



!!!! 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 11-10 & 11-30

Superior High Nickel TIG & MIG Wire

Typical Applications:

Royal 11-10 (TIG) and **Royal 11-30** (MIG) are used to weld wrought and cast forms of commercially pure nickel such as Nickel 200 and Nickel 201 to themselves or each other. The weld metal has good corrosion resistance, particularly in alkalis. Dissimilar welding applications for **Royal 11-10** and **Royal 11-30** include joining Nickel 200 and 201 to stainless steels, carbon steels, Inconel® alloys, copper-nickel alloys, and Monel® alloys. They are also used for joining Monel® alloys and copper-nickel alloys to carbon steels, and for joining copper-nickel alloys to Inconel® alloys.

Specifications:

AWS A 5.14	Tensile Strength	60,000 PSI
ER Ni-1	Yield Strength	35,000 PSI
	Elongation in 2"	20%

Procedure:

Royal 11-10 (Gas Tungsten Arc Welding or TIG): 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 25% more opening than conventional joint openings to allow for the low penetrating and sluggish nature of the molten nickel. Use DC straight polarity. Shielding gas should be argon or argon with a small amount of helium. Arc length must be maintained as short as possible. Prevent agitation and excessive heat from the weld puddle so as to avoid burning out the deoxidizing elements.

Royal 11-30 (Gas Metal Arc Welding or MIG): Use DC reverse polarity. Maintain a medium arc length. Balance of procedure same as **Royal 11-10**.

Sizes:

GTAW (TIG) 1/16" 3/32" 1/8"

GMAW (MIG)	Volts	Amps
.035	26-32	200-300
.045	26-33	250-325

Available in 2# and 8" and 30# spools.

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