

# TECH-ROD 320

- I. **DESCRIPTION:** Tech-Rod 320 electrodes are designed for welding of alloys of similar composition in wrought and cast forms. The weld metal provides exceptionally good corrosion resistance to a wide range of chemical environments. The weld deposit is fully austenitic, and as such the heat input has to be limited to minimum during welding to avoid microfissuring.
- II. **APPROVALS:** Manufactured under Quality System approved by ASME, ISO9001. Meets AWS 5.4 Class E320-16.

III. **CHEMICAL COMPOSITION**

Carbon	.04
Manganese	1.95
Silicon	.52
Chromium	20.10
Nickel	33.75
Columbium + Tantalum	.72
Copper	3.55
Sulfur	.019
Phosphorus	.022
Iron	Balance

**MECHANICAL PROPERTIES**

<b>Tensile Strength</b>	
86,000 PSI	590 MPA
<b>Yield Strength</b>	
59,000 PSI	410 MPA
<b>Elongation</b>	33%

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