

APPENDIX B

Nutherm International, Incorporated
Docket Number 99900779/82-01

NOTICE OF NONCONFORMANCE

Based on the results of an NRC inspection conducted on June 21-25, 1982, it appears that certain of your activities were not conducted in accordance with NRC requirements as indicated below:

Criterion V of Appendix B to 10 CFR Part 50 states: "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Nonconformances with these requirements are as follows:

- A. Paragraph 6.1.1 of the Quality Assurance Manual, No. QA-N-10179-3, Revision 3, dated October 2, 1981, states in part, "All activities affecting the quality of the product shall be covered by written manufacturing instructions and engineering procedures or drawings. The activity shall be described as indicated in job specification, work instructions, shop construction drawings, planning sheets, operating or procedures manuals, test procedures or any other type of written form, providing adequate description of the activity to be performed."

Contrary to the above:

1. The assembly of heater elements had not been covered by written manufacturing instructions and engineering procedures or drawings. Consequently assembly personnel had no written information regarding mounting hardware and tightening requirements.
2. The bending of Part No. 064 was not being performed as required by Drawing No. 7003-51054-23, dated March 31, 1982. Rather, the designated portion (3 inches by 38.375 inches) was sheared and reattached, at 90 degrees, by welding.
3. Wiring was not being performed as indicated on Drawing No. 1023-51151-43, Revision 1, dated April 8, 1982. The wire being used was manufactured by Rockbestos while the drawing specified wire manufactured by National.

- B. Paragraph 7.1.1 of the Quality Assurance Manual, No. QA-N-10179-3, Revision 3, dated October 2, 1981, states in part, "All documents such as manufacturing instructions, engineering procedures, and drawings, including changes which describe activities affecting quality, shall be reviewed for adequacy and approved for release"

Contrary to the above, numerical control programs and tapes which describe activities affecting quality, had not been reviewed for adequacy and approved for release, prior to usage.

- C. Paragraph 10.1.3.1(a) of the Quality Assurance Manual, No. QA-N-10179-3, Revision 3, dated October 2, 1981, states in part, "All . . . welding on safety class shall be performed in accordance with qualified procedures"

Contrary to the above:

1. Welding of Part No. 064 (Drawing No. 7003-51054-23, dated March 31, 1982) was not being performed in accordance with a qualified procedure inasmuch as the procedure being used required E70S-6 filler metal while that being used was E70S-3.
2. The electrode wire speed was computed to be approximately 284 inches per minute rather than the specified 170-205 inches per minute, during performance of the welding on Part No. 064.

- D. Paragraph 16.1.4 of the Quality Assurance Manual, No. QA-N-10179-3, Revision 3, dated October 2, 1981, states in part, "All nonconforming material parts or components disposition shall be noted on the appropriate inspection records and will be signed by the MRB"

Contrary to the above, the disposition of all nonconforming parts had not been noted on the Inspection Report - Quality Assurance, for a Remote Control Panel for Project No. A-1089. Three nonconforming conditions had been recorded at Operation No. 3, only one dispositioned by the operation had been accepted.

- E. Paragraph 4.1.2 and its subparagraph (c) of the Quality Assurance Manual, No. QA-N-10179-3, Revision 3 dated October 2, 1981, states, "Design functions include: Prepare design drawings in accordance with contractual requirements."

Contrary to the above, design drawings had not been prepared in accordance with contractual requirements as evidenced by Drawing Nos. 1023-51153-33, and 1023-51151-43, both are Revision 1, dated April 8, 1982. The drawings

specified wire manufactured by Marathon and National, respectively; while the customer specification required wire manufactured by Cerro Wire and Cable Company.

- F. Paragraph 11.1.2 of the Quality Assurance Manual, No. QA-N-10179-3, Revision 3, dated October 2, 1981, states in part, "The Quality Assurance Manager shall indicate mandatory inspection hold points which require witnessing or inspecting by the purchasers designated representative . . . the specific hold points shall be indicated in appropriate documents."

Contrary to the above, purchaser witness and hold points (welding and shop tests) required by Purchase Order No. 91-1325-226, dated November 9, 1981, had not been indicated in the Inspection Reports-Quality Assurance for the Remote Control Panel and Electric Air Handling Heater for Project No. A-1089; nor had documented exceptions been taken as required by Note 2 of the purchase order.

- G. Paragraph 13.1.1 of the Quality Assurance Manual, No. QA-N-10179-3, Revision 3, dated October 2, 1981, requires that tools, measuring and testing devices used in activities affecting quality, be controlled by written procedures to assure calibration.

Contrary to the above, wire terminal crimping tools (hand and bench-mounted) had not been controlled by written procedures to assure calibration.