Machinability:** Poor
- Can be flame-cut
- Wire Equivalent: Techniwear 55

#### Recommended Weld Parameters:

Diameter	Amps
0.125" (1/8")	90-130
0.156" (5/32")	120-150
0.187" (3/16")	140-175

- **Welding Procedure:** Do not preheat manganese steels. Maintain a short to medium arc. Direct the arc on deposited weld metal depositing 3 to 4 inches at a time. Interpass temperatures on manganese steel should not excel 500°F by skip-welding. Skip welding is advisable on large parts. Peening while hot helps reduce stress. Cool slowly.