



Technical Bulletin

*Place a copy of this bulletin in the front of each Blueprints Manual.
Redline drawings as needed and include a TB reference note.
Reference TB implementation on site Action Item Box-chart and/or
site tool history management log.*

Number: 023
Date Issued: 08/28/03
Expiration Date: 08/28/04

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|--------------------------------------|---|--|---|
| Subject/Key Words: | Process Technology wire size increase – wire containment and feed through kit required for installation of new heaters. | | |
| Classification: | <input checked="" type="checkbox"/> Informational | <input checked="" type="checkbox"/> Mandatory | <input type="checkbox"/> Safety Alert |
| | <input type="checkbox"/> Warranty Impact | <input checked="" type="checkbox"/> Purchase Parts | <input type="checkbox"/> No Charge For Parts expires ___ / ___ / ___. Reference this TB# when ordering NC parts. |
| Applicable Akrion Procedures: | Work instructions included with each kit – drill bit and tap not included. | | |
| Parts/Reference Documents: | Kit 224308-001: 3/4 inch feed through fitting and tubing and documentation. | | |
| Attachments: | Page 2. – kit work instructions. | | |

Issue: Process Technology (PT), in-line quartz heater OEM, has increased the buss supply wire from 10 gauge to 8 gauge for both the 8 kW (207433-001) and 4.5 kW (207433-002) heaters. Plenum feed through holes/fittings sized for 10 gauge wire are too small for 8 gauge power wires.

Symptoms: Installing the replacement PT heater wires into the pre-existing 1/2 inch containment tubing and feed through fitting is physically impossible.

Test/Validate: All first time Komatsu quartz in-line heater replacements and PT replacements having 1/2 inch wire containment tubing and feed through fittings will require an upgrade kit (224308-001) and plenum modification to install the new 8 gauge supply wire heaters. Check the Process Tech Heater to be installed to confirm that it has 8 gauge power wires prior to ordering upgrade kit or making plenum modification.

Solution: Inspect all commissioned heaters to inventory upgrade kit needs. Order kits for on-demand installation requirements. Follow work instructions (supplied with each kit) as shown on page two of this bulletin. Drill bit and tap to be furnished locally - not included in this kit.

If you have technical questions or require more information, please contact Akrion Technical Support Department via e-mail at techsupport@akrion.com. Authorized service personnel can obtain copies of the latest Akrion procedures and controlled documents from the Akrion Document Control department at doccontrol@akrion.com. Customers must direct all inquires to their local Akrion field service representative. (Form QA1656F1AC)

**Work Instruction:
Replacing Process Technology Heater (207433-001/002)**

1. After removing the old heater unit, remove fitting FTG3B0254 (1/2") from the underside of heater box top panel.
2. Re-drill heater panel top panel thru-hole to 5/16" and tap for 3/4"-14-FNPT from the bottom of the panel. Screw the new fitting, FTGB0270, into the hole from the bottom of the panel.
3. Cut tubing 213028-001 to an adequate length to cover wiring from the Process Technologies heater to the heater box thru-hole.
4. Thread heater wiring through tubing 213028-001 and secure the tubing inside the fitting on the Process Technologies heater.
5. Feed the wiring and tubing into the fitting on the underside of the heater box top panel. Secure the tubing within the integral ferrule fitting.
6. Reconnect wiring to appropriate terminal blocks in the head case.

