

# AMTEC 3 CAST IRON AC/DC STRAIGHT ELECTRODE



## General Characteristics

A special pulsed arc electrode producing soft and easily machinable welds on cast iron without preheating. The special coating produces a pulsed arc, which provides easy manipulation in all positions and good bond with the parent metal. The deposit is soft, dense, and highly crack resistant with an easily removed slag. The transition zone is easily machined and can be filed. Produces deposits that are extremely soft and machinable due to minimal base metal dilution.

|                         |   |                    |
|-------------------------|---|--------------------|
| <b>Tensile Strength</b> | - | <b>62,000 PSI</b>  |
| <b>Yield Strength</b>   | - | <b>44,000 PSI</b>  |
| <b>Elongation</b>       | - | <b>30%</b>         |
| <b>Hardness (HB)</b>    | - | <b>Approx. 150</b> |
| <b>Brinell</b>          |   |                    |

| <b>Diameter</b> |             | <b>Amps(approx.)</b> |
|-----------------|-------------|----------------------|
| <b>(Inch)</b>   | <b>(MM)</b> |                      |
| <b>3/32</b>     | <b>2.5</b>  | <b>50-70</b>         |
| <b>1/8</b>      | <b>3.25</b> | <b>60-110</b>        |
| <b>5/32</b>     | <b>4.0</b>  | <b>120-150</b>       |
| <b>3/16</b>     | <b>5.0</b>  | <b>140-175</b>       |

## Procedure

Weld with a long arc. (1/4-3/8 inch). Normally, weld only short beads of approximately 20-30mm (0.75-1.25 inches) in order to keep heat input to a minimum. It is recommended that you peen the weld deposit to relieve weld bead stress, while the deposit is still hot. Allow part to cool slowly.

## Application

For joining and build-up of broken and worn parts of cast iron machine bases, engine blocks, sprockets, levers, housings, frames, and heavy cast iron equipment. It is recommended for joining cast iron to steel, especially where bonding quality and machinability are essential. Also used as an overlay on top of the build-up cast iron alloys like Amtec 2 to produce the best possible machinability.