

## Installation Instructions

- Only qualified technicians should install all heaters.
- All applicable, codes and standards must be observed. Failure to do so can cause electrical shock and personal injury.
- The surface where the heaters are installed must be clean, and free of contaminants that could melt and get inside the heaters, causing them to fail.
- Do not use any heat transfer compounds when installing mica or ceramic heaters.
- All electrical terminations must be well insulated to prevent electrical hazards.
- One-piece mica band heaters must not be opened - to go around the barrel. This can cause distortion and improper contact, causing the heaters to fail. Either two-piece or expandable types should be considered, where it is not possible to slide heaters from one end.
- After the initial heat-up, check the lockup screws to see if they need to be retightened. Do not over torque the screws. If necessary, tap the heaters with a mallet to make sure that they are in firm contact with the surface for full heat transfer.
- Do not over tighten lockup screws on ceramic bands. This will compress the insulation, thus reducing their R-value. Further, note that excessive pressure can cause the ceramic pieces to crack.
- All heaters must be properly grounded.
- As a safety measure to prevent overheating and or thermal runaway, a temperature sensor, such as thermocouple, or RTD connected to a temperature controller must be installed. Guidelines for safety circuitry must be followed.
- After installation, safety covers must be applied.