

Royal 13-29 FC

Flux Cored Arc Welding
(FCAW)

Hard-Facing Alloy

DCEP
All Position



"The Royal Line"

CROWN ALLOYS COMPANY

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Premium High Chromium Carbide Hard-Facing Flux-Cored Wire

Typical Applications

Royal 13-29 FC is a high quality, flux-cored, all-purpose hard-facing wire with excellent welding characteristics. It is a high carbon and chromium alloy. These primary chromium carbides are able to withstand severe abrasion while still resisting moderate impact. The **Royal 13-29 FC** will withstand temperatures up to 1100°F and the deposit will stress crack in a uniform pattern.

Royal 13-29 FC is used where wear resistance and toughness are required on all steels. It can even be used directly on stainless steel provided that dilution of the stainless steel is kept to a minimum. Typical uses include: bucket teeth, screw conveyers, muller plows, crusher jaws, pulverizing rollers, dipper teeth, cams, clutch parts, hot rolling dies, scraper blades, fan blades, dredge pumps and impellers, hammer mills and roasting mill plows.

Specifications

- Hardness as welded:
 - 1 Pass 56-59 (Rockwell C)
 - 2 Passes 58-61 (Rockwell C)
 - 3 Passes 59-63 (Rockwell C)
- Number of passes: Maximum of three
- Machinability: Grinding only – Can NOT be flame cut

Procedure

Clean weld area. Use DC reverse polarity (DCEP). Weld with either stringer beads or slight weave motion. Shielding gas is not necessary, but a better weld appearance and greater weld coverage can be achieved by using 75% Argon – 25% CO₂. A constant potential or controlled voltage power source and wire feeder will give best results. If hard facing low to medium carbon steels, a preheat is not required. If hard facing high carbon steels, the preheat and interpass should be that which is required to produce an optimal 3/8" to 5/8" average distance between stress relief checks. If more than 3/16" build up is needed use **Royal 13-25 FC** as a cushion.

Diameter	Shielding Gas	Welding Current (amps)	Arc Voltage (volts)	Stickout (inches)
.045	Not necessary, however best bead appearance and greater weld coverage is achieved using 75%Ar - 25%CO ₂ .	120 - 230	21 - 26	1" to 1½"
1/16		225 - 400	23 - 29	1" to 1½"

Sizes and Part Numbers

Diameter	Part Numbers		
	2 lb (4") Spools	8" Spools	25 lb Spools
.045	RS1329/1G	RS1329/2G	RS1329/3G
1/16	RS1329/1L	RS1329/2L	RS1329/3L



!!!! 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.

