VENDOR INSPECTION BRANCH

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
REGION IV

Report No. 99900112/78-02 Program No. 44060

Company: Ametek Corporation
Calmec Division
8401 East Slauson Avenue
Pico Rivera, California 90660

Inspection Conducted: October 2-6, 1978

Inspectors: K M Hunnicutt for R. E. Oller, Contractor Inspector — 10/19/78 Date
Vendor Inspection Branch

Approved by: K M Hunnicutt D. M. Hunnicutt, Chief, Components — 10/19/78 Date
Section II, Vendor Inspection Branch

Summary

Inspection on October 2-6, 1978 (99900112/78-02)

Areas Inspected: Implementation of 10 CFR 50, Appendix B criteria and applicable codes and standards including, general review of vendor's activities, nonconformances and corrective action, training, special welding, equipment calibration, product acceptance and action on previous inspection findings.

The inspection involved 28 inspector-hours on site.

Results: Within the seven (7) areas inspected, no deviations were identified in five (5) areas. The following were identified in the remaining areas:

Deviations: Training; Records of auditor indoctrination and training were not maintained in accordance with Criterion II. Equipment calibration; the calibration program requirements were not fully implemented for three (3) separate items in accordance with Criterion XII.

Unresolved Items: None.

DETAILS SECTION

A. Persons Contacted

*L. Ferguson, QA Manager
B. Martin, QC Inspector - Calibration
E. Parungao, QC Supervisor
*A. Ruddy, General Manager
L. Sabean, Welder
*C. Weisman, Senior Engineer, State of California, Division of Industrial Safety

*Attended the Exit Meeting.

B. Action on Previous Inspection Findings

(Closed) Deviation (Report No. 78-01): Failure to maintain a record of acceptable demonstration to the Authorized Inspector (AI) for the fluorescent penetrant procedure No. PS-371 Revision A through C. The inspector found that the subject procedure was demonstrated to the satisfaction of the AI and a copy of the certification for the demonstration, signed and dated February 22, 1978, by the AI is being maintained by the QA Manager.

C. General Review of Vendor's Activities

1. Objective

The objective of this area of the inspection was to assess the vendor's activities and their impact on future NRC inspections and identify the components supplied for nuclear facilities.

2. Method of Accomplishment

The preceding objective was accomplished by:

a. Discussions with cognizant personnel.

b. Review of the following ASME N-type symbol authorizations to verify that they are current and identify the products.

(1) N-1051, N Class 1, 2, and 3 Valves.

(2) N-1050, NPT Class 1, 2 and 3 Valve Parts and Appurtenances, Piping subassemblies and Component Supports. Both of these authorizations expire May 6, 1981.

c. Verbal review of principal contracts and projected work loads for impact on the NRC inspection schedule.

d. Review of manufacturing processes and QA/QC activities, to evaluate the vendor's effectiveness in controlling the quality of the product.

3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

D. Nonconformances and Corrective Action

1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME requirements.

a. A written system has been established to assure that nonconformances are controlled and corrective action is taken.

b. Documented procedures or instructions are implemented for identification, documentation, segregation and disposition of nonconforming materials parts or components, and notification to affected organizations.

c. Nonconforming items are reviewed and accepted, rejected, repaired or reworked in accordance with documented procedures.

d. Conditions adverse to quality are promptly identified and corrected.

e. The causes of significant conditions adverse to quality are determined and corrected to preclude repetition.

f. The condition adverse to quality, the cause and the corrective action are documented and reported to appropriate levels of management.

2. Method of Accomplishment

The preceding objectives were accomplished by:

a. Review of the QA Manual CM-615, Section 11.0, "Nonconformities" to verify that controls for handling nonconformance and corrective action are documented.

b. Review of 21 completed Rejection Reports covering in-process valve manufacturing nonconformances and the resulting corrective actions, to verify that the nonconforming items were identified, documented, reviewed, and rejected or reworked in accordance with the QA program.

c. Review of a rework Shop Order traveler related to Reject Report No. 16844 (one of 21), to verify that the rework was controlled.

d. Review of use of a corrective action request/reply record used in conjunction with Reject Report No. 16545, to verify these documents were used to handle rejected supplier material in accordance with the QA program.

e. Observation of nonconforming valve components in the shop, to verify that these items were properly identified and segregated and that the appropriate Rejection Reports and other process control documents accompanied these items.

f. Discussions with cognizant personnel.

3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

E. Training

1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME Code requirements:

a. A written system has been established to assure that indoctrination and training of personnel performing activities affecting quality, is implemented in accordance with applicable codes.

b. Appropriate written agenda are used.

c. Records of training sessions agenda and attendance are maintained.

d. The agenda includes subject matter adequate to provide an understanding of the general and detailed aspects of the QA program, codes, standards and applicable technical disciplines.

e. The instructors are suitably qualified.

2. Method of Accomplishment

The preceding objectives were accomplished by:

a. Review of the QA Manual CM-615, part 1.4, "Training and Indoctrination", to verify that measures to control this activity are documented.

b. Review of procedure CM-933 dated January 5, 1978, "Training and Indoctrination of Personnel Effecting Quality" and, positions to verify that this procedure contained provisions to implement the QA Manual, and adequately identified personnel to receive training and indoctrination.

c. Review of records of training agenda and attendance for meetings conducted in March 1978, to verify that personnel representing positions identified in procedure CM-933, received training in QA program areas related to their responsibilities.

d. Discussions with cognizant personnel.

3. Findings

a. Deviations From Commitments

See Notice of Deviation, Item A.

b. Unresolved Items

None.

F. Special Welding

1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME Code requirements.

a. A written system has been established to assure that special welding applications are performed and controlled in accordance with applicable codes.

b. The documented welding procedure specifications used are suitably qualified, and are in accordance with the ASME Code for the specific special applications such as hard surfacing.

c. The welders are qualified as required.

d. The welding results are documented and accepted.

2. Method of Accomplishment

The preceding objectives were accomplished by:

a. Review of the QA Manual CM-615, Section 7.0, "Welding Process Control", to verify that adequate controls for welding are documented.

b. Review of Rework Shop Order traveler for the Operation hardfacing of valve body seat of Part 1-269-1, Lot NM-631, SN-37, to verify that the weld hardfacing operation was controlled and identified on the traveler by procedure and revision numbers WPS-102, Revision N.C.

c. Review of the in-process welding procedure specification (WPS) WPS-102, Revision N.C. dated June 23, 1975, "Welding Process GTAW-Manual" for the above traveler operation; the related procedure qualification record (PQR) No. 02 dated July 15, 1975, and welder Stamp W-27 performance qualification record, to verify that the required WPS was being used; that the WPS was approved and qualified, and that the welder was properly qualified.

d. Observation of in-process manual hardsurface stelliting of the above (Item 2.b.) valve body seat using WPS-102, to verify that the procedure's essential variables and other parameters were being complied with.

e. Discussions with cognizant personnel.

3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

G. Equipment Calibration

1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME Code Requirements:

a. A written system has been established to assure that equipment calibration is performed and controlled in accordance with applicable codes.

b. A written procedure has been developed and approved which contains provisions to assure that tools, gages, instruments and other inspection, measuring and testing equipment and devices used in activities affecting quality, are of the proper range, type and accuracy, and are calibrated and properly adjusted at specified periods or use intervals.

c. The devices are identified in the documented system and/or procedure and are calibrated in accordance with the system and procedure.

d. The calibration is performed against certified measurement standards which have known relationship to National Standards, where such standards exist.

e. The control measures include provisions for test equipment identification and calibration status by marking, or on records traceable to the equipment.

2. Method of Accomplishment

The preceding objectives were accomplished by:

a. Review of the QA Manual CM-615, Section 12.0, "Calibration of Measurement and Test Equipment," to verify that controls for calibration are documented.

b. Review of procedure CM-1005, Revision E, "Quality Control Calibration Procedure," to verify that approved written instructions are available to provide for the control, calibration, and documentation of measuring, testing and inspection devices at specified periods or use intervals.

c. Examination of the following measuring and testing devices, to verify that they were controlled, calibrated, and identified as required by Appendix B to 10 CFR 50, the ASME Code and the QA Program.

(1) Mechanical measuring devices such as height gages, micrometers, calipers, plug gages, "Go-NoGo" Rings, dial bore, Cardax instrument and optical comparator.

(2) Reference gage block sets and parallel bar set.

(3) Black light (ultraviolet) lamp and the related NDE capability checklist.

(4) Hydrostatic Gages and Master Gas Pressure Gages.

(5) Deadweight Tester.

(6) Welding Machine Ammeters, Voltmeters and Argon Gas Flow Meters.

(7) Weld Preheat Oven Temperature Indicators.

(8) Vol-U-Meter Reference Standard.

d. Review of Ametek/Calmec calibration record cards for the above devices and outside sources' certificates of calibration for those devices not calibrated by Ametek/Calmec, to verify that Ametek/Calmec implements and maintains a documented calibration, identification, and recall system for measuring and testing devices, and that calibration standards have known traceability to National Standards, where such standards exist.

e. Discussions with cognizant personnel.

3. Findings

a. Deviations From Commitments

See Notice of Deviation, Item B.

b. Unresolved Item

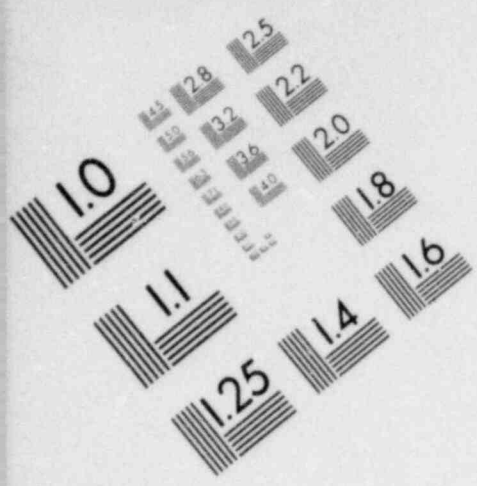
None.

H. Product Acceptance

1. Objectives

The objectives of this area of the inspection were to verify that the following items were controlled in accordance with applicable NRC and ASME Code requirements.

a. A written system has been established to assure that product acceptance activities related to procurement of items and services, are controlled.



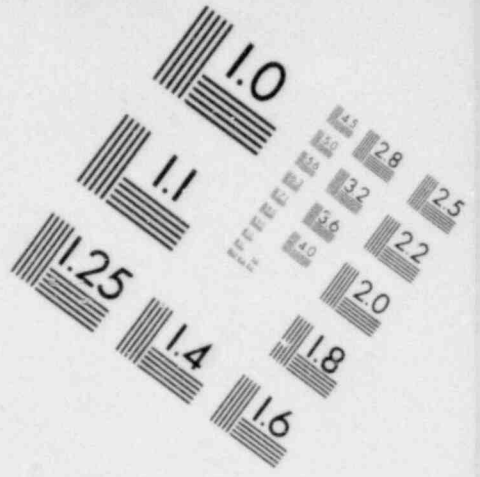
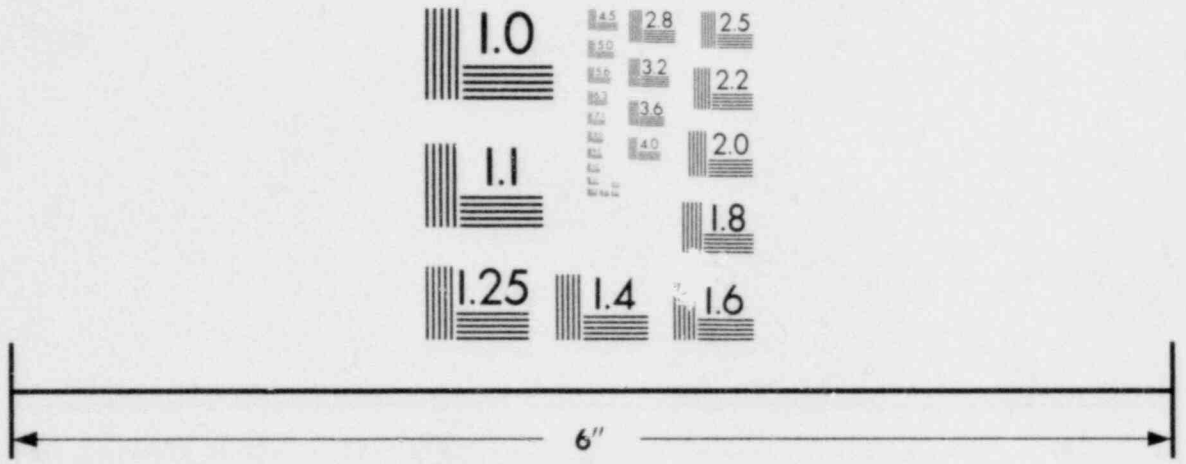
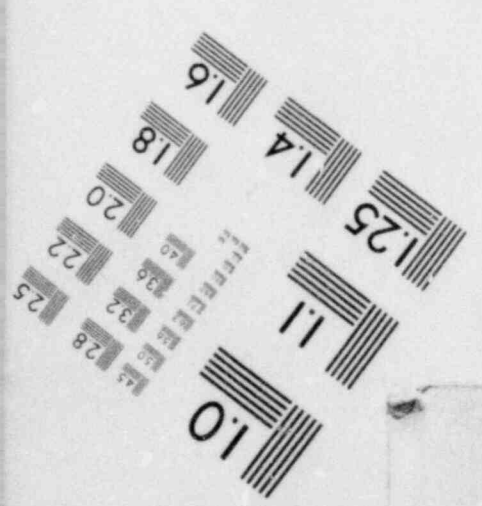
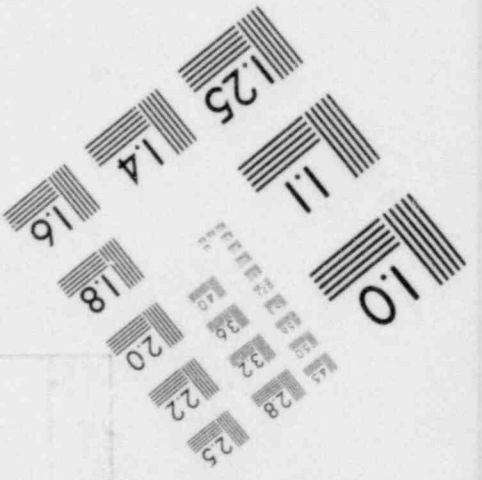


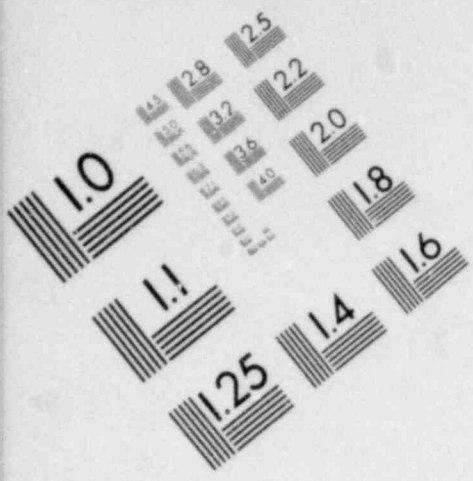
IMAGE EVALUATION
TEST TARGET (MT-3)



MICROCOPY RESOLUTION TEST CHART







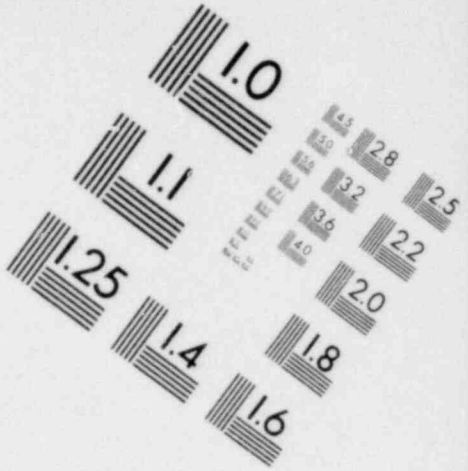
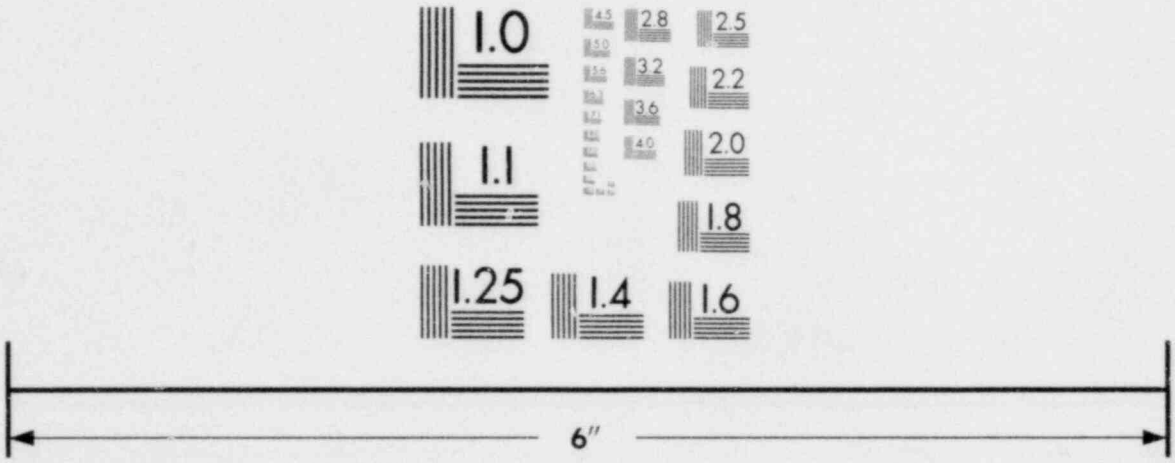


IMAGE EVALUATION
TEST TARGET (MT-3)



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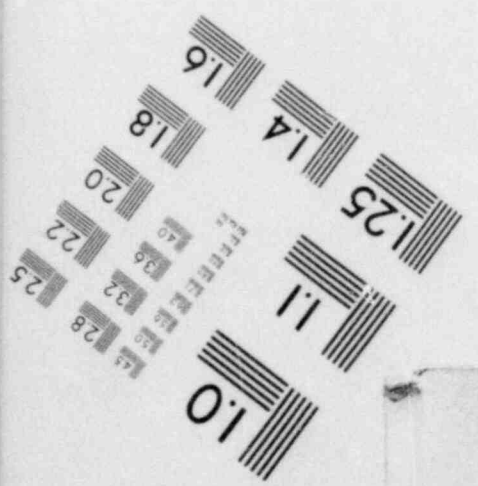

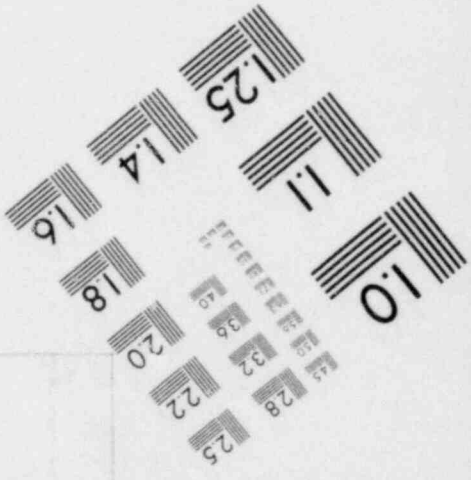

b. Procedures have been prepared, approved and implemented by responsible personnel to control the subject activities.

c. The results of product acceptance activities are documented and reviewed for acceptability by responsible personnel.

2. Method of Accomplishment

The preceding objectives were accomplished by:

a. Review of the QA Manual CM-615, Section 5.0, Part 5.5, "Receiving Inspection" and Section 10.0, Part 10.1, "Receiving Inspection," to verify that controls for the subject activity are documented.

b. Review of Receiving Inspection document packages for materials purchase orders No. 17199 (set screws), No. 16926 (bar stock), No. 16793 (ER-308 welding wire), and No. 15372, (valve bodies) to verify that the QC receiving inspector and the QA Engineer are verifying that the purchased items and the certified material test reports and other vendor records supplied with the materials, are in accordance with procurement document requirements.

3. Findings

Within this area of the inspection, no deviations or unresolved items were identified.

I. Exit Interview

1. The inspector met with management representatives denoted in paragraph A, at the conclusion of the inspection on October 6, 1978.

2. The following subjects were discussed:

a. Status of corrective action for the previous inspection findings.

b. The deviations from commitments identified in the Notice of Deviation.

3. The manufacturer's representatives were asked to formulate the corrective action response to deviations in accordance with the three (3) conditions identified in the inspection report cover letter.

4. Managements questions related to clarification of the above subjects.