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OPERATING PROCEDURES MANUAL

Manual Number: _____

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OPERATING PROCEDURES REVISION RECORD

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	ALL	NEW	R.H.	09/23/97

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MANAGEMENT REVIEW

Distribution

President

Branch Manager

Sales Manager

Director of Quality

1. PURPOSE

1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for scheduling, conducting and recording management reviews of the quality system.

2. SCHEDULING

2.1 The quality system is reviewed by the executive management at least once a year. The Branch Manager schedules an annual review meeting to be held before the end of June. The President and the Branch Manager may call for additional meetings as they see fit.

3. ATTENDANCE

3.1 Management review meetings are attended by the President, the Branch Manager, the Sales Manager, and the Director of Quality. If any managers are unable to attend, they may send a representative in their place. All managers will receive minutes of the meeting, regardless of their attendance. Absent managers will review the minutes and submit comments to the Branch Manager no later than ten working days following receipt of the minutes. No more than two managers may be absent from a meeting. In the event more than two managers will be absent the meeting will be rescheduled within 5 working days of the original schedule. The Branch Manager and the Director of Quality must always attend.

4. AGENDA

4.1 The agenda for management review meetings is prepared by the Director of Quality. It is then reviewed by the Branch Manager and distributed to participating managers at least one week prior to the scheduled meeting.

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4.2 As a minimum, the agenda shall address the following:

◆ Management Objectives

1. Decrease customer complaints
2. Decrease customer returns
3. Decrease late deliveries
4. Decrease vendor rejections

◆ Results of internal audits of the Quality System to determine if it is suitable and effective.

◆ Quality Policy

◆ Effectiveness of Corrective Actions

Measured by:

1. Review of the number of non-compliance's.
2. Review of Corrective and Preventive Actions.
3. Review of the number of re-occurrences, if any.

◆ Effectiveness of Preventive Actions

Measured by:

1. The number vendor rejections.
2. The number of customer rejections.
3. The number of customer complaints.
4. The delivery performance by both the vendor and our company.

5. RECORDS

5.1 Minutes of the management review meetings are taken and distributed to all attendees and absent managers. The minutes, together with internal documents, as applicable, are confidential and will not be revealed to anyone outside of the company. Storage location and period of retention of these records are as specified in Procedure QOP-16-1, Control of Quality Records.

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QUALITY PLANNING

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Sales Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to define the requirements for development of quality plans and to assign responsibilities for establishing and maintaining the quality plans.

2. GENERAL

- 2.1 The assessment of the quality system in management review determines the need for revised operating procedures or work instructions or the need to create and implement additional operating procedures or work instructions.
- 2.2 When necessary, quality plans will be prepared, giving consideration to the following:
- 2.2.1 Early identification of resources and equipment needed to achieve the required quality.
 - 2.2.2 Ensuring that processes, inspection and test procedures, and documentation are compatible.
 - 2.2.3 The updating, as necessary, of quality control, inspection, and testing techniques.
 - 2.2.4 The identification of any measurement requirement involving capability that exceeds the known state of the art, in sufficient time for the needed capability to be developed.
 - 2.2.5 The identification of suitable verification processes.
 - 2.2.6 The clarification of standards of acceptability for all features and requirements, including those which contain a subjective element.
 - 2.2.7 The identification and preparation of quality records.
- 2.3 Control of quality plans will be as specified in Procedure QOP-5-2, Document and Data Control.

3. RESPONSIBILITY

- 3.1 The appropriate department manager is responsible for developing additional or revised operating procedures or work instructions. All documents will be reviewed and approved by the Director of Quality, the President, or the appropriate department manager. Quality plans specific to a particular customer or a particular order, will be approved by the customer.

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CONTRACT REVIEW

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Sales Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for review of customer orders for products in order to ensure that the orders are understood and that the company is able to deliver the ordered products.

2. ORDER REVIEW

- 2.1 Sales personnel are responsible for taking orders from customers. When an order is received, a salesperson reviews the order to verify that the order matches the original quotation. If a quotation was not requested prior to the order, the order is reviewed to assure that the company is able to fulfill the customer requirements. The order is reviewed to note any special packaging requirements, delivery date, certification requirements, and billing requirements.
- 2.2 Revision levels of specified documents are confirmed. If the company does not have possession of the current revision it will be requested from the customer.
- 2.3 If any discrepancies are noted, the salesperson will contact the customer for clarification.
- 2.4 Verbal orders received from the customer will have all requirements documented. This will be reviewed with the customer and customer acknowledgment noted

3. RECORDS REVIEW

- 3.1 When the order review is completed satisfactorily, the salesperson enters the order in to the computer system. An initialed copy of the order constitutes record of its review. Until the order is printed, it is maintained in the computer system. Storage location and retention period for the printed contract review records are specified in Procedure QOP-16-1, Control of Quality Records.

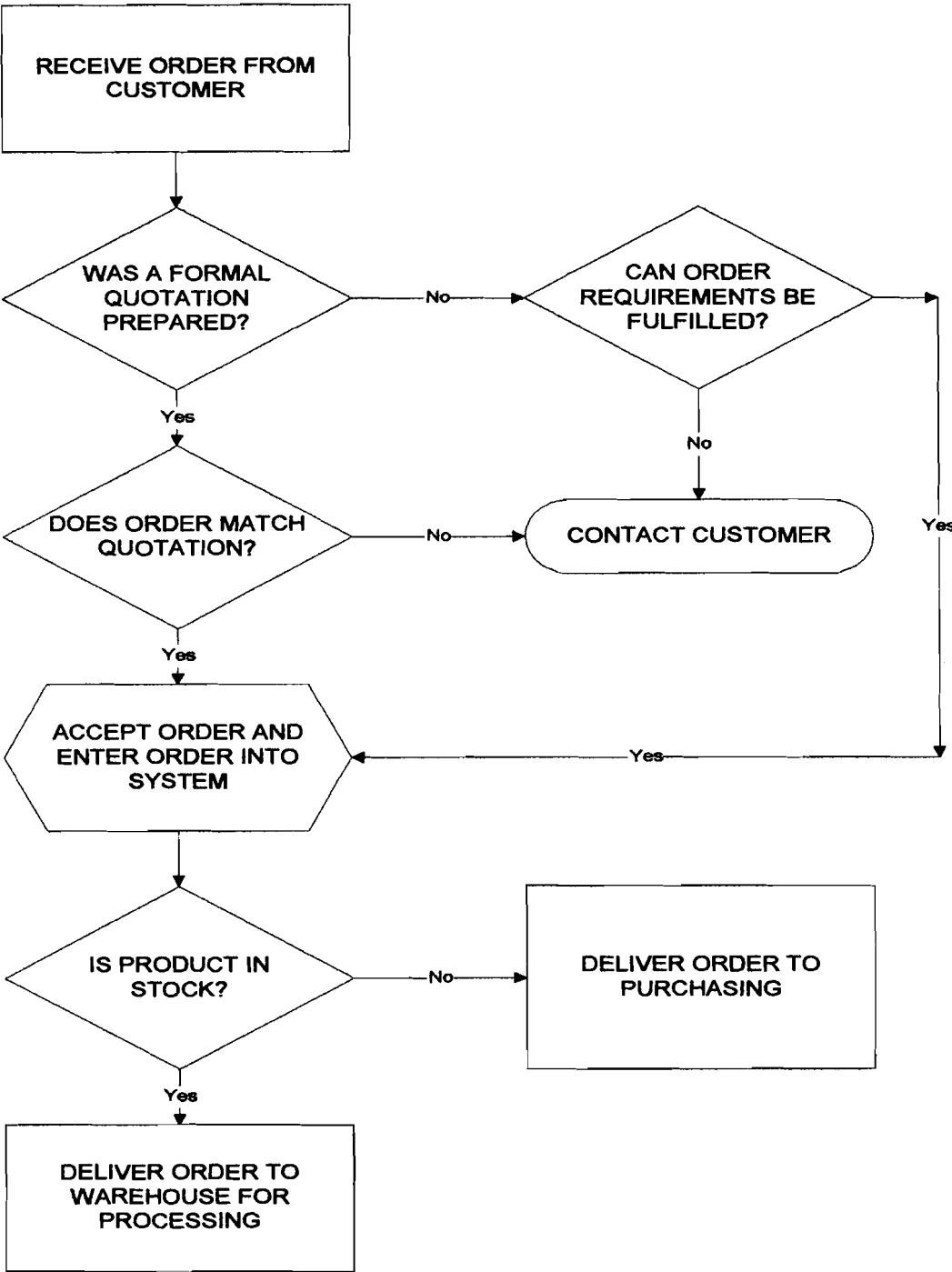
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4. AMENDMENTS TO THE CONTRACT

- 4.1 Amendments made to a contract will require that the original sales order be recalled. A new sales order will be issued.
- 4.2 Amendments made to a contract will require customer notification. Amendments will be documented with the following information:
 - 4.2.1 Date of amendment.
 - 4.2.2 Nature/Type of change.
 - 4.2.3 Individual accepting change (Customer)
 - 4.2.4 Initials of employee issuing the change or notifying the customer of the change.
- 4.3 The following circumstances will require an amendment to the contract:
 - 4.3.1 Quantity adjustment.
 - 4.3.2 Pricing adjustment.
 - 4.3.3 Customer request for modification of delivery date or delivery method.
 - 4.3.4 Order cancellation.
 - 4.3.5 Product change.
 - 4.3.6 Q.A. documentation change or addition.

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CONTRACT REVIEW AND ORDER ENTRY FLOW CHART



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QUALITY SYSTEM DOCUMENTATION

Distribution

President

Branch Manager

Sales Manager

Director of Quality

All Employees

1. PURPOSE

- 1.1 The purpose of this procedure is to define the purpose, content, and format of the quality system documentation and to assign responsibilities for establishing and maintaining the quality system documentation

2. QUALITY MANUAL

- 2.1 The purpose of the quality manual is:
- 2.1.1 State the company's general quality policy as well as specific policies related to the main activities comprising the quality system.
 - 2.1.2 Define and describe the quality system.
 - 2.1.3 Define the authorities and responsibilities of management personnel affected by the quality system.
 - 2.1.4 Provide general and specific procedures for various activities comprising the quality system.
- 2.2 The President formulates the general quality policy, the Branch Manager reviews and approves the quality manual, and the Director of Quality is responsible for maintaining the manual. Revisions to the manual will be noted on the revision record and are approved by the President.

3. OPERATING PROCEDURES

- 3.1 The purpose of the operating procedures are to provide for systems and instructions, and to assign specific authorities and responsibilities for carrying out the main activities comprising the quality system.
- 3.2 Operating procedures are coded XOP-S-##. X is the department code, the consecutive two letters following stand for *Operating Procedure*, S is the number of the quality manual section that the procedure applies, and ## is the number of the procedure within the department.

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QOP-5-1	QUALITY SYSTEM DOCUMENTATION	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

- 3.3 The following departments, with their assigned departmental codes, are authorized to prepare and issue the operating procedures:

<u>DEPARTMENT</u>	<u>CODE</u>
Quality Assurance	Q
Sales	S
Personnel and Administration	A
Purchasing (Sales Department)	P
Materials/Warehouse	M

- 3.4 Revisions to operating procedures will be noted on the revision record and are approved by the appropriate department manager.

4. WORK INSTRUCTIONS

- 4.1 The purpose of work instructions is to guide personnel in performing specific tasks, such as operating specific equipment, handling products, preparing purchase orders, and so forth. The distinction between work instructions and operating procedures is that an instruction relates to a single specific task, while a procedure regulates a whole activity that is an element of the quality system.
- 4.2 Work instructions may be issued in the form of posted notices, instruction sheets or books, internal standards, and so forth.
- 4.3 Work instructions are normally issued by the department that uses them. Where the instructions concern quality verifications only the QA department will prepare and issue such instructions regardless of where they are used.

5. STANDARDS AND OTHER REFERENCE DOCUMENTS

- 5.1 The company has in its library all standards and reference materials pertaining to products it furnishes and to operate the quality system.
- 5.2 The standards library is controlled and maintained under the guidance of the QA department.
- 5.3 Standards are maintained current by periodic purchase of documents as they are revised for standard products. Standards for customer proprietary products are revised by the customer.

6. QUALITY PLANS

- 6.1 Quality plans define special inspection and testing criteria and are attached to the sales order.

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DOCUMENT AND DATA CONTROL

Distribution

President

Branch Manager

Sales Manager

Director of Quality

All Employees

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for establishment, review, authorization, issue, distribution and revision of the quality system documents.

2. APPLICATION

- 2.1 There are five categories of controlled documents:
- 2.1.1 Quality manual
 - 2.1.2 Operating procedures
 - 2.1.3 Work instructions
 - 2.1.4 Standards and other technical reference materials
 - 2.1.5 Quality plans
- 2.2 The purpose of each category of documents and the personnel authorized to review and issue these documents are defined in Procedure QOP-5-1, Quality System Documentation.

3. IDENTIFICATION

- 3.1 All documents are normally identified, as a minimum, by their title, document number, revision, revision date, and identification of the issuing authority.
- 3.2 Posted instructions are also controlled documents, however the need for revision levels of these documents is not absolute. When revised, the obsolete postings will be removed and replaced with new versions.

4. ELECTRONIC MEDIA

- 4.1 Documents or data stored on electronic media such as computer hard drives will be controlled in the same manner as paper documents.
- 4.2 Data will be backed up onto removable media and stored off site and/or in a fire safe.

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QOP-5-2	DOCUMENT AND DATA CONTROL	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

5. ESTABLISHMENT OF INITIAL ISSUES AND REVIEWS

5.1 The initiative to establish a new, or revise an existing document can be taken by anyone in the organization. The person wishing to initiate a document or a revision submits a draft of the proposed document to his or her supervisor or, in the case of documents controlled by the QA department, directly to the Director of Quality. Regardless of who initiates a document, final approval will be made by the appropriate department manager.

6. ISSUE

6.1 Prior to release of a document, it is reviewed for adequacy, correctness and conformance with the quality policies. A document is considered to be formally issued when approved by the Department Manager.

7. PLACEMENT OF INITIAL ISSUES AND REVISIONS

7.1 The quality manual and operating procedures both incorporate a distribution list. Whenever appropriate, other documents will also have a distribution list. Documents are placed with personnel at locations where they are to be used. Managers also have a full set of all documents relevant to their departments.

7.2 Revisions of documents are distributed to the same personnel and locations as the original issues. Every copy of a revised document is distributed with a cover sheet that contains a description of the change. The cover sheet also contains a note instructing the recipient to remove and destroy the old, superseded version of the document. Observance of this instruction is regularly audited.

7.3 Obsolete documents retained for legal use or for historical knowledge will be marked obsolete.

8. MASTER LIST

8.1 Each department issuing quality documents maintains a master list of all documents it has issued. The list identifies the last revision date, level and distribution of each document.

9. CONTROLLED COPIES

9.1 When issued to personnel and outside parties who are not affected by the document but need a copy for information only, documents are stamped UNCONTROLLED across every page. Such documents are not followed up with revisions. Uncontrolled copies of documents may not be given to personnel or outside parties who manage, perform or verify work that is directly affected by the document.

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QOP-5-2	DOCUMENT AND DATA CONTROL	OPERATING PROCEDURE	09/23/97	R.H.	NEW	2 of 1

SUBCONTRACTOR ASSESSMENT

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Sales Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for qualification of subcontractors.

2. DEFINITIONS

- 2.1 A subcontractor is defined as a vendor who supplies either:
- 2.1.1 Completed products.
 - 2.1.2 A service or process on products per the company's specifications or instructions. This may include but is not limited to machining, metal finishing, locking element installation or testing.

3. SUBCONTRACTOR ASSESSMENT

- 3.1 The Q.A. department is responsible for assessing subcontractors. A Quality System self survey questionnaire is sent to the subcontractor or completed over the telephone. The survey will be reviewed by Q.A. to determine if, at a minimum, the subcontractor is capable of supplying the required product per company and customer requirements. Continuous quality performance monitoring of selected subcontractors is also an important element of subcontractor assessment.
- 3.2 Every time a nonconforming delivery is identified, the receiving clerk or QA inspector initiates a nonconformity report. One copy of the report is forwarded to Purchasing. The subcontractor is always contacted and informed of the identified nonconformity's and, if they are recurring, the subcontractor is requested to propose and implement a corrective action. Nonconformity reports, reports for corrective actions and associated correspondence are filed in the subcontractor's file.

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3.3 Selected subcontractors' files are reviewed at least every six months to assess trends in their quality performance. If a trend is indicated by 3-5 re-occurrences of the same type of discrepancy, a Subcontractor Corrective Action Request (SCAR) will be initiated. The SCARs will be reviewed during the assessment to determine their effectiveness. Subcontractors who repeatedly fail to deliver satisfactory product will be reported to the Branch Manager for review.

4. SUBCONTRACTOR LIST

4.1 The purchasing department is responsible for maintaining the subcontractor list. The list is kept current on the computer, and approximately every six months it is printed out and authorized by the Branch Manager and Director of Quality.

5. FOLLOW UP ASSESSMENTS

5.1 Every three years selected subcontractors will be required to complete and return a Quality System Survey. The survey will be analyzed by Purchasing and QA. In addition to ongoing monitoring, the survey will be evaluated to determine continued approval.

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PURCHASING

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Sales Personnel

1. PURPOSE

1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for:

1.1.1 Review of purchasing documents and use of the subcontractor list.

1.1.2 Customer verification of purchased products.

2. SUBCONTRACTOR LIST

2.1 A copy of the subcontractor list is available to personnel preparing and authorizing the company's purchasing documents. Products that are purchased for resale may not be purchased from subcontractors that are not on the list, unless the subcontractor is in the process of qualification. This also applies to the purchase of measuring and test equipment, and engineering/consulting services.

3. PURCHASING DATA

3.1 Purchasing documents are prepared by the Sales department and, before their release, are reviewed by the appropriate sales person. Purchasing documents for measuring and test equipment or for processes performed to a specification must be reviewed and approved by QA.

3.2 Purchasing documents clearly and completely describe the ordered products including, where applicable:

3.2.1 Precise identification, including name, part number, type, class, style, and grade.

3.2.2 Title and issue of relevant standards, specifications, drawings, process requirements, and other such technical data.

3.2.3 Requirements for inspection, testing or other verification, and evidence of compliance.

3.2.4 Requirements for quality system standard applied.

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4. VERIFICATION OF PURCHASED PRODUCT

- 4.1 When applicable and appropriate, the company will verify that the purchased products conform to specified requirements, at the vendor's facilities.
- 4.2 If the verifications are to be performed at the source, the must be notified at least one week in advance to allow for contacting the involved subcontractor and making the necessary arrangements.
- 4.3 Customer verification of purchased products does not absolve the company of the responsibility to deliver a quality product that conforms with the contract requirements. Customer verification does not preclude subsequent rejection.
- 4.4 When the requirement for Government or Customer Source inspection is requested and approved by the assigned Government or Customer Representative, the following statement will be documented in the purchase order:

"Government or Customer Inspection is required prior to shipment from your plant. Upon receipt of this order, promptly notify the local Government or Customer Representative so that planning for Government or Customer inspection can be accomplished."

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CONTROL OF CUSTOMER SUPPLIED PRODUCT

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Inspection Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for handling customer supplied products.

2. INSPECTION AND STORAGE

- 2.1 Customers are required to supply their products with technical and quality data sufficient to provide the company's inspectors with the acceptance criteria against which they will perform the receiving inspection.
- 2.2 Customer supplied products are received, inspected and tested in the same manner as other purchased products, that is, in accordance with the company's Procedure QOP-10-1, Receiving Inspection. Marking, storage, handling and the maintenance of customer supplied products also follow the same procedures that are applicable to purchased products.

3. SPECIAL REQUIREMENTS

- 3.1 When specified in the contract, special instructions for handling customer supplied products are followed. When so requested, the customer's products may be segregated and labeled to identify them as the customer's property.

4. LOSS OR DAMAGE

- 4.1 Any occurrence of loss, damage, deterioration or unsuitability of customer supplied product is reported back to the customer.

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POP-7-1	CONTROL OF CUSTOMER SUPPLIED PRODUCT	OPERATING PROCEDURE	09/23/97	T.P.	NEW	1 of 1

PRODUCT IDENTIFICATION AND TRACEABILITY

Distribution

President

Branch Manager

Sales Manager

Director of Quality

All Employees

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for:
 - 1.1.1 Product identification and traceability
 - 1.1.2 Allocating internal part numbers
 - 1.1.3 Product marking

2. PARTS AND PRODUCT IDENTIFICATION

- 2.1 Purchased products will have their appropriate container labeled or stamped with the appropriate part number and lot/batch number if applicable. This may include the actual standard part number, a description, and the company's internal part number, if applicable.

3. INTERNAL PART NUMBERS

- 3.1 Internal part numbers may be assigned. These part numbers generally correspond to the product description. A master list of internal part numbers and their description is maintained by data entry.

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QOP-8-1	PRODUCT IDENTIFICATION AND TRACEABILITY	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

PROCESS CONTROL

Distribution

President

Branch Manager

Sales Manager

Director of Quality

1. PURPOSE

- 1.1 The purpose of this procedure is to provide a system and instructions, and to assign responsibilities for the establishment and use of process controls.

2. WORK INSTRUCTIONS

- 2.1 Personnel are instructed in performing critical or complex operations by work instructions and posted notices. Work instructions indicate how an operation should be performed and what sequence the operations should be performed in order to achieve the correct result.
- 2.2 Work instructions are normally established by the manager of the department the work instructions affect.
- 3.3 Work instructions are established for all processes and operations where the absence of such instructions could cause an impairment in quality.

3. NEW OR MODIFIED PROCESSES OR EQUIPMENT

- 3.1 New or modified processes or equipment will require monitoring, analysis and approval by the appropriate department manager.

4. SPECIAL PROCESSES

- 4.1 Where special processes are involved, personnel performing these processes will be trained and where necessary, certified.

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RECEIVING INSPECTION

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Inspection Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for performing and recording the receiving inspections of purchased products.

2. RECEIPT OF PRODUCT

- 2.1 The receiving clerk performs the visual inspection of the received goods. After unloading of the delivery, the receiving clerk counts the number of delivered units and inspects packages for in-transit damage. If all checks are satisfactory, he or she signs the delivery receipt and moves the products to receiving inspection. If not, any shortages of delivered units or damages are noted on the delivery receipt.

3. RECEIVING INSPECTION

- 3.1 Receiving personnel perform the receiving inspections. The inspector assembles all technical documentation necessary to determine inspection scope and acceptance criteria. If there is doubt regarding the inspection scope or criteria, the inspector contacts the Director of Quality.
- 3.2 As a minimum, the scope of receiving inspection is:
- 3.2.1 Review of material certification, source inspection and test records, compliance certificates and other such documentation delivered with the product.
 - 3.2.2 Visual inspection to detect any damage or other visible quality problems.
 - 3.2.3 Taking measurements and testing as required.
 - 3.2.4 Recording the actual measurements and test results.
- 3.3 If the product passes all reviews, inspections and testing the receiving paperwork is stamped to indicate acceptance and the product along with all paperwork is moved to the warehouse area.
- 3.4 If the product does not pass all reviews, inspections and tests, a discrepant material report is generated in accordance with Procedure QOP-13-1.

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3.5 Once the product is moved to the warehouse area, quantities are verified and the product is entered into stock, prepared for outside processing, or prepared for shipment to the customer.

4. RECORDS

4.1 The receiving documents and associated paperwork are stored and records retained as specified in Procedure QOP-16-1, Control of Quality Records.

5. NONCONFORMING PRODUCTS

5.1 If a nonconforming product is identified or quality documents are incomplete, the QA inspector labels the product container with a HOLD or REJECTED tag and prepares a discrepant material report. The product is segregated from conforming products by placement in the designated Hold Area. Processing of the discrepant material report is explained in Procedure QOP-13-1, Control of Nonconforming Product.

6. SOURCE INSPECTION

6.1 When required by customer contract or purchase order, or if required by upper management or Quality Assurance, source inspection may be conducted at the vendor's facilities.

6.2 Acceptance at the source does not constitute final acceptance and will not be used in lieu of receiving inspection as set forth in this section.

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IN-PROCESS INSPECTION

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Inspection Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for performing and recording the in-process inspections.

2. APPLICATION AND RESPONSIBILITY

- 2.1 Products which require in-house processing are subjected to in-process inspection. Inspections will be conducted by the personnel performing the process.

3. IN-PROCESS INSPECTION

- 3.1 The scope of the in-process inspection is determined by the QA department. As a minimum, the scope is as follows:
- 3.1.1 Inspection of the initial setup of the work to be performed.
- 3.1.2 Inspection by random sampling after completion of the work to insure that the process performed is in compliance with the requirements specified.
- 3.2 If the product passes all inspections and tests, the order will be so noted and the product allowed to move to either its next process or to final inspection.

4.0 RECORDS

- 4.1 The work orders are stored and records retained as specified in Procedure QOP-16-1, Control of Quality Records.

5.0 NONCONFORMING PRODUCTS

- 5.1 If a nonconforming product is identified, the QA inspector labels the product container with a HOLD or REJECTED tag and prepares a discrepant material report. The product is segregated from conforming products by placement in the designated Hold Area. Processing of the discrepant material report is explained in Procedure QOP-13-1, Control of Nonconforming Product.

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FINAL INSPECTION

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Inspection Personnel

1. PURPOSE

1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for performing and recording the final inspection.

2. APPLICATION AND RESPONSIBILITY

2.1 Products which were sent for outside processing prior to shipment to the customer require a final inspection. Inspections will be conducted by the QA inspectors.

3. FINAL INSPECTION

3.1 The scope of the final inspection is determined by the QA department. As a minimum, the scope is as follows:

3.1.1 Review of the work order to determine if all processes required were performed, inspected and accepted.

3.1.2 Review of certificates of compliance for all processes performed.

3.1.3 Visual inspection of product to ensure that all specified processes have been performed are complete and to detect any visual quality problems.

3.2 If the product passes all reviews, inspections and tests the original receiving paperwork is noted as being accepted and the product is moved to the warehouse area to prepare for shipment or entry into stock.

4. RECORDS

4.1 The customer order and associated paperwork are stored and records retained as specified in Procedure QOP-16-1, Control of Quality Records.

5. NONCONFORMING PRODUCTS

5.1 If a nonconforming product is identified or quality documents are incomplete, the QA inspector labels the product container with a HOLD or REJECTED tag and prepares a discrepant material report. The product is segregated from conforming products by placement in the designated Hold Area. Processing of the discrepant material report is explained in Procedure QOP-13-1, Control of Nonconforming Product.

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QOP-10-3	FINAL INSPECTION	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

CONTROL OF INSPECTION, MEASURING AND TEST EQUIPMENT

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Inspection Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for calibration, identification and maintenance of measuring and test equipment. The system is in compliance with ISO 10012-1.

2. MEASUREMENT IDENTIFICATION AND SELECTION OF EQUIPMENT

- 2.1 Identification of measurements to be made and the accuracy required is documented in the quality plan and in the product drawings and specifications.

3. CALIBRATION

- 3.1 QA is responsible for maintenance, calibration and control of all inspection, measuring and test equipment, including equipment belonging to employees or on loan. Equipment is calibrated in accordance with written instructions. When applicable, calibration instructions specify for each type of equipment the acceptable limits of temperature, humidity, pressure, and other environmental conditions that may adversely affect calibration. Inadvertent adjustments of measuring and test equipment will be prevented by the use of safeguards such as tamper proof seals and sealing wax, where appropriate. For items calibrated internally, this will be specified in the Calibration Procedures.
- 3.2 Calibration of measuring and test equipment is performed using calibration instruments or standards certified to have a known relationship to a nationally recognized standard. This relationship is identified on the calibration record. Equipment that is sent out for calibration is required to be returned with certification that is traceable to a national standard. Calibration records and certificates are maintained by the QA department.
- 3.3 Calibrated equipment is labeled with a sticker indicating the date calibrated, the due date for the next calibration and the identity of person or facility performing the calibration. If a calibration sticker cannot be applied to the item, it shall be identified in a manner that provides complete traceability to the appropriate calibration record as in the case of thread ring gages which shall bear a serial number. If possible the calibration sticker may be affixed to the normal container of the item. Equipment found to be past due for calibration will not be used and will be returned to the QA department for calibration.

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- 3.4 QA maintains a list of all measuring and test equipment, whether or not it is owned by the company. The list identifies every piece of equipment by its name and type, size, serial number, location, and calibration frequency. The list is updated as required.
- 3.5 Calibration records are reviewed on a monthly basis to identify equipment that is approaching the recalibration date.

4. TEMPLATES AND FIXTURES

- 4.1 Jigs, fixtures, templates and patterns used for inspection are controlled by the same procedures as those for measuring and test equipment.

5. STORAGE AND MAINTENANCE AND TRANSPORTATION

- 5.1 Measuring and test equipment is stored in the QA department. The equipment is maintained, stored and handled in such a manner as to preserve its accuracy and fitness for use. Equipment that is out of calibration or otherwise not fit for use is segregated.
- 5.2 Equipment that is sent to an outside source will be suitably protected during transportation to and from calibration source.

6. NONCONFORMING MATERIAL

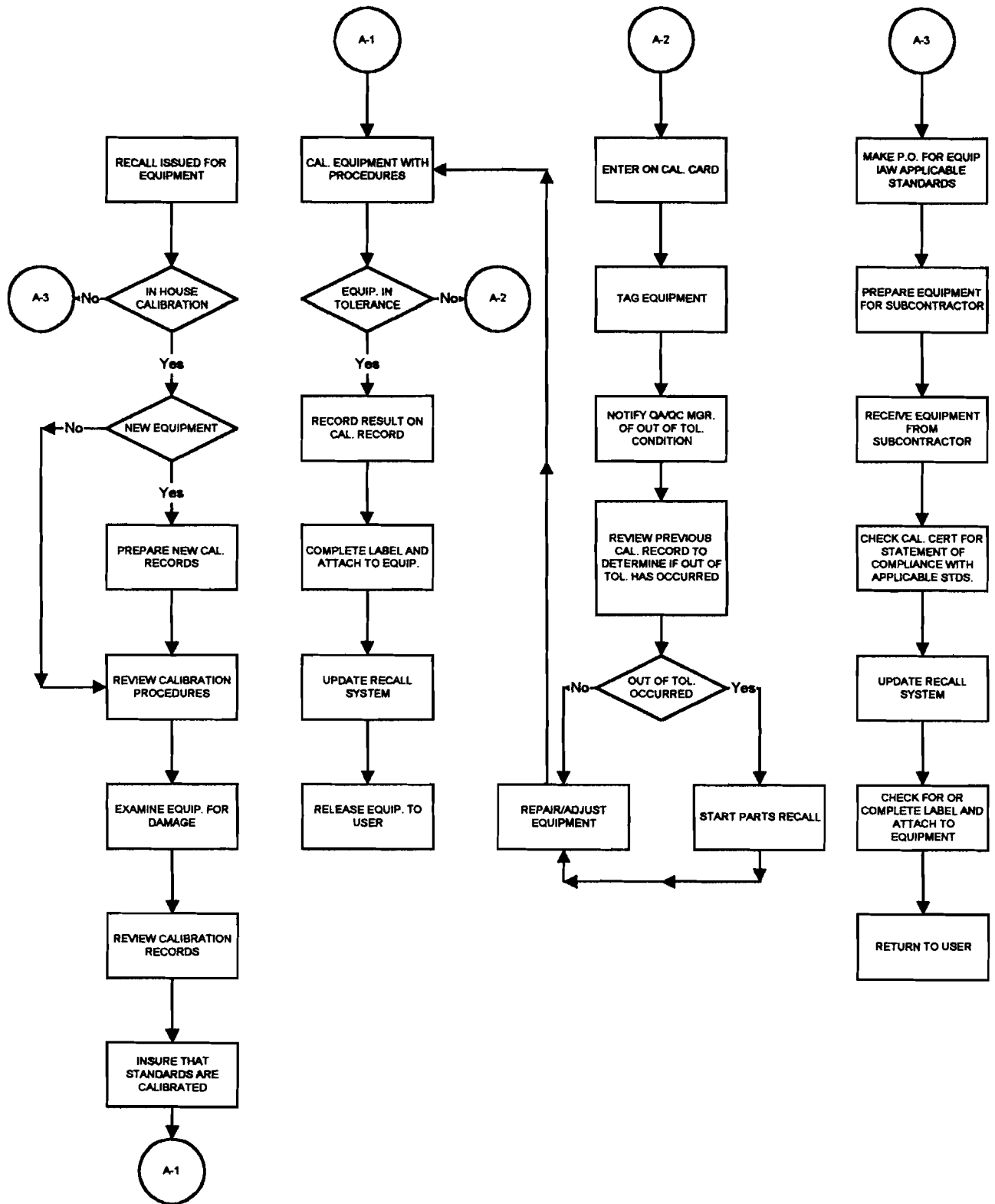
- 6.1 When an item of measuring or test equipment is found to be out of calibration or appears to produce inaccurate readings, the item is checked. If it is confirmed that the equipment is not performing within its specified accuracy, QA investigates and assesses the validity of measurements for which the equipment was previously used. Identification of such equipment, its investigation and conclusions are reported in a discrepant material report in accordance with Procedure QOP-13-1, Control of Nonconforming Product.
- 6.2 If product was inspected with defective measuring and test equipment, it will be reinspected with properly calibrated equipment to determine if discrepant material was shipped or entered into stock. If the product is found to be nonconforming or the company is unable to locate samples of the product, the customer who received the product will be notified by Purchasing that a defective or possibly defective shipment was made. The product will be recalled and reinspected or at the customer's discretion, they may choose to inspect the product. In either case a discrepant material report will be generated in accordance with Procedure QOP-13-1, Control of Nonconforming Product.

7. EQUIPMENT EXEMPTED FROM CALIBRATION

- 7.1 Inspection and test equipment that is not required to be calibrated will be labeled noting that it is not calibrated.

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CALIBRATION FLOW CHART



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INSPECTION AND TEST STATUS

Distribution

President

Branch Manager

Sales Manager

Director of Quality

All Employees

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for identification of a product's inspection status and for release of conforming product.

2. CONFORMING PRODUCTS

- 2.1 Products that have passed the receiving inspection are segregated by being moved to inventory, staged for shipment to the customer, or staged for processing. They are identified by an acceptance label or stamp.
- 2.2 Products that have completed processing and are accepted are segregated by being moved to inventory, staged for shipment to the customer, or staged for processing. They are identified by an acceptance label or stamp.

3. NONCONFORMING PRODUCTS

- 3.1 Products that fail any inspection are labeled with a REJECTED or HOLD sticker or tag. A copy of the inspection report is attached to the failed product.
- 3.2 Products failing inspection are segregated by movement to the designated Hold Area.

4. AUTHORITY TO RELEASE PRODUCTS

- 4.1 The authority and responsibility to release products for shipment or entry into stock is vested with the Director of Quality. The acceptance stamp is evidence that the product is released.

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CONTROL OF INSPECTION STAMPS

Distribution

President

Branch Manager

Sales Manager

Director of Quality

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for the control of inspection stamps.

2. GENERAL

- 2.1 Inspection stamps shall be issued by the Director of Quality to all inspection personnel.
- 2.2 A Stamp Control Record will be kept by the Director of Quality, identifying the inspectors to whom they were issued.
- 2.3 Upon transfer or termination of an inspector, his or her stamps will be returned to the Director of Quality before final clearance of the employee. An entry to this effect will be made on the Stamp Control Form and dated. Returned stamps will be placed in bond and will not be re-issued for a period of at least six months.
- 2.4 Lost or damaged stamps will be logged as such.

3. SAMPLE IMPRESSION OF INSPECTION STAMP

ACCEPTANCE

INSP.

2

REJECTION

REJECTED

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QOP-12-2	CONTROL OF INSPECTION STAMPS	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

CONTROL OF NONCONFORMING PRODUCT

Distribution

President

Branch Manager

Sales Manager

Director of Quality

QA Personnel

Warehouse Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for the identification, documentation, evaluation and disposition of a nonconforming product.

2. GENERAL

- 2.1 It is a firm policy of the company that all nonconformances be documented, regardless of how insignificant they seem or how easily they can be repaired. The discrepant material reports are an invaluable tool in tracking performance and trends that give an indication where and when a corrective action is required.

3. IDENTIFICATION

- 3.1 QA inspectors are responsible for identifying nonconforming products in the course of their inspection activities. In addition, all other personnel are encouraged to watch for and identify nonconforming products regardless of their responsibilities.
- 3.2 Whenever a nonconformity is identified, it is documented on a discrepant material report. Part 1 of the report form is designated for describing the nonconformity and the responsible party. Only the receiving clerk and QA personnel are authorized to initiate a discrepant material report. All other personnel report nonconformity's observed to the QA department.
- 3.3 After a nonconformity is described in Part 1 of the report, the affected product is identified as REJECTED and a copy of the report is attached to the product. The product is then moved to the designated Hold Area to await disposition.

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GOP-13-1	CONTROL OF NONCONFORMING PRODUCT	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

4. NONCONFORMITY REVIEW AND DISPOSITION

- 4.1 There are five possibilities for disposition of a nonconforming product. They are:
- ◆ Reworked or repaired to meet the specified requirements, or
 - ◆ Accepted with or without repair by concession, or
 - ◆ Sort for defective product, or
 - ◆ Rejected and returned to vendor, or
 - ◆ Scrapped
- 4.2 The disposition decision may be made by one of two methods, dependent on the nature of the nonconformity.
- 4.2.1 When it is obvious that the product must be scrapped or where it can be reworked or repaired by a simple process, the QA inspector, with approval from the Director of Quality, may make a decision regarding the disposition of the nonconforming product. The disposition decision is entered into Part 2 of the report.
- 4.2.2 If a repair would in any way affect quality, or if there is a possibility for an accept as is decision, the evaluation and disposition are made by the Director of Quality, the Director of Quality or President, the Sales Manager, and if necessary, a Consulting Engineer. The disposition decision is entered into Part 2 of the report.
- 4.3 When required by the contract or customer policy, the customer is contacted for concession to accept nonconforming product or proposed repairs that would affect quality. In no event will nonconforming product arbitrarily be shipped to the customer.

5. REINSPECTION

- 5.1 Repaired or reworked products are inspected again to verify that they comply with the same requirements as originally specified, unless a product is regraded and a new specification applies. Regraded products are clearly marked to indicate their new status.

6. CLOSING OUT THE DISCREPANT MATERIAL REPORT

- 6.1 If the disposition decision is to accept, regrade, or scrap, the discrepant material report is closed out and filed at that point. Rework or repair decisions require that the reinspection results be entered in Part 3 of the report before the report may be closed out.

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QOP-13-1	CONTROL OF NONCONFORMING PRODUCT	OPERATING PROCEDURE	09/23/97	R.H.	NEW	2 of 1

CORRECTIVE AND PREVENTIVE ACTION

Distribution

President

Branch Manager

Sales Manager

Director of Quality

All Employees

1. PURPOSE

1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for initiating, requesting, carrying out and checking the effectiveness of corrective and preventive actions.

1.2 Definition:

1.2.1 Corrective Action - Immediate action taken to correct a product deficiency or system deficiency.

1.2.2 Preventive Action - Long term actions that will prevent the recurrence of nonconformity's or noncompliance's.

2. APPLICATION AND RESPONSIBILITY

2.1 Corrective Action Requests (CAR) can be directed to the company's managers or to its or subcontractors.

2.2 Initiation of a CAR may be proposed by anyone in the company, however all CARs must be authorized before their release by either the Director of Quality or the Branch Manager.

2.3 Requests to initiate a CAR are made in writing to the Director of Quality, or if QA activities are involved, to the Branch Manager. The requests contain a description of the unsatisfactory condition to be corrected and explain how quality is affected.

3. INITIATION OF A CORRECTIVE ACTION REQUEST

3.1 Corrective/Preventive actions may be requested in the following cases:

3.1.1 Identification of a major nonconformance

3.1.2 Accumulation of minor nonconformity's of a similar characteristic

3.1.3 A noncompliance observed during an internal, customer or third party audit

3.1.4 Customer complaints

3.1.5 Nonconforming deliveries from subcontractors

3.1.6 Identification of any other condition that does not comply with the documented quality system and/or the ISO 9002 standard.

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4. PROCEDURE

- 4.1 Corrective/Preventive actions are requested using the Corrective Action Request Form. The requests contain a description of the unsatisfactory condition that needs to be corrected and are addressed to a specific manager who is responsible for the area where the condition occurred.
- 4.2 Upon receiving the request for corrective/preventive action, the manager concerned investigates the cause of the problem that initiated the request, proposes a permanent preventive action to be taken, and indicates the date by which the corrective action will be fully implemented. The party initiating the corrective/preventive action request (Director of Quality or Branch Manager) reviews and approves the proposed action.
- 4.3 On, or immediately after, the due date for implementation of a corrective/preventive action, the Director of Quality or Branch Manager follows up with an inquiry or an audit to determine if the corrective action has been implemented and if it is effective. When there is objective evidence that the corrective/preventive action is effective, the CAR can be closed out. If more work is needed to fully implement the action, a new follow-up date is agreed upon.

5. DOCUMENTATION AND RECORD

- 5.1 Corrective/preventive action requests, their implementation and follow up are documented using the CAR form.
- 5.2 Part 1 of the form contains a description of the nonconforming condition. Part 2 contains the proposal for a corrective/preventive action, and Part 3 is reserved for the follow up and close out.
- 5.3 Pending CARs are kept by the party that has initiated the CAR. Storage location and retention period for closed-out CARs are specified in Procedure QOP-16-1, Control of Quality Records.
- 5.4 CARs are confidential records and shall not be made available to anyone outside the company.

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QOP-14-1	CORRECTIVE AND PREVENTIVE ACTION	OPERATING PROCEDURE	09/23/97	R.H.	NEW	2 of 1

PRODUCT HANDLING

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Warehouse Personnel

1. PURPOSE

1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for product handling activities and handling equipment maintenance.

2. RESPONSIBILITY

2.1 The Director of Quality is responsible for ensuring that products are handled properly and in accordance with this procedure in order to prevent damage and deterioration.

3. CONTAINERS

3.1 Plastic bins, wood pallets and boxes are provided for holding products. Damaged or dirty containers are repaired and/or cleaned, or scrapped if beyond repair.

4. EQUIPMENT

4.1 Equipment used for internal transport of products are forklifts, carts, and dollies. Only designated personnel may operate a forklift. The operators are specially trained and their training records are maintained in their personnel records. Forklifts are regularly maintained.

5. PROTECTION OF PRODUCTS

5.1 When there is a possibility of a product being damaged from contact with abrasive or dirty surfaces, the product is adequately protected during its storage and delivery.

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MOP-15-1	PRODUCT HANDLING	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

STORAGE

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Warehouse Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for use and maintenance of storage areas and periodic assessment of stock.

2. STORAGE AREAS

- 2.1 Storage areas are maintained by warehouse personnel. The storage areas are maintained in good condition to prevent deterioration of stored products. All products in the stores are identified. Where possible, products are rotated on a first in, first out (FIFO) basis.

3. ASSESSMENT OF STOCK

- 3.1 The storage areas are cleaned on a daily basis. Continuous cycle counting is employed as a means for assessment of stock quantities. A discrepant material report is issued when damaged, deteriorated, or unidentified products are found.

4. AUTHORIZATION TO RECEIVE AND ISSUE

- 4.1 Only products that have passed inspection are authorized to be received or issued from storage. Products that have passed receiving inspection will be identified by an acceptance stamp.

5. OTHER SUPPLIES

- 5.1 The stores also contains products not for resale, and as such these products are not controlled.

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MOP-15-2	STORAGE	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

PACKAGING, PRESERVATION AND DELIVERY

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Warehouse Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for packaging activities and protection of products prior to and during delivery.

2. PACKAGING

- 2.1 Packaging material and packaging are specified by customer contract, or by standard specifications and good commercial practices. Special packaging requirements will be entered on the sales order.

3. PRESERVATION

- 3.1 Standard methods of product preservation are employed where required.
- 3.2 When required by contract or purchase order, customer specified preservation requirements will be accomplished. These methods will be specified on the sales order.

4. DELIVERY

- 4.1 When a sales/shipping order is received the products are pulled from inventory and packaged as required. Shipping personnel are required to watch for any damaged products before packaging and report such to the QA department.
- 4.2 Whether delivery is specified by the contract or not, packaging materials must be suitable for the intended means of delivery.

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MOP-15-3	PACKAGING, PRESERVATION AND DELIVERY	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

CONTROL OF QUALITY RECORDS

Distribution

President

Branch Manager

Sales Manager

Director of Quality

All Employees

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for establishing and storage of quality records.

2. SCOPE

- 2.1 The following records, with their storage locations and retention periods are maintained by the company:

RECORD DESCRIPTION	LOCATION	RETENTION PERIOD
Contract review records	Computer/Accounting	6 years
Management review minutes	Branch Manager	6 years
Inspection and testing records	QA	6 years
Calibration records	QA	6 years
Discrepant material reports	QA	6 years
Corrective action request	QA	6 years
Quality audit reports	QA	6 years
Training records	QA	6 years
Purchase orders	Accounting	6 years

3. IDENTIFICATION

- 3.1 Records are identifiable to the product, person, or event to which they pertain. Records are dated and identify the person who established the record. Records are indexed or grouped to facilitate their retrieval.

4. STORAGE

- 4.1 A record is normally stored by the same department that initially established the record. Records are stored in a manner to preclude damage and deterioration. Records and other quality documents may not be stored in areas that are not generally known.
- 4.2 As necessary, records are removed from the above locations, transferred to filing boxes, and stored in the archive area.

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QOP-16-1	CONTROL OF QUALITY RECORDS	OPERATING PROCEDURE	09/23/97	R.H.	NEW	1 of 1

INTERNAL QUALITY AUDITS

Distribution

President

Branch Manager

Sales Manager

Director of Quality

Audit Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for conducting the internal quality audits.

2. PLANNING

- 2.1 The Director of Quality is responsible for planning and scheduling the internal audits. Each main activity comprising the quality system is audited at least once per year. In addition to the annually scheduled audits, the Director of Quality may select certain activities for more frequent auditing, depending on their status, importance and past compliance history. The audit plan lists all the activities corresponding to the sections of the quality manual, identifies locations where these activities are taking place, and assigns an audit date to each activity/location.

3. AUDIT TEAM

- 3.1 Personnel assigned to carry out an audit are independent of those having direct responsibility for the audited activity. It is normally the Director of Quality, assisted by a trained inspector, who conducts the audits. Personnel from other departments are also encouraged to familiarize themselves with auditing techniques and participate in the internal auditing program as assisting auditors.
- 3.2 Activities that are the responsibility of the QA department are audited by the Branch Manager.
- 3.3 External training and/or certification of auditors is required. The Director of Quality maintains a library of publications, articles and standards instructing in auditing techniques, and auditors in training are required to use the library for self study. Use of the library is recorded in personnel training records.

4. PREPARATION FOR AUDIT

- 4.1 Auditors prepare for an audit by fully familiarizing themselves with the ISO 9002 standard, refreshing their knowledge of the quality manual and relevant operating procedures, reviewing the discrepant material reports and corrective actions files, and preparing questions and checklists.

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5. CONDUCTING AN AUDIT

- 5.1 The manager responsible for the area being audited is contacted at least one week in advance of the proposed audit date. The manager concerned responds with a confirmation or proposes an alternative date.
- 5.2 While conducting an audit, the auditors seek objective evidence demonstrating whether the audited activities comply with the requirements of the documented quality system. When a noncompliance is noted, it is brought to the attention of, and discussed with, the responsible manager. Before the end of an audit day, each noncompliance noted during the day is documented on a Noncompliance Report form. Auditors fill out only the first part of the form, describing the noted noncompliance. The form is then handed back to the responsible manager who uses its second part to propose a corrective action.

6. CORRECTIVE ACTION AND FOLLOW UP

- 6.1 Once a noncompliance is identified and documented, further processing of the Noncompliance Report follows the same procedure as applies to corrective action requests. Upon receiving the report, the manager concerned investigates the cause of the problem noted as a noncompliance, proposes a corrective action to be taken, and indicates the date by which the corrective action will be fully implemented. The auditor reviews and approves the proposed action.
- 6.2 On, or immediately after, the due date for implementation of a corrective action, the auditor follows up with an inquiry or an audit to determine if the corrective action has been implemented and if it is effective. When there is objective evidence that the corrective action is effective, the Noncompliance Report is closed out. If more work is needed to fully implement the action, a new follow-up date is agreed upon.

7. DOCUMENTATION AND RECORDS

- 7.1 Internal audits, implementation of resulting corrective action and the follow-up audit are documented using the Noncompliance Report form.
- 7.2 Part 1 of the form contains a description of the nonconforming condition, Part 2 contains the proposal for corrective action, and Part 3 is reserved for follow up and close out.
- 7.3 Pending Noncompliance reports are kept by the auditor that initially issued the report. Storage location and retention period for closed out Noncompliance Reports are specified in Procedure QOP-16-1, Control of Quality Records.
- 7.4 Noncompliance Reports are confidential records and shall not be made available to anyone outside the company.

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TRAINING

Distribution

President

Branch Manager

Sales Manager

Director of Quality

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for determining training needs, providing training and keeping training records.

2. TRAINING NEEDS

- 2.1 The training and qualification needs of each employee are assessed annually by supervisors and department managers. Conclusions of the assessment are recorded in the employees' training records.
- 2.2 In addition to the individual training and qualification needs related to specific tasks, the company determines the general orientation training needs and provides such training to all employees.

3. TRAINING

- 3.1 At the time of implementation of the present quality system, all existing employees have received this training. The employee orientation training familiarizes employees with administrative rules such as working hours, use of changing room, parking, lunch arrangements, etc.: but also instructs in quality matters. As a minimum, the training comprises the following topics:
- ◆ Product orientation with emphasis on crucial quality characteristics.
 - ◆ Presentation of the company's quality system.
 - ◆ The role of the employees in maintaining the quality system and improving its efficiency.
 - ◆ Safety

Participation in the employee orientation training is recorded.

- 3.2 Based on the annual employee assessment and specific task related needs, each department provides on-the-job or classroom training to its employees. All forms of such departmental training are recorded.

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4. RETRAINING

4.1 When an excessive number of nonconformity's or other quality problems are traceable to a specific employee, the Director of Quality or the department manager of the employee may request retraining.

5. RECORD

5.1 The training records of the employees are maintained in their personnel files. A training record lists all employees participating in a given training, identifies the subject, form and duration of training, and is signed by the person conducting the training.

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STATISTICAL TECHNIQUES

Distribution

President

Branch Manager

Sales Manager

Director of Quality

QA Personnel

1. PURPOSE

- 1.1 The purpose of this procedure is to provide for a system and instructions, and to assign responsibilities for the use of statistical techniques to ensure a sound basis for the analysis and improvement of all activities.

2. STATISTICAL SAMPLING

- 2.1 Statistical sampling is employed for inspections, as required. Statistical sampling plans are as specified in ANSI/ASQC Z1.4-1993, or derived from ANSI/ASQC Z1.4-1993, unless otherwise specified by customer contract or customer policy.

3. STATISTICAL METHODS

- 3.1 Statistical data is collected and analyzed, where appropriate, to identify problem areas, both external and internal. The actual methods utilized for analyzation will be determined by upper management and assigned to personnel with sufficient experience in the prescribed method.

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INDEX OF FORMS AND EXHIBITS

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QAF-01	Inspection Record	NEW	09/23/97
QAF-02	Calibration Record	NEW	09/23/97
QAF-03	Discrepant Material Report	NEW	09/23/97
QAF-04	Corrective/Preventive Action Request	NEW	09/23/97
QAF-05	Audit Noncompliance Report	NEW	09/23/97
QAF-06			
QAF-07	Acceptance Tag/Label	NEW	09/23/97
QAF-08	Inspection Stamp Control Log	NEW	09/23/97
QAF-09	Deviation Request	NEW	09/23/97
QAF-10	Revision Notice	NEW	09/23/97
QAF-11			
QAF-12	Training Record	NEW	09/23/97
QAF-13	Employee Record of Receipt	NEW	09/23/97
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FORMS AND EXHIBITS REVISION RECORD

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INSPECTION REPORT

VENDOR

P.O.#

QTY. ORDERED

QTY. RECEIVED

SAMPLE SIZE

PART#

LOT#

DESCRIPTION

SPECIFICATION

FEATURE INSPECTED	REQUIRED MAX	REQUIRED MIN	ACTUAL MAX	ACTUAL MIN	PASS	FAIL	INSTRUMENT USED
MARK							VISUAL

ACCEPT

FAIL

NOTES

DATE

SIGNATURE: _____

ID	TITLE	DOCUMENT TYPE	REVISED	APPVD	LTR	PAGE
QAF-01	INSPECTION RECORD	FORM OR EXHIBIT	09/23/97	R.H.	NEW	1 of 1

REPORT NUMBER:	DISCREPANT MATERIAL REPORT	DATE:
PART NUMBER:	LOT/BATCH #:	
DESCRIPTION:		
VENDOR:	P.O. NUMBER:	
DEPARTMENT (Internal):	EMPLOYEE:	
QUANTITY RECEIVED:	QUANTITY REJECTED:	QUANTITY ACCEPTED:
DESCRIPTION OF NONCONFORMANCE		
DISPOSITION		DATE:
<input type="checkbox"/> ACCEPT WITH CONCESSION	<input type="checkbox"/> REGRADE	<input type="checkbox"/> REWORK / REPAIR
<input type="checkbox"/> SCRAP	<input type="checkbox"/> RTV	
COMMENTS:		
APPROVED BY:	TITLE:	DATE:
CLOSE OUT		DATE:
CORRECTIVE ACTION REQUEST NUMBER:	REINSPECTION DATE:	
COMMENTS:		
APPROVED BY:	TITLE:	DATE:

ID	TITLE	DOCUMENT TYPE	REVISED	APPVD	LTR	PAGE
QAF-03	DISCREPANT MATERIAL REPORT	FORM OR EXHIBIT	09/23/97	R.H.	NEW	1 of 1

REPORT NUMBER:	ACTION REQUEST	DATE:
VENDOR:		P.O.W.O#:
VENDOR REPRESENTATIVE:		
PART#:	LOT#:	QUANTITY:
DEPARTMENT (Internal):	RESPONSIBLE MANAGER:	
NONCONFORMING CONDITION		
INITIATED BY:		DATE:
<i>IDENTIFY THE ROOT CAUSE AND PROPOSED CORRECTIVE/PREVENTIVE ACTION(S) IN THE SPACE PROVIDED BELOW.</i>		
ROOT CAUSE OF NONCONFORMANCE		
<input type="checkbox"/> CORRECTIVE ACTION	ACTION TAKEN	<input type="checkbox"/> PREVENTIVE ACTION
PROPOSED BY:		APPROVED BY:
(Vendor or Manager)	Name, Title, Date	(Initiator) Name, Title, Date
ACTION EFFECTIVITY DATE:		ACTION CLOSE OUT SCHEDULE:
CORRECTIVE/PREVENTIVE ACTION EFFECTIVITY FOLLOW UP / CLOSE OUT		
DATA REVIEWED TO DETERMINE EFFECTIVITY OF THE ACTION TAKEN:		
APPROVED BY:		
Signature & Title		Date

ID	TITLE	DOCUMENT TYPE	REVISED	APPVD	LTR	PAGE
QAF-04	CORRECTIVE/PREVENTIVE ACTION REQUEST	FORM OR EXHIBIT	09/23/97	R.H.	NEW	1 of 1

TRAINING RECORD

EMPLOYEE: _____ SSN: _____

POSITION: _____ DEPARTMENT: _____

DATE OF HIRE: _____

PREVIOUS WORK EXPERIENCE

EMPLOYER	POSITION	DATES OF EMPLOYMENT	VERIFIED BY

EDUCATION: _____

CERTIFICATIONS (Include Dates): _____

OTHER INFORMATION: _____

ID	TITLE	DOCUMENT TYPE	REVISED	APPVD	LTR	PAGE
QAF-12	TRAINING RECORD	FORM OR EXHIBIT	09/23/97	R.H.	NEW	1 of 1

EMPLOYEE:		DATE:	
CUSTOMER:		CONTACT:	
PART#:	QUANTITY:	P.O.#:	
COMPLAINT:			
CORRECTION:		BY:	DATE:
MGMT. REVIEW	BY:	CORRECTIVE ACTION REQ'D: YES NO	CAR#
CUSTOMER:		CONTACT:	
PART#:	QUANTITY:	P.O.#:	
COMPLAINT:			
CORRECTION:		BY:	DATE:
MGMT. REVIEW	BY:	CORRECTIVE ACTION REQ'D: YES NO	CAR#
CUSTOMER:		CONTACT:	
PART#:	QUANTITY:	P.O.#:	
COMPLAINT:			
CORRECTION:		BY:	DATE:
MGMT. REVIEW	BY:	CORRECTIVE ACTION REQ'D: YES NO	CAR#
CUSTOMER:		CONTACT:	
PART#:	QUANTITY:	P.O.#:	
COMPLAINT:			
CORRECTION:		BY:	DATE:
MGMT. REVIEW	BY:	CORRECTIVE ACTION REQ'D: YES NO	CAR#
CUSTOMER:		CONTACT:	
PART#:	QUANTITY:	P.O.#:	
COMPLAINT:			
CORRECTION:		BY:	DATE:
MGMT. REVIEW	BY:	CORRECTIVE ACTION REQ'D: YES NO	CAR#
CUSTOMER:		CONTACT:	
PART#:	QUANTITY:	P.O.#:	
COMPLAINT:			
CORRECTION:		BY:	DATE:
MGMT. REVIEW	BY:	CORRECTIVE ACTION REQ'D: YES NO	CAR#
CUSTOMER:		CONTACT:	
PART#:	QUANTITY:	P.O.#:	
COMPLAINT:			
CORRECTION:		BY:	DATE:
MGMT. REVIEW	BY:	CORRECTIVE ACTION REQ'D: YES NO	CAR#

SUBCONTRACTOR PHONE ASSESSMENT

Read the following to the vendor:

In accordance with our Quality System we are required to qualify our vendors prior to issuing an order. These questions will allow us to determine your ability to meet our requirements and those of our customer.

Date: _____ Vendor: _____
 Contact: _____
 Street: _____
 City, State Zip: _____
 Phone: _____ Fax: _____

1. Are you able to provide the requested item as quoted? Y N
 COMMENTS: _____

2. If there are problems prior to shipment, is it standard procedure for you to contact us so that we may inform our customer or make other arrangements? Y N
 COMMENTS: _____

3. Do you have a formal Quality System in place? Y N
 ISO 9001 _____ ISO 9002 _____ QS9000 _____ Guide 25 _____
 Other _____
 COMMENTS: _____

4. Can you provide material and finish certifications, if needed? Y N
 COMMENTS: _____

Vendor Accepted: _____ One Time Use Only: _____

Vendor Rejected: _____

Explanation or Comments: _____

Survey completed by: _____

If this vendor is intended to be utilized more than once, send them a standard System survey.
 Submit this form to Quality Assurance after completion

ID	TITLE	DOCUMENT TYPE	REVISED	APPVD	LTR	PAGE
QAF-15	SUBCONTRACTOR ASSESSMENT	FORM / EXHIBIT	09/23/97	R.H.	NEW	1 of 1