Alloy for Cast Iron

AC/DCEP All Position



## Superior Medium Nickel Alloy for Cast Iron

#### **Typical Applications**

Royal 260 is a superior nickel-iron electrode which features extra arc stabilizers and cleaning agents enabling dense, strong, crack-resistant welds even on dirty, contaminated, scaly and oil-soaked base metal. This special flux coating displaces the impurities of the base metal into the slag instead of being trapped in the weld deposit. Royal 260 is specifically designed for heavy sections of gray, ductile, Meehanite, and nodular cast iron. This electrode produces welds with higher strength and ductility than straight nickel electrodes. Deposits are machinable, but are harder and more resistant to abrasion than high nickel electrodes. Castings containing phosphorus levels higher than normal (approximately 0.20% phosphorus) are more readily welded using the Royal 260 than with the Crown 295 or even the Royal 290. Use on sewer pipe, engine blocks, cylinder heads, cams, machine bases, transmission or gear housings, sprockets and gears.

Royal 260 is also used to weld sections of cast iron to steel.

#### **Specifications**

- Tensile Strength up to 75,000 psi
- Yield Strength up to 55,000 psi
- Color Match Good • 18 - 22%
- Elongation in 2" •
  - Hardness 200 to 350 Brinell
- Deposit
- Magnetic

#### Procedure

Clean weld area thoroughly. Use DC reverse polarity (DCEP) for maximum penetration. Bevel or use Chamfer 204 to form a "U" groove. Prepare the groove by grinding or filing it clean. Preheating is not necessary, although warming to 400°F to 500°F will produce a softer weld and minimize stresses on heavier sections. Locate the ends of all cracks. Use the Royal 260 to weld 1-11/2" long beads perpendicular to the ends of the crack. Begin welding from the center of the crack and weld alternately to the right and left. Select lowest possible amperage. Maintain a medium long arc with electrode tilted slightly in the direction of travel. Short stringer beads or narrow weave beads should be used to prevent excessive heat build-up. When breaking the arc, always fill the crater and drag rod back over the weld deposit. Stopping to peen often will help relieve stresses. Allow part to cool slowly.

### Sizes, Amps and Part Numbers

| Diameter | Amps      | Part Numbers |            |
|----------|-----------|--------------|------------|
|          |           | 1# Package   | 5# Package |
| 3/32     | 40 - 80   | RE260/EN-BP  | RE260/EN   |
| 1/8      | 60 - 110  | RE260/EO-BP  | RE260/EO   |
| 5/32     | 90 - 140  | RE260/EP-BP  | RE260/EP   |
| 3/16     | 110 – 180 | RE260/EQ-BP  | RE260/EQ   |



# **!!!! WARNING !!!!**



WELDING FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH.

BEFORE USING THIS PRODUCT THE WELDER (END-USER) MUST READ AND UNDERSTAND THE COMPLETE PRODUCT WARNING LABEL AND THE NEW 16 SECTION SAFETY DATA SHEET (SDS).

THE SAFETY DATA SHEET (SDS) WHICH OUTLINES THE POTENTIAL HEALTH HAZARDS AND SAFETY INFORMATION RELATED TO THIS PRODUCT CAN BE DOWNLOADED FROM THE SDS PORTION OF THIS WEBSITE. IT IS ALSO AVAILABLE FROM YOUR EMPLOYER AND WELDING SUPPLY DISTRIBUTOR.

DO NOT PROCEED WITH USE OF THIS PRODUCT UNTIL YOU READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) AND PRODUCT WARNING STATEMENT.

BE SURE TO CONSULT THE LATEST VERSION OF THE SDS.

SEE THE PRODUCT WARNING LABEL AND SDS FOR COMPLETE WARNING INFORMATION.



