

# Royal 208

Shielded Metal Arc Welding  
(SMAW) Stick Electrode

Low Alloy Steel

AC/DCEP  
All Position



*"The Royal Line"*

**CROWN** ALLOYS COMPANY

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## Superior High Strength - Low Hydrogen - Iron Powder Coated Electrode for Carbon and Low Alloyed Steels

### Typical Applications

**Royal 208** is excellent for use on high strength low alloy steels where good ductility and high tensile strength are desired. Deposits have outstanding elongation and ductility and provide crack-free welds under highly stressed conditions. **Royal 208** will weld a variety of high strength low alloy steels such as T-1, Hy-80, Hy-90, Hy-100, SSS 1000 and Jalloxy 90 and 100. Commonly used to fabricate tanks, containers, covers and high strength pipe. Used to weld low alloy steels containing nickel, manganese, molybdenum and chromium such as "I" beams, angle iron, scaffolding and super-structures. **Royal 208** can be used to build-up a base for **Royal 240** on hard-facing applications. **Royal 208** will respond to heat treatment (stress relieve) and can be flame cut.

### Specifications

- Tensile Strength up to 113,000 psi
- Yield Strength up to 104,000 psi
- Elongation in 2" approx. 25%
- Stress Relieve Heat to 1025°F and hold for 1 hour

### Procedure

Clean weld area thoroughly. Use AC or DC reverse polarity (DCEP). No preheat is necessary when welding low carbon steels. When joining heavy sections to thin sections and when low alloy or higher carbon steels are welded, a preheat of 400°F to 600°F is recommended. Use a short arc. Use stringer beads for best penetration on horizontal welds. Use weave technique working from bottom up for vertical welding. Allow deposit to cool before chipping off slag between passes.

### Sizes, Amps and Part Numbers

Diameter	Amps	Part Numbers	
		1# Package	5# Package
3/32	60 – 120	RE208/EN-BP	RE208/EN
1/8	100 – 150	RE208/EO-BP	RE208/EO
5/32	120 – 210	RE208/EP-BP	RE208/EP
3/16	200 – 275	RE208/EQ-BP	RE208/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.**

