

Royal 3100

Shielded Metal Arc Welding
(SMAW) Stick Electrode

DC reverse only (DCEP)
All Position

Copper Based Alloy



"The Royal Line"

CROWN ALLOYS COMPANY

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Phosphor Bronze (Copper-Tin) Electrode

Typical Applications

Royal 3100 is excellent for the joining and cladding of **phosphor bronze**, bronze, brass, steel and cast iron. Also good for overlays on bearing surfaces. Common applications are repair and surfacing of gear-wheels, bearings, pumps, impellers, turbines, valve bodies and defects in new castings. **Royal 3100** offers good resistance to sea water and many other chemicals. Welds have excellent color match to bronze and the slag is easy to remove.

Specifications

- Tensile Strength up to 60,000 psi
- Yield Strength up to 35,000 psi
- Elongation in 2" 30% - 40%
- Hardness 80 - 120 Brinell

Procedure

Clean weld area thoroughly. Bevel edges of heavy sections to form a 45° vee. Preheat copper alloys to 900°F and maintain during welding. Use DC reverse polarity (DCEP). Run stringer beads maintaining a medium arc for best results. After weld cools, slag is removed by chipping and brushing. Cool slowly.

Sizes, Amps and Part Numbers

Diameter	Amps	Part Numbers	
		1# Package	5# Package
3/32	60 – 110	RE3100/EN-BP	RE3100/EN
1/8	90 – 150	RE3100/EO-BP	RE3100/EO
5/32	125 – 190	RE3100/EP-BP	RE3100/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.

