

TECH-ROD 385

I. **DESCRIPTION:** Tech-Rod 385 is used for welding of materials of similar chemical composition (UNS Number N08904). These materials are used in fabrication of equipment and vessels for handling and storage of sulfuric acid and phosphoric acid. The weld metal is fully austenitic and, as such, the low melting constituents such as carbon, silicon, and phosphorus should be kept low. Welding must be done with low heat input, using stringer bead technique.

II. **APPROVALS:** Manufactured under Quality System approved by ASME, ISO9001. Meets AWS 5.4 Class E385-16.

III. **CHEMICAL COMPOSITION**

Carbon	.015
Manganese	2.1
Silicon	.45
Chromium	20.5
Nickel	25.2
Molybdenum	4.6
Copper	1.750
Sulfur	.009
Phosphorus	.018
Iron	Balance

MECHANICAL PROPERTIES

Tensile Strength	
88,000 PSI	610 MPA
Yield Strength	
65,500 PSI	450 MPA
Elongation	32%

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