



A  GLO-QUARTZ Company

OVER-THE-SIDE METAL HEATERS

INSTALLATION, OPERATING & MAINTENANCE INSTRUCTIONS

BEFORE INSTALLING HEATERS PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO ENSURE SAFE AND PROPER OPERATION!

VERIFY THE FOLLOWING:

- Check to make sure that the heater received is the same as ordered.
- Available voltage and phase agree with nameplate ratings – Do **NOT** install especially if on-site voltage exceeds rated voltage.
- Heater element material and Watt density rating must be compatible with chemistry of environment – Consult with Heatmax or Chemistry provider's (MSDS) as necessary.
- Thermostatic, high limit (over temperature) and liquid level controls are in place as required.
- Installation is performed by qualified personnel in accordance with National Electric Code and other electrical codes as they apply.
- That operational personnel are adequately trained in all key safety facets surrounding the use and maintenance of electric immersion heaters and controls.

Failure to verify these installation criteria may result in premature heater and equipment failure and may present a HAZARD to personnel and/or property as electric heaters are an ignition source in certain situations. Consult with Heatmax Heaters with any questions.

INSTALLATION:

- Heater is designed for either vertical mounting (secured at tank lip) or a horizontal orientation of heating elements (L-Shaped, sitting on the bottom of tank floor with a vertical tube "riser" paralleling tank wall. A terminal/connection box sits atop riser in the proximity of tank lip).
- **NEVER** install a L-Shape heater by lowering it into a tank by means of solely holding the riser tube. This approach may crack the weld at the juncture of the tube and bottom element housing.
- Wire in accordance with National Electrical Code and secure terminal covers and conduit connections.
- Connect thermostatic control, over-temperature safety switch and liquid level control.

OPERATION:

- **NEVER** energize or operate heater unless solution covers the heated zone and safety circuit is connected.
- Set thermostat to desired operating temperature and observe thermostatic control at start-up.
- Test all safety interlocks at start-up to assure they deactivate power to heater. **NEVER** circumvent safety circuit for any reason.
- Avoid damage to heater from racks or parts coming into contact with heater assembly.
- Avoid excessive splashing or dripping onto heater terminal box.
- Do **NOT** place heater terminal box under cover.
- Do **NOT** place heater terminal box in the direct flow path of tank fume ventilation system.

MAINTENANCE:

- **ALWAYS** disconnect power when performing any maintenance or service.
- **NEVER** remove an energized or connected heater out of tank; allow at least a 15 minute stabilization period before removing.
- Periodically inspect for excessive deposit build-up or sludge accumulation on elements and clean as necessary. **NEVER** hammer deposits off elements as damage to heater will ensue. Consult the chemical provider for suggestions on how to remove and dispose of particular scales.
- Remove any corrosion in terminal enclosure and **NEVER** operate a heater that exhibits any sign of physical or electrical damage. Consult with Heatmax Heaters for recommendations.