



!!!! 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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Crown 21

2¼ Chrome - 1 Moly for TIG

Typical Applications:

Crown 21 is excellent for TIG welding Chrome Moly Steels used in pressure vessels and high pressure pipe. Used extensively in the petroleum industry and steam power generating plants. The chromium provides good oxidation and corrosion resistance, and the moly increases strength at elevated temperatures. **Crown 21** is heat-treatable.

Specifications:

AWS A 5.28	Carbon	0.70-0.12
ER 90S-B3	Manganese	0.40-0.70
	Silicon	0.40-0.70
	Phosphorus	0.025
	Sulfur	0.025
	Nickel	0.200
	Chromium	2.30-2.70
	Molybdenum	0.90-1.20
	Copper	0.350
	Others	0.500

- Tensile Strength* 90 to 94,500 PSI
- Yield Strength* 75 to 80,500 PSI
- Elongation 19%

*Post weld heat treated between 1250°F and 1300°F for one hour

Procedure:

Clean weld area thoroughly. A preheat and interpass temperature of not less than 350°F should be maintained during welding. Use DC straight polarity with argon shielding gas.

Sizes: 1/16 x 36" 3/32 x 36" 1/8 x 36"

ER 90S-B3

2¼ Chrome - 1 Moly for MIG

Typical Applications: Same as **Crown 21**

Specifications: Same as **Crown 21**

Procedure:

Use DC reverse polarity. Spray transfer welding should be done using a shielding gas mixture of 2-5 percent oxygen/balance argon. Short circuit transfer welding should be done with 50-90 percent argon/remainder CO₂. The best gas to use when welding out of position on thin gauge steel is 75% argon/25% CO₂. Use the same preheat temperature that is used for TIG.

SIZES:	AMPS:	VOLTS:	CFH:	STICK OUT:
.035	140-200	16-21	25-30	1/4"
.045	180-240	18-23	25-30	1/4"

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