

GEOMETRIC CIRCUITS, INC.

Procedures Manual ISO 9001:2008

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Prepared by	William Pollina, President/MR	Issue Number	3
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This Procedures Manual contains only the pages issued by this facility. The President/MR is responsible for processing all authorized changes, and for inserting revision pages into official copies. The President/MR has authority to remove and dispose of obsolete pages to prevent their unintentional usage. This collection of documentation is controlled and shall be used as the final authority regarding the latest revision level and amendment status for the Procedures Manual. The President/MR maintains the Master Copy of this Procedures Manual.

SECTION	DATE	PAGE(S)	DESCRIPTION	APPROVAL
All	11/4/05	All	1st Manual Release	J. Pollina
QP04-01	1/23/06	All	Added paragraph 3.15, concerning obsolete documents	J. Pollina
OP07-03	1/23/06	All	Modified paragraphs 3.5 and 3.6 to clarify PPAP process for Non Automotive Customers	J. Pollina
QP09-01	3/15/06	All	Added Quality Procedure, Compliance to MIL-PRF-31032A	J. Pollina
QP08-02	3/27/06	All	Modified paragraph 3.6 to include list of "processes" that are audited in an Internal Audit	J. Pollina
QP07-01	3/29/06	All	Modified paragraphs 3.1, 3.2, 3.3, 3.4, 3.5, 3.7 and 3.8 to clarify the Contract Review and APQP Processes	J. Pollina
QP07-03	3/29/06	All	Modified paragraph 3.1 and added paragraph 3.10 to clarify the Contract Review and APQP Processes	J. Pollina
QP07-02	6/30/06	All	Modified paragraphs 3.9 through 3.13 to clarify Supplier evaluation and re-evaluation efforts	J. Pollina

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QP05-01	7/10/06	All	Modified paragraphs 3.11 through 3.13 to define the Management Review Process at Geometric to be comprised of Daily, Monthly and Quarterly Management Review Meetings	J. Pollina
QP09-01	9/19/06	All	Added paragraph 3.19, Compliance to MIL-PRF-55110 Appendix A	J. Pollina
QP05-01	2/20/07	All	Added "Inspection input on quality issues" to paragraph 3.11.2, Daily Production Meetings	J. Pollina
QP07-03	2/20/07	All	Added paragraph 3.1.1, exception to APQP/PPAP documentation for part not fitting existing family	J. Pollina
QP07-08	6/11/07	All	Deleted reference to Designee in paragraph 3.11	J. Pollina
QP08-05	6/11/07	All	Deleted reference to Designee in paragraph 2.0	J. Pollina
App. A	6/11/07	All	Added Appendix A for Designee Identification	J. Pollina
QP07-01	6/20/07	All	Added clarification for New and Revised Product Activities versus Repeat Product Activities, added PO Approval significance in 3.12	J. Pollina
Section 0.2	2/25/08	All	Added Lowell Sherman To Controlled Circulation List	J. Pollina
All	8/20/08	All	Completed re-write of procedures manual, including elimination of the following procedures: <ul style="list-style-type: none"> ◆ QP07-03 (APQP/PPAP) ◆ QP07-04 (Control of Production) ◆ QP07-05 (Preventive 	W. Pollina

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			<p>Maintenance</p> <ul style="list-style-type: none"> ◆ QP07-06 (Identification and Traceability) ◆ QP07-08 (Preservation of Product) <p>Re-naming and Re-numbering of the following procedures:</p> <ul style="list-style-type: none"> ◆ QP07-01 is now Sales/Order Entry ◆ QP07-03 is now Warehousing/Distribution ◆ QP07-04 is now Customer Property ◆ QP07-05 is now Calibration 	
QP05-01	2/18/09	All	Added paragraph 3.7 though 3.15 to define the Quality Objectives Table at Geometric to be done on a Quarterly Basis	W. Pollina
All	9/01/09	All	Completed Update to reflect change from ISO 9001:2000 to ISO 9001:2008	W. Pollina
QP05-01	04/07/11	All	Modified paragraphs 3.12 and 3.14 to clarify Improvement Efforts for MRM	W. Pollina
Cover Page	5/04/12	All	Updated Cover Page for Moving to New Location	W. Pollina
QP08-02	11/02/12	ALL	Modified paragraph 3.3 to QE19011S-2011 Internal Audit Conduct	W. Pollina
QP07-02	1/30/14	All	Modified paragraph 3.6 removing customer support from supplier rating	W.Pollina

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 4.2.3 of ISO 9001:2008 titled Control of Documents.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR and General Manager have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

Quality Manual

3.1 The President/MR has written a Quality Manual that includes the scope of the Quality Management System, including details of and justification for any exclusions. The Quality Manual also contains a description of the interaction between the processes of the Quality Management System. Finally, the Quality Manual includes references to the procedures established for Geometric.

Control of Documents

3.2 The President/MR is responsible for retaining the master copy of both the Quality Manual (QM) and the Procedures Manual (PM.) The master copy of both the QM and PM are retained on the company network, which all appropriate personnel maintain access to. All printed controlled copies are retained as established in the Controlled Circulation List sections found in both the QM and PM.

3.3 The President/MR is responsible for processing all changes to the QM and PM, including pulling obsolete copies and giving the controlled copyholder the revised pages and a revised amendment record.

3.4 The President/MR, or designees, are responsible for reviewing and approving for adequacy all documents and data prior to issue.

3.5 Revision levels for all controlled documents are established/referenced on the Document and Data Control Matrix.

3.6 Master copies of documents are retained in one of two manners:

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- 3.6.1 The President maintains an online database with controlled access master copies of all electronically generated documents.
- 3.6.2 The President or his designee maintains a Master Reference Binder with both printed master copies from the network and master copies of all other documents.
- 3.7 The Document and Data Control Matrix identifies who approves documents, and all documents are approved prior to use. The approval personnel are also responsible for distributing any document changes to all appropriate personnel.
- 3.8 All Geometric personnel share responsibility for ensuring that documents remain legible and readily identifiable.
- 3.9 Changes to documents are documented through one of the following methods (or a combination therein):
 - 3.9.1 The QM and PM have amendment records built in to show the revisions that have been made.
 - 3.9.2 The President/MR or another member of management retain obsolete copies of the changed document (either in hard copy or in a separate network location) for direct comparison to the revised document.
 - 3.9.3 The Document Change Notice is used to detail the change to the document (and shows approval of the change itself.)
- 3.10 The President receives and identifies/reviews customer prints/drawings.
- 3.11 Prints/drawings are stored in the appropriate customer file.
- 3.12 The President maintains a Master List of all Customer Specifications to insure that the most current customer requirements are available for this process. This Master List of Customer Specifications includes tracking of the following dates: Received Date; Review Date; and Implement Date.
- 3.13 All other external documents are retained as established on the External Document and Data Control Matrix maintained by the President/MR.

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4.0 RELATED DOCUMENTATION

QP05-01 – Management Responsibility
Document and Data Control Matrix
Master List of Records
External Document and Data Control Matrix
Master List of Customer Specifications
Document Change Notice

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 4.2.4 of ISO 9001:2008 titled Control of Records.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR and General Manager have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 Geometric maintains the records mandated by ISO 9001:2008 that are applicable to its operations.
- 3.2 The Master List of Records clearly details which record-keeping requirements are applicable, the record storage locations, and the record retention periods.
- 3.3 Hard copies of records are stored in a manner that prevents damage, deterioration or loss. The preferred storage method involves the use of computers, file cabinets, storage boxes, and either file folders or binders.
- 3.4 All hard copy records are clearly labeled to facilitate identification, indexing, filing, and retrieval.
- 3.5 All Geometric personnel are responsible for ensuring legibility of hard copy records.
- 3.6 Any electronic records maintained are backed up on a regular basis and stored appropriately.
- 3.7 The President/MR and other members of management are responsible for the disposal/archiving of records when their retention periods expire.

4.0 RELATED DOCUMENTATION

QP05-01 – Management Responsibility
Document and Data Control Matrix
Master List of Records
External Document and Data Control Matrix

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 5.0 of ISO 9001:2008 titled Management Responsibility.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR and the General Manager have the responsibility and authority for implementing all the requirements of this procedure.

3.0 PROCEDURE

Customer Focus

3.1 The President/MR and other members of top management shall ensure that customer requirements are determined and fulfilled with the aim of enhancing customer satisfaction. This shall be achieved through a combination of careful attention to contract review (see QP07-01), and through collection of customer satisfaction information (see QP08-01.)

Quality Policy

- 3.2 The President/MR has defined and documented the Quality Policy of Geometric. The President/MR is responsible for ensuring that the Quality Policy is appropriate to Geometric’s purpose, shows commitment to compliance and continual improvement of the system, and offers a framework for establishment and review of quality objectives.
- 3.3 The President/MR has signed the Quality Policy as evidence of review and approval. The Quality Policy is discussed annually at a Management Review Meeting to ensure its continuing suitability.
- 3.4 The President/MR and the General Manager are responsible for ensuring that the Quality Policy is understood, implemented, and maintained at all levels of the organization by posting it in various locations throughout Geometric’s facility.

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Quality Objectives

- 3.5 Quality objectives are an agenda item for Management Review Meetings. The President/MR and the General Manager are responsible for ensuring that the integrity of Geometric's system is maintained whenever changes are planned and implemented.
- 3.6 Employees are informed of the quality objectives as they are developed and implemented. This is achieved through posting of the Quality Objectives Table.
- 3.7 Quality Objectives will be reviewed and revised accordingly on a quarterly basis with results being tied directly in the MRM agenda.

Responsibility, Authority, and Communication

- 3.8 Descriptions for all jobs affecting quality have been compiled and approved by the President/MR. These job descriptions list the specific duties associated with a job function.
- 3.9 An Organizational Chart defining the authority and the interrelation of personnel who manage, perform, and verify work affecting quality has been compiled and approved by the President/MR.

Management Representative

- 3.10 The President has assumed the duties of Management Representative for Geometric. The duties inherent to this self-appointment include:
- ◆ Ensuring that a Quality System is established, implemented, and maintained in accordance with ISO 9001:2008. This includes maintenance of the Quality Manual and ensuring that Procedures and Work Instructions are written in a manner consistent with ISO 9001:2008.
 - ◆ Reporting to other members of management on the performance of the Quality System for review and as a basis for improvement.
 - ◆ Ensuring awareness of customer requirements throughout Geometric.

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Internal Communication

- 3.11 The President/MR and the General Manager are responsible for communicating any necessary information to Geometric's employees, if that information pertains to the Quality System. This is achieved either by word-of-mouth, meeting, email, or memorandum.

Management Review

- 3.12 Management Review Meetings (MRMs) are held semi-annually at minimum. Prior to MRMs the President/MR will canvass the employees for Improvement Effort Ideas.
- 3.13 Attendance at MRMs is stipulated and recorded in the meeting agenda/minutes.
- 3.14 The meeting is chaired by the President/MR and input for this meeting should include at minimum the topics listed in ISO 9001:2008, Clause 5.6.2, these are:
- ◆ Results of audits (both first and third party).
 - ◆ Customer feedback.
 - ◆ Process performance and product conformity.
 - ◆ Status of preventive and corrective actions.
 - ◆ Follow-up actions from previous management reviews.
 - ◆ Quality Objectives.
 - ◆ Planned changes that could affect the quality management system.

It is through the discussion of these aforementioned topics, as well as other topics that recommendations for improvement are discussed, documented, and/or approved.

The meeting's progress should be geared towards the output objectives listed in ISO 9001:2008, Clause 5.6.3, these are:

- ◆ Improvement of the effectiveness of the quality management system and its processes.
- ◆ Improvement of product related to customer requirements.
- ◆ Identifying new or changing resource needs.
- ◆ Generate One (1) Improvement Effort from each MRM.

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3.15 MRM minutes will be taken and kept, and distributed to those individuals who were absent from the meeting.

4.0 RELATED DOCUMENTATION

- Management Review Meeting Minutes
- Quality Policy Statement
- Job Descriptions
- Organizational Chart
- Quality Objectives Table

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 6.2 of ISO 9001:2008 titled Human Resources.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR and the General Manager have the responsibility and authority for implementing all the requirements of this procedure.

3.0 PROCEDURE

- 3.1 The President/MR and the General Manager use the job descriptions to determine the necessary qualifications/training requirements for a particular position.
- 3.2 Personnel performing a specific job may be qualified on the basis of appropriate education, training, and/or experience. Pre-qualification will be considered at the discretion of the applicable department head, and may vary from case to case.
- 3.3 Management is responsible for providing appropriate training for employees to perform their job function.
- 3.4 The President/MR will arrange for classes to be conducted off premise when the need arises.
- 3.5 Training is generally conducted by experienced personnel.
- 3.6 The General Manager is responsible for updating training documentation in the employee's Training Folder.
- 3.7 All training and competency assurance activities are recorded using the Training Matrix. The Training Matrix is also used to capture any new training that an employee receives due to process changes, etc. over the course of their employment.
- 3.8 The General Manager is responsible for the management of the Employee Training Evaluation System. This system is used to monitor the effectiveness of the overall training effort at Geometric.

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3.9 At a minimum of once per year, the General Manager will review the training needs of each employee.

4.0 RELATED DOCUMENTATION

Job Descriptions
 Training Matrix
 Employee Training Evaluation System

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 7.2 of ISO 9001:2008 titled Customer Related Processes.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR has the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 Geometric is a distributor of printed circuit boards for a variety of industries and applications.
- 3.2 All orders are based on specific information provided by customers, and therefore subject to quotation.
- 3.3 All quotes are prepared by the President/MR.
- 3.4 Input to quotations can include, but is not limited to:
 - ◆ Product specification information;
 - ◆ Order quantity;
 - ◆ Requested delivery date;
 - ◆ Price; and
 - ◆ Terms.
- 3.5 The President/MR and his designee are responsible for soliciting bids from prospective suppliers for the customer's product, including any engineering work as needed.
- 3.6 Once all bids from suppliers have been received, the President selects the most appropriate one and utilizes it as input to the final quotation issued to the customer.
- 3.7 Quotations are subject to review and approval by the President/MR before submittal to the customer. An electronic signature is used as evidence of this review and approval.

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- 3.8 Customers are required to submit purchase orders as evidence of their approval of the quotation. Product is not shipped without receipt of a customer purchase order.
- 3.9 All customer purchase orders received are reviewed against the quotation. The President/MR or designee resolves any order discrepancies with the customer.
- 3.10 The record of purchase order review is the initials of the President/MR and date on the purchase order.
- 3.11 All customer orders are entered into the computer system, which drives Purchasing and Warehousing activity. For further details of these processes, please refer to QP07-02 and QP07-03, titled “Purchasing/Supplier Evaluation” and “Warehousing/Distribution” respectively.

4.0 RELATED DOCUMENTATION

QP07-02 – Purchasing/Supplier Evaluation
 QP07-03 – Warehousing/Distribution
 Quotations

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 7.4.1 and 7.4.2 of ISO 9001:2008 titled Purchasing Process and Purchasing Information respectively.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR, General Manager, and the Office Manager have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 As discussed in QP07-01, all customer orders are entered in the computer system.
- 3.2 The General Manager is responsible for reviewing available inventory and issuing Purchase Orders to suppliers as needed.
- 3.3 All other purchasing activity is driven by verbal requisitions subject to verification by Management.
- 3.4 Purchase Orders are utilized for all purchasing activity that relates to the Quality Management System, and include the following information:
 - ◆ Purchase Order Number;
 - ◆ Supplier Information;
 - ◆ Date;
 - ◆ Date Due;
 - ◆ Price;
 - ◆ Detail of the product(s) being ordered; and
 - ◆ Electronic indication of who issued and authorized the order.
- 3.5 Purchase Orders are retained in the computer system and include indication of status (open, closed, etc.)

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- 3.6 Geometric has determined that price, product quality, and on-time deliveries are the three most important criteria to consider when evaluating and selecting suppliers and subcontractors.
- 3.7 All suppliers that have proven their dedication to these objectives through past performance or history with Geometric have been grandfathered. Geometric's subcontractors are maintained on an Approved Supplier List (database) maintained by the Office Manager. The Approved Supplier List indicates who the grandfathered suppliers are.
- 3.8 New suppliers/subcontractors that Geometric is considering entering into a contractual relationship with are assessed by a combination of quotation and trial run purchases. These are recorded on the Supplier Evaluation Record. Alternate supplier evaluations include requiring suppliers to be certified or supplier completion of a Geometric Supplier Survey.
- 3.9 Suppliers that are deemed satisfactory after this preliminary assessment are added to the Approved Supplier List.
- 3.10 Suppliers are subject to re-evaluation based on their continuing performance. The results of these re-evaluations are recorded on the Supplier Quality Rating Report.

4.0 RELATED DOCUMENTATION

Purchase Orders
Approved Supplier List
Supplier Evaluation Record
Supplier Quality Rating Report

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 7.5.1 of ISO 9001:2008 titled Control of Production.

2.0 RESPONSIBILITY AND AUTHORITY

The Production Manager, all Process Area Supervisors, and all Process/Equipment Operators have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 As previously discussed, all customer orders are entered into Geometric's computer system.
- 3.2 Also as previously discussed, the General Manager issues Purchase Orders for all products not available in stock at the point the order is reviewed for fulfillment.
- 3.3 If a product is available from existing inventory, the General Manager issues a Traveler with indication of which inventory location to pull the product from.
- 3.4 Product that is pulled from existing inventory is not re-inspected prior to shipment. Traceability to the original inspection records, including the Final Inspection Report is maintained through shipping records by date and part number.
- 3.5 If a product is not available from existing inventory, it is ordered in accordance with procedure QP07-02.
- 3.6 All purchased product is subject to evaluation upon receipt for physical damage and correct quantity/product information against any shipping paperwork provided by the supplier.
- 3.7 All shipping paperwork is forwarded to the General Manager upon receipt. The General Manager reviews the content of the shipment against existing customer orders to determine if the products were ordered for a specific customer or to replenish stock.

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- 3.8 Once a customer order has been determined ready to ship (or a partial shipment has been requested,) the General Manager issues Travelers and all applicable engineering documentation for the order.
- 3.8.1 The President/MR updates the Distribution Schedule on an as needed basis based on the receipt of customer orders. The General Manager refers to the Distribution Schedule as needed in issuing Travelers.
- 3.9 Inspectors utilize the Travelers to determine order quantities, due date, general product information, etc.
- 3.10 The Traveler stipulates general information about the order, including but not limited to:
- ◆ Traveler Number;
 - ◆ Supplier;
 - ◆ Customer;
 - ◆ Customer Purchase Order Number;
 - ◆ Master Job Number;
 - ◆ Order Quantity; and
 - ◆ Inventory Location/Quantity.
- 3.11 Final inspection is performed on each printed circuit board and includes a dimensional (first piece per lot only) and visual inspection. Results of the final visual and dimensional tests are all recorded on the Final Inspection Report.
- 3.12 Circuit boards that are found to be nonconforming at any stage of inspection are labeled as such and sent to a special area for final disposition according to the Control of Nonconforming Product procedure.
- 3.13 The Shipping/Receiving Coordinator enters the Shipped Quantity and Shipped Date on the Traveler upon shipment of the product to the customer.

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4.0 RELATED DOCUMENTATION

QP07-01 – Sales/Order Entry procedure
 Distribution Schedule
 Traveler
 Final Inspection Report

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 7.5.4 of ISO 9001:2008 titled Customer Property.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR and General Manager have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 The only instance of customer property within Geometric at this time is engineering documentation provided during the quotation phase. This engineering documentation may be in the form of CAD files and/or blue prints/schematics.
- 3.2 Master copies of any engineering documentation are retained on the company network by Master Job Number. Printed copies of the blueprints accompany the traveler during production.
- 3.3 The President/MR and/or General Manager are responsible for reporting any damage or loss of customer property to the customer. Such instances are generally recorded according to the Corrective and Preventive Action procedure.

4.0 RELATED DOCUMENTATION

QP08-04 – Corrective and Preventive Action procedure
Traveler

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 7.6 of ISO 9001:2008 titled Control of Monitoring and Measuring Devices.

2.0 RESPONSIBILITY AND AUTHORITY

The President, General Manager and all Inspectors have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 The President is responsible for ensuring that test equipment is used in a manner that ensures that the measurement uncertainty is known and is consistent with the required measurement capability.
- 3.2 All test equipment is calibrated/verified against certified masters having a known valid relationship to internationally or nationally recognized standards. Currently, all test equipment is calibrated by outside sources. Records of this outside calibration are maintained by the President.
- 3.3 All calibrated test equipment is labeled with a calibration sticker which shows the last inspection date, the next inspection date, and who last calibrated the device. Test equipment may also be labeled with a unique device number that is used to trace to the device's calibration record.
- 3.4 Any test equipment found to be out of calibration is re-calibrated as soon as possible, and is not used during this period to test product. The President will assess if any measurements have been made with this out-of-calibration equipment. Customers will be notified if any inaccurate measurements affecting their product might have been made.
- 3.5 The President is responsible for ensuring that the handling, preservation, and storage of test equipment are such that the accuracy and fitness for use are maintained. All employees must take care to handle the test equipment carefully and make sure that it is used only for the intended purposes.
- 3.6 The President is responsible for safeguarding the test equipment from adjustments that would invalidate the calibration setting.

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4.0 RELATED DOCUMENTATION

None

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MEASUREMENT, ANALYSIS, AND IMPROVEMENT

1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 8.2.1 of ISO 9001:2008 titled Customer Satisfaction.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR has the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 Geometric actively monitors customer satisfaction through the use of customer satisfaction surveys. These surveys are directed at a sampling of active customers.
- 3.2 These customer satisfaction surveys are administered and evaluated by the President/MR on a minimum annual basis.
- 3.3 If the customer should fail to return the Customer Satisfaction Survey, the President/MR or designee personally contacts the customer and requests the survey's return.
- 3.4 Customers may be evaluated more often if they demonstrate an unfavorable opinion at the time they are surveyed.
- 3.5 Upon return of customer feedback, the President/MR or designee tabulates the results and also gathers all customer complaints incurred since the last Management Review Meeting. A summary is prepared for presentation at Management Review Meetings. This summary includes a cumulative year-to-year cross comparison.
- 3.6 Any actions taken in response to customer satisfaction data will be noted in the Management Review Meeting minutes.

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4.0 RELATED DOCUMENTATION

Customer Satisfaction Survey
Management Review Meeting minutes

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 8.2.2 of ISO 9001:2008 titled Internal Audit.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR has the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

3.1 The President/MR schedules internal audits on the basis of the status and importance of the process to be audited. The President/MR may choose to refer to the results of previous internal audits and the results of previous third party audits (if nonconformities were present) in order to schedule increased audit activity.

3.2 The President/MR ensures that all processes are audited at least once a year. A process based internal audit schedule is retained by the President/MR to assist in this process. This audit schedule is a working document that is updated as necessary based on audit results. In addition, an audit plan is prepared in advance of each audit by the Internal Auditor.

3.3 All auditors have been trained in the ISO 9001:2008 Standard and are knowledgeable of Geometric operations and auditing. Auditors gather objective evidence through the following techniques: interviewing employees, reviewing documents, reviewing records and observing activities/processes. All audits are conducted in strict accordance with the QE19011S-2011 standard regarding internal audit conduct.

3.3.1 Auditors are generally culled from Geometric Management and would as a result be participants in the Management Review, Corrective Action, and Customer Satisfaction processes. Where this is not the case (such as when subcontractors are used) the auditor will be provided with detailed records of these prior to the audit taking place.

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- 3.3.2 Auditors are required to have demonstrated sufficient competency in whatever responsibility outside of auditing they have prior to selection as internal auditors. This assessment is left to the discretion of the President/MR, and may include completion of an accredited auditing course.
- 3.4 In scheduling the audits, the President/MR ensures that personnel independent of those having direct responsibility for the activity being audited carry out the audits.
- 3.5 The Internal Auditor conducts an opening and closing meeting, with participation recorded on the Internal Audit OM/CM Sign-In Sheet.
- 3.6 Whoever performs the audit uses a Process Audit Working Document provided by the President/MR to record the audit findings.
- 3.7 At the conclusion of the audit, the Auditor will present all nonconformities, if any, to the President/MR. The President/MR will coordinate communication of the findings to the appropriate department head for acknowledgement. These will be recorded using the Internal Audit Nonconformity/Observation Report.
- 3.8 The auditee's department head accepts the nonconformities. The auditee then has a varying time period (never to be more than 2 months) to decide upon the appropriate corrective action (including a thorough examination of root cause.) The suggested corrective action is recorded and is submitted to the Auditor or President/MR for approval. The auditee is also responsible for proposing a target date for implementation of the corrective action.
- 3.9 If the Auditor or President/MR accepts the suggested corrective action, the auditee must implement it within the agreed to time period. If the Auditor or President/MR does not think that the corrective action is sufficient, the auditee will have additional time to devise an alternate corrective action.
- 3.10 After the time period for corrective action implementation has expired, the auditee's department head must submit the corrective actions to the Auditor or President/MR for follow-up. If the auditee requires additional

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time for implementing the corrective action, the auditee's department head must gain permission from the Auditor or the President/MR.

- 3.11 The Auditor or President/MR must then verify the effectiveness of the implemented corrective action. Follow-up activities are recorded.
- 3.12 The President/MR must present the results of all internal audits at the next Management Review Meeting.
- 3.13 The effectiveness of the internal audit process is generally determined by way of comparison with Geometric's performance in any registrar audits as well as related incidents of customer complaints. If a customer complaint is determined to have been ultimately avoidable through a more robust internal audit program, additional corrective action is pursued in accordance with the Corrective and Preventive Action procedure (QP08-06.) This may extend to retraining current auditing staff or appointment of replacement auditing staff.

4.0 RELATED DOCUMENTATION

QE19011S:2004 Auditing Guidelines
 Internal Audit Schedule
 Internal Audit Plan
 Internal Audit OM/CM Sign-In Sheet
 Process Audit Working Document
 Internal Audit Nonconformity/Observation Report

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 8.3 of ISO 9001:2008 titled Control of Nonconforming Product.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR, General Manager, and all Inspectors have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

- 3.1 Purchased material that does not match shipping paperwork, has physical damage, or does not match the purchase order is segregated while onsite, and sent back to the supplier for resolution.
- 3.2 All nonconforming products that cannot be immediately dispositioned are segregated pending disposition.
- 3.3 Scrap is placed in designated containers marked appropriately.
- 3.4 All nonconforming product incidents are recorded on the Nonconforming Product Log.
- 3.5 Customer rejections are subject to evaluation upon receipt to verify the validity of the customer's rejection. If the rejection is legitimate, the product is generally sent to the supplier for replacement or scrapped. The President/MR and/or General Manager records final disposition on the Nonconforming Product Log.
- 3.6 Due to the nature of operations at Geometric, most nonconforming product is replaced, final product disposition is determined by management and is recorded on the Nonconforming Product Log.
- 3.7 A Corrective Action Report for the nonconforming material is generated when appropriate. The report attempts to detect the root cause of the nonconformity. For a full explanation of the corrective action process, please refer to the Corrective and Preventive Action procedure.

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4.0 RELATED DOCUMENTATION

- QP08-03 – Inspection
- QP08-04 – Corrective and Preventative Action
- Nonconforming Product Log

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1.0 PURPOSE AND SCOPE

The procedure described below complies with the requirements of Element 8.5.2 and 8.5.3 of ISO 9001:2008 titled Corrective Action and Preventive Action.

2.0 RESPONSIBILITY AND AUTHORITY

The President/MR and the General Manager have the responsibility and authority for implementing all requirements of this procedure.

3.0 PROCEDURE

Corrective Action

- 3.1 Corrective and preventive action is initiated in any of the following cases:
 - ◆ Identification of product nonconformities
 - ◆ Nonconformities observed during audits (1st, 2nd, or 3rd party)
 - ◆ Customer complaints
 - ◆ Nonconforming product deliveries from vendors/subcontractors
 - ◆ Employee suggestions
- 3.2 Any employee can initiate corrective and preventive actions. Product nonconformities are documented on the Nonconforming Product Log, (See QP08-03.)
- 3.3 A formal Corrective Action is issued in response to customer complaints per customer request or at the discretion of upper management. Criteria pertinent to this discretion include the determination of an underlying cause relative to the complaint.
- 3.4 All internal corrective actions are recorded on the Corrective Action Form.
- 3.5 The President/MR or designee assigns the corrective action to the area of the nonconformity, or to the supplier if the problem is a supplier issue. This party is responsible for effectively handling the nonconforming product/situation. This could include the tagging and segregation of nonconforming material or notifying the personnel with authority to implement an appropriate short-term fix to the problem.

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- 3.6 All Corrective Action Forms are logged onto a Corrective Action Log, which is maintained by the President/MR or designee.
- 3.7 A short term, or containment action takes place to ensure that no product or process associated with the nonconformity is used or sent to the customer.
- 3.8 The individual to whom the Corrective Action Form is issued is responsible for determining the root cause relative to the issue documented on the Corrective Action Form.
- 3.9 The individual doing the root cause analysis must also record the corrective action to be taken. The corrective action must include a long-term fix of the problem.
- 3.10 Once the individual responsible for implementation of the corrective action has completed it, he/she must submit the Corrective Action Form to the party that initiated it for verification.
- 3.11 The President/MR or designee is responsible for periodically reviewing the Corrective Action Log in order to ensure that no corrective action is excessively outstanding.
- 3.12 If the initiator finds the corrective action is acceptable, then he/she must document as such and sign the Corrective Action Form. Any unacceptable actions are routed back to the responsible party.
- 3.13 The President/MR or designee is also responsible for follow up on all closed Corrective Action Forms to ensure their effectiveness.
- 3.14 Generally, if corrective action is being requested from a Geometric supplier, the supplier is encouraged to utilize their own corrective action format and record. In the event that such a format does not exist, the supplier will be sent a Corrective Action Form to record their actions. All corrective action requests issued to suppliers (regardless of format utilized) are recorded on the Corrective Action Log.

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Preventive Action

- 3.15 Opportunities for preventive action can be raised by any Geometric employee, at any time, and for any reason.
- 3.16 Opportunities are generally drawn from an analysis of process/product adjustments that are made without the initiative of a customer complaint or other problem (such as would be addressed in accordance with the Corrective Action portion of this procedure.)
- 3.17 Opportunities can also be identified through review and analysis of process trends, inspection data, and the need for pre-emptive action therein to eliminate potential nonconformities.
- 3.18 Preventive Actions are documented on the Preventive Action Report (PAR.)
- 3.19 The PAR Team (including at minimum the General Manager and President/MR) is responsible for ensuring that all appropriate steps implied by completion of the PAR are followed, and that the PAR itself is filled in appropriately.
- 3.20 The PAR Team is responsible, in coordination with any additional needed personnel, for determination of the root cause(s) associated with the potential incident.
- 3.21 The PAR Team and associated team members must then determine and approve the Preventive Action(s) to be taken in response to the determined root cause of the potential incident. These Preventive Action(s) are documented on the original PAR. Approval of the Preventive Action(s) is noted through sign-off on the PAR by a member of the PAR Team.
- 3.22 All PARs are logged onto the Corrective Action Log, whose use is discussed above.
- 3.23 Once the preventive action(s) have been approved, the PAR Team is responsible for ensuring that the preventive actions are fully implemented. This may extend to performing needed training, modifying forms, etc. as required.

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3.24 All PARs are subject to verification of effectiveness after an appropriate period of time has passed from their initial implementation. The PAR Team is generally responsible for performing this verification. Successful completion of verification is recorded on the PAR.

3.25 PARs (and any repetitive or other trends therein) are reviewed at Management Review Meetings as discussed in procedure QP05-01.

4.0 RELATED DOCUMENTATION

- QP05-01 – Management Responsibility
- QP08-03 – Control of Nonconforming Product Procedure
- Corrective Action Form
- Corrective Action Log
- Preventive Action Form

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