



## TECH-ROD 630

I. **DESCRIPTION:** Tech-Rod 630 is a precipitation hardening stainless steel covered electrode used for welding of materials of similar chemical composition. Mechanical properties of this alloy are greatly influenced by the heat treatment.

**Note:** Mechanical properties listed below reflect utilization of a postweld heat treatment between 1875°F and 1925°F for one hour, followed by precipitation hardening between 1135°F and 1165°F for four hours.

II. **APPROVALS:** Manufactured under Quality System approved by ASME, ISO9001. Meets AWS 5.4 Class E630-16. Approved by Canadian Welding Bureau.

<u>III. CHEMICAL COMPOSITION</u>	<u>MECHANICAL PROPERTIES</u>
Carbon .03	<b>Tensile Strength</b>
Manganese .56	150,000 PSI      1030 MPA
Silicon .44	
Chromium 16.58	<b>Yield Strength</b>
Nickel 4.78	133,800 PSI      920 MPA
Molybdenum 0.2	<b>Elongation</b> 10%
Copper 3.55	
Columbium +	
Tantalum .24	
Sulfur .020	
Phosphorus .018	
Iron Balance	

IV. **WELDING PARAMETERS**

Direct Current  
Electrode + Ve

**AMPERAGES**

3/32"	65-75
1/8"	90-105
5/32"	120-135
3/16"	135-155

(For vertical welding amperages are to be reduced by 10 to 15 amps)

V. **PACKAGES AVAILABLE:**

3/16"-10# Can, 5/32"- 10# Can, 1/8"-10# Can, 3/32"-8# Can

**A LEADING PRODUCER OF STAINLESS STEEL AND NICKEL ALLOY WIRE**

BALTIMORE WELDING DIVISION • 2310 Chesapeake Avenue • Baltimore, MD 21222-4098 USA  
Tel: 410-633-9300 • Toll Free: 800-638-1458 • Fax: 410-633-2033 • www.techalloy.com