



!!!! 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 MATERIAL SAFETY DATA SHEET (MSDS).

THE MATERIAL SAFETY DATA SHEET (MSDS) WHICH OUTLINES THE POTENTIAL HEALTH HAZARDS AND SAFETY INFORMATION RELATED TO THIS PRODUCT CAN BE DOWNLOADED FROM THE MSDS 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 MATERIAL SAFETY DATA SHEET (MSDS) AND PRODUCT WARNING STATEMENT.

BE SURE TO CONSULT THE LATEST VERSION OF THE MSDS.

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



CROWN ALLOYS

COMPANY

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Royal 182

Premium Nickel-Chrome Welding Electrode

Typical Applications:

Royal 182 is THE universal electrode for high heat and cryogenic (low temperature) applications. **Royal 182** withstands thermal cycling even to sub-zero temperatures thus making it the perfect choice for flame hardening equipment, heat treat parts, and cryogenic vessels. **Royal 182** is also highly corrosion resistant. The aforementioned characteristics make **Royal 182** ideal for cladding and wearfacing as well as joining. **Royal 182** is used to join carbon steels and stainless steels to high nickel-based metals. **Royal 182** is also used to weld Inconel® alloys 600,601 and 690 to themselves or each other. Inconel® and Incoloy® alloys are joined to carbon steels, stainless steels, nickel and Monel® alloys with **Royal 182**. Also, Monel® alloys can be joined to carbon steels with this electrode.

Specifications:

AWS A 5.11	Tensile Strength	80,000 PSI
E NiCrFe-3	Yield Strength	45,000 PSI
	Elongation in 2"	30%

Procedure:

Base metal must be clean. Nickel alloys become brittle if any sulfur or lead is absorbed into the weld deposit. These impurities are often found in lubricants, dirt, grease, oil paint, and other processing residues. Use about 30% more opening than conventional joint openings to allow for the low penetrating and sluggish nature of the molten nickel. Use DC reverse polarity while holding the electrode about 20° off vertical for flat position welding. Use a weave type bead but not more than three times the diameter of the electrode. In multipass welding, it is essential that all slag is removed before each bead is deposited.

Sizes:

3/32	40-70	AMPS
1/8	70-100	AMPS
5/32	100-130	AMPS
3/16	130-170	AMPS

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