

Technical Data Sheet

3990 Electrode



Cronatron™
A LAWSON BRAND



Overview

3990 Electrode is the ultimate stainless electrode for maintenance and repair of equipment subjected to the extreme corrosion conditions found in the petrochemical, pulp and process industries. The unique formula of precision-balanced elements, including extra molybdenum and columbium, reacts synergistically to resist the problem of carbide precipitation, intergranular corrosion, pitting and chloride-stress-corrosion cracking.



Features/Benefits

- Welds all common and extra-low-carbon grades of stainless in the 300 Series including Carpenter 20 and Jessop 700
- Extra-high molybdenum to improve high-temperature performance
- Easy deslagging and excellent bead appearance
- Extra columbium for improved stabilization
- Tough, moisture-resistant flux coating
- Non-scaling to 1,800°F (980°C)
- Easy to use in all positions

Applications

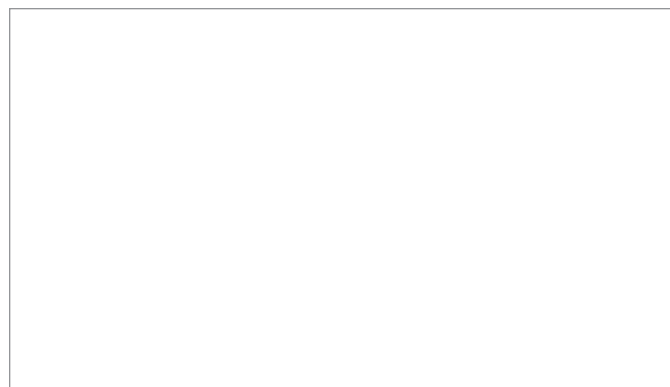
- Mixing tanks
- Heat exchangers
- Metal cleaning and pickling tanks
- Pump shafts
- Cracking plants
- Organic-chemical plants
- Pharmaceutical and food-processing equipment
- Stainless valves
- Solvent, plastics and explosive plants
- Piping, fittings and nozzles
- Excellent for sulfuric-acid-handling equipment
- Pulp and paper plants

Method of Application

AC or DC reverse polarity

Identification

Printed gray electrode; TIG flagged one end



Directions for Use

Use AC or DC reverse polarity with normal maintenance-welding procedures. Surface area should be as clean as is practical, however, 3990 Electrode is manufactured with special cleansing and fluxing agents to promote sound welds under most conditions. Hold a medium to short arc and tilt electrode 10° in direction of travel. Remove slag between passes.
3990 Electrode deposited weld beads should have a convex profile. AVOID flat or concave beads.

Technical Specifications

Tensile Strength: 84,000 PSI (579 MPa)
Elongation: 48%

Technical Tips

3990 Electrode is the safest and surest alloy to use on unknown stainless applications for maximum corrosion resistance.