

Royal 270

Shielded Metal Arc Welding
(SMAW) Stick Electrode

Alloy for Cast Iron

AC/DCEP
All Position



"The Royal Line"

CROWN ALLOYS COMPANY

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Nickel Free Alloy for Welding Cast Iron

Typical Applications

Royal 270 is an inexpensive option for repairs on cast iron when machinability is not required. The **Royal 270** flux 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. This electrode can be used as the first build-up layer(s) on cast iron which can then be capped with **Royal 260** or **Royal 290** for the required machinability. **Royal 270** is often used to repair burned furnace grates, cracked machine bases, housings and for build-up of worn areas that are subject to abrasion.

Specifications

- Tensile Strength up to 60,000 psi
- Color Match Good – Will rust like cast iron if exposed to the atmosphere
- Hardness approx. 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" or "V" groove. Prepare the groove by grinding or filing it clean. Preheating is not necessary. Locate the ends of all cracks. Use the **Royal 270** to weld 1-1½" 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. 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
1/8	70 – 115	RE270/EO-BP	RE270/EO
5/32	100 – 160	RE270/EP-BP	RE270/EP



!!!! 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.

