

Quality Policy, Quality Objectives and Quality Manual

Precision Gage & Tool Company

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PRECISION GAGE & TOOL CO.

Your quality is our passion

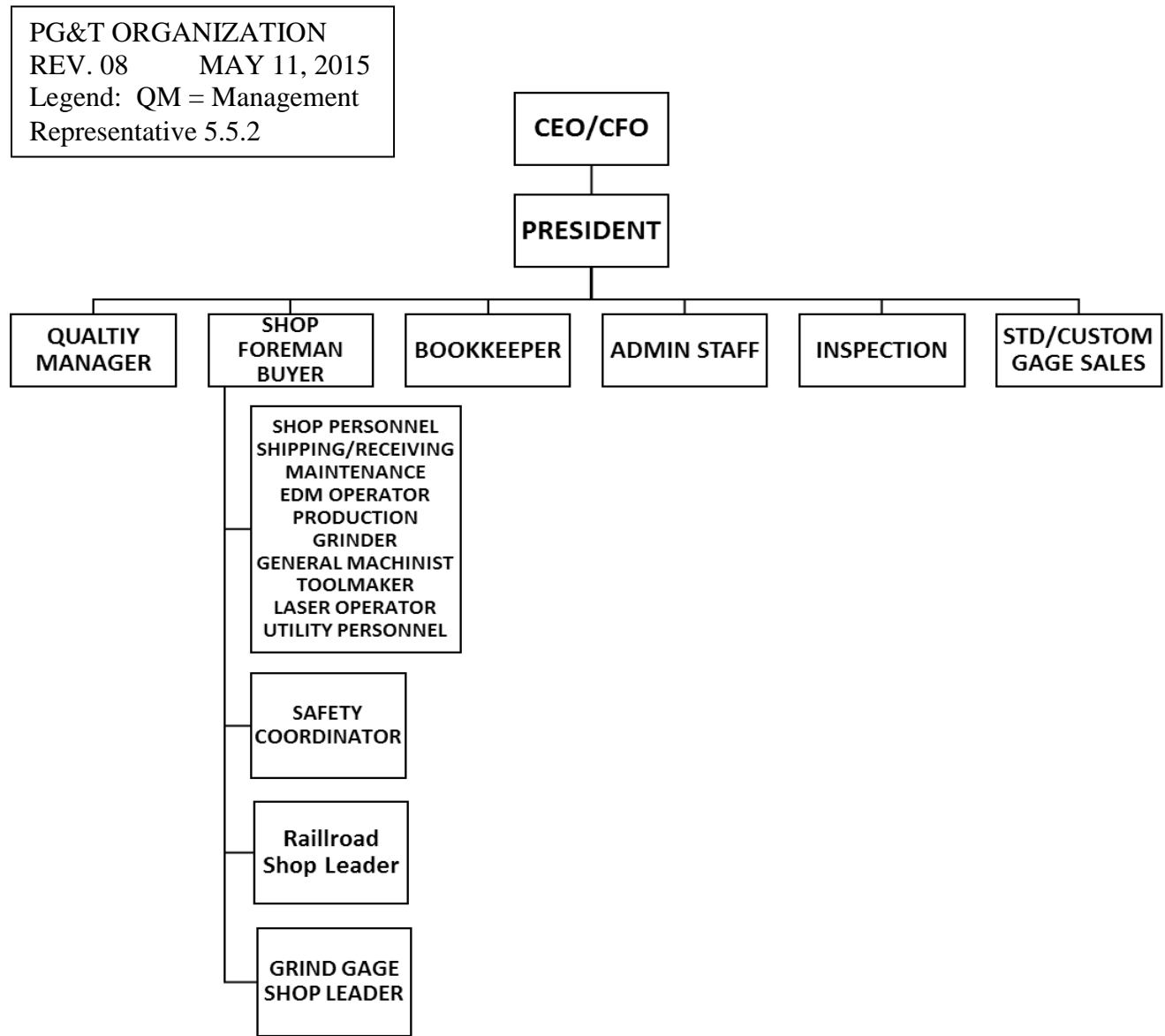


Approved by _____
President Date

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Precision Gage & Tool Co.
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Legend:
 CEO = CFO, Owner, Controller

President = Treasurer, Grind Gage Sales, Quality Manager, Management

Manufacturing Manager = Shop Foreman, Buyer/Purchasing Agent

Shop Personnel – may include Shipping & Receiving, Maintenance, EDM Operator, Production Grinder, General Machinist, Toolmaker, Laser Operator, Utility Personnel, Safety Coordinator

Administrative Staff – Administrative Assistants

Quality Policy

Precision Gage and Tool Company (PGT) is committed to refining our ISO quality management system to continue to provide quality gaging products to our customers.

As a team we will focus on enhancing customer satisfaction by striving to provide:

- a) Quality products that meet or exceed our customers' requirements
- b) Products that are delivered on time, without defects, and
- c) Continuous improvement of our processes and personal performance in order to offer a quality product at a cost effective price

This policy reflects our organizational commitment to meeting our customers' needs. PGT's management assures that this policy is understood, implemented, and maintained at all levels of the company.

Quality Objectives

- a) Products will meet or exceed our manufacturing tolerances and/or customer specifications.
- b) We will ship products within the time frame established on order documentation.
- c) We will use continuous improvement on process management to provide quality products.

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Quality Manual

1 Scope

1.1 General

The purpose of this Quality Policy and Quality Manual is to describe the policies and related documents that Precision Gage and Tool maintains as a result of conforming to the requirements established in ISO 9001:2008. This policy manual covers all defined quality activities, products and services that are within the control of or can be influenced by PG&T. This manual is approved by the president. It is maintained in two forms, controlled and uncontrolled. All printed copies are considered uncontrolled.

2 Normative References

The following documents are referenced herein. The latest version of PG&T documents can be found on the PG&T server:

- a) ISO 9001:2008 Quality Management Systems Requirements
- b) Precision Gage and Tool Quality Policy and Quality Manual
- c) Precision Gage and Tool Quality System Procedures and Forms

3 Terms and Definitions

The definitions used in the manual are consistent with the ISO 9000:2008 *Quality Management Systems Fundamentals and Vocabulary*.

4 Quality Management System Requirements

4.1 General Requirements

The Quality Management Representative is responsible for the identification of all written procedures and instructions considered necessary to produce, in a cost-effective manner, a product that meets customers' and any applicable regulatory requirements. The interaction between the sales, engineering, purchasing and production functions, is defined within this Quality Policy and Quality Manual.

The procedures and instructions take account of the requirements of ISO 9001 and any other requirements specified by the Organization's customers. Such documentation shall define the methods and criteria needed for the effective operation, control and improvement of the quality critical processes.

The Quality Management Representative is responsible for making the Quality Policy and Quality Manual available to those who need them.

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4.2 Documentation Requirements

4.2.1 General

The Quality System procedures and instructions are documented on three levels:

- Level I** This document describes our approach to the requirements of ISO 9001.
Level II The PG&T Documented Procedures that detail the sequence and interaction of the activities and processes considered necessary to ensure conformance to the quality system requirements.
Level III Work Instructions and Methods defining specific activities related to products and processes.

4.2.2 Quality Manual

This manual sets out the quality system requirements for the Precision Gage & Tool Co. and is structured on, and meets the requirements of ISO 9001:2008. Any irregularities relative to the requirements of ISO 9001:2008 are explained within this manual.

The documented procedures defining the quality management controls and responsibilities are referenced in the appropriate sections of this manual. The interaction between the quality system processes is defined within the documented procedures and in the other pertinent sections of this manual.

4.2.3 Control of Documents

Documentation required by this quality management system is controlled per Documented Procedure (DP) **Document and Data Control**. This procedure defines the controls needed:

- a) for document approvals prior to use
- b) to review and update as necessary and for re-approval
- c) to ensure current revisions and changes are identified
- d) to ensure relevant versions are available at points of use
- e) to ensure documents are legible and identifiable
- f) to ensure documents of external origin are identified and distribution is controlled
- g) to prevent unintended use of obsolete documents and their identification if they are retained

4.2.4 Control of Quality Records

The quality management representative is responsible for the identification of records required in the operation of the quality management system. Quality records are maintained to demonstrate achievement of the required quality and the effectiveness of the quality management system. Quality records are stored and maintained to provide for ready access, maintain legibility, and to prevent loss. The disposal of quality records after the nominated period of retention shall be at the direction of the quality management representative. Quality records maintained electronically are routinely backed-up and password protected. Details of methods, responsibilities and documentation are defined in the Documented Procedure (DP) **Control of Quality Records**.

5 Management Responsibility

5.1 Management Commitment

Management's commitment to the development and improvement of the quality management system is demonstrated through the following activities:

- a) Communicating to the organization the importance of meeting customer as well as regulatory and legal requirements
- b) Establishing the quality policy and quality objectives
- c) Conducting and recording management reviews
- d) Ensuring the availability of necessary resources

5.2 Customer Focus

Management ensures that customer needs and expectations are determined, converted into requirements and fulfilled with the aim of achieving customer satisfaction by:

- a) Soliciting customer satisfaction/dissatisfaction
- b) Reviewing the quality system performance indicators
- c) Recording and evaluating customer complaints

5.3 Quality Policy

The policy statement contained in this manual is established by our management and defines the management's commitment to quality and continual improvement of our products and services.

The quality policy provides the framework for establishing and reviewing the quality objectives. Communication of the quality policy is part of the new employee induction process. Copies of the Policy Statement are prominently displayed throughout the company. The quality policy is periodically reviewed by management during the management review meeting.

5.4 Planning

5.4.1 Quality Objectives

Company goals and quality objectives are established by management and are documented in this manual. These objectives are measureable and reviewed on a regular basis during the management review.

5.4.2 Quality Management System Planning

The planning of our QMS is facilitated by our management reviews. This planning is focused on meeting customer requirements and is further supported at several key points within our QMS. The planning involved at the key reference points serves to ensure that our QMS is maintained when changes are planned and implemented.

5.5 Responsibility, Authority and Communication

5.5.1 Responsibility and Authority

PG&T management has defined the responsibilities and authority of its employees in an organizational chart, included in this manual, and in procedures and work instructions as appropriate. This authority includes, but is not limited to, the freedom and responsibility to identify, record and begin actions necessary to prevent or correct non-conforming conditions, products and processes. Personnel at all levels are empowered with the responsibility to identify suspect, nonconforming situations so that they may be addressed in accordance with applicable procedures.

PG&T management encourages all employees to recommend or provide preventive or corrective action solutions through approved channels.

5.5.2 Management Representative

The quality manager is appointed as the management representative for the quality management system. The responsibilities include, but are not limited to, the following:

- a) ensuring that the quality system is established and maintained
- b) reporting on the performance of the quality management system to top management, including needs for improvement
- c) coordination with external parties on matters relating to the quality system
- d) promoting an awareness of customer requirements throughout the organization
- e) ensuring the overall effective operation of the quality management system and that the requirements of ISO 9001 are met and maintained

The management representative has the full support of PG&T management to ensure the provisions above are fully implemented.

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5.5.3 Internal Communication

Internal communication regarding the processes of the quality management system and its effectiveness in achieving customer satisfaction is accomplished by:

- a) posting of quality performance reviews and targets
- b) results of management review meetings
- c) distributing / posting performance of the organization toward stated targets

5.6 Management Review

5.6.1 General

PG&T management will meet at least once per calendar year to review and ensure the continuing suitability and effectiveness of the quality system. The purpose of the review is to assess the effectiveness of the system and to determine whether any changes in policy, procedure, method or philosophy are necessary to meet the current and future needs of the organization and its customers. PG&T's Management Review Agenda and Minutes will serve as the record for these meetings.

5.6.2 Review Input

Inputs to management review include current performance and improvement opportunities that are related to, but not limited to the following:

- a) results of audits
- b) customer feedback
- c) process performance
- d) recommendations for improvement
- e) status of preventive and corrective actions
- f) follow-up actions from earlier management reviews
- g) changes that could affect the quality management system

5.6.3 Review Output

As a result of our QMS management review meeting decisions and actions regarding improvements to our QMS, our systems, and our products are recorded. In addition, improvements to customer requirements and any perceived resource needs are noted. Other actions, as deemed necessary by the quality management team will also be included and recorded in the action section of the minutes. Continual improvement projects and assignments are also recorded using our minutes and serve as a record of the accomplishment of those projects, assignments, etc. As most continual improvement projects are also preventive in nature, these minutes will also act as an additional record of preventive actions.

6 Resource Management

6.1 Provision of Resources

Top management shall determine the necessary resources to implement and improve the processes of the quality management system and to address customer satisfaction.

6.2 Human Resources

6.2.1 General

Trained personnel shall be assigned to all work affecting quality, based on their competency which includes:

- a) education
- b) training
- c) skills
- d) experience

6.2.2 Competence, Training and Awareness

The PG&T management team ensures that personnel performing work affecting product quality are competent on the basis of appropriate education, training, skills and experience as part of the hiring process. During our orientation process, individuals are given an overview of our ISO quality management system, our quality policy and expectations. We provide training to ensure personnel are competent in their respective jobs. Project specific training needs identified to the project management team will be addressed in an appropriate manner to meet the needs of the project and records of such training shall be kept in the employees training files.

6.3 Infrastructure

PG&T management shall provide and maintain the infrastructure needed to achieve the ongoing conformity of its products, including:

- a) workspace and associated facilities
- b) production tools and equipment
- c) supporting services such as information systems

6.4 Work Environment

PG&T management shall ensure that a suitable work environment is provided to achieve conformance to product requirements and to provide a safe working environment. Such factors include:

- a) safety rules and guidance
- b) physical factors such as lighting, cleanliness, and temperature

7 Product Realization

7.1 Planning of Product Realization

We shall plan and develop the requirements for new, or significantly changed products and services. The planning process shall define, as appropriate:

- a) quality objectives for the product and/or service
- b) the provision of any resources and facilities specific to the product
- c) the inspection and validation activities, and the criteria for acceptability
- d) all records needed to ensure product conformity

The output of this planning process shall be defined in engineering drawings, contract specific documents and work instructions as appropriate.

7.2 Customer-Related Processes

7.2.1 Determination of Requirements Related to the Product

Product requirements are recorded and transmitted to appropriate personnel within the organization by sales and engineering personnel. Such requirements may be defined by the customer and/or internally by our technical staff. These requirements include the following:

- a) product requirements specified by the customer, including any requirements for delivery and post-delivery activities
- b) requirements not stated by the customer, but necessary for the intended or specified use of the product
- c) any statutory and regulatory requirements related to the product

7.2.2 Review of Requirements Related to the Product

PG&T has documented procedures that define the review process.

The review shall ensure that:

- a) The requirements are adequately defined and documented
- b) The company has the resources to meet the requirements, and that
- c) Any differences between the contract and the tendered quotation are resolved to the mutual satisfaction of the involved parties before formal acceptance of the contract, and that in the event of product/contract requirement amendments, that appropriate notification is given to affected departments within PG&T and that relevant documentation is revised

Such reviews are documented on the quote, e-mail, the order acknowledgement and/or within the job folder, as applicable.

7.2.3 Customer Communication

We recognize the necessity for customer communication and feedback as a major contributing element of customer satisfaction. Responsiveness is a key indicator of our commitment to customer needs. Other communications with the customer for the variety of project issues are handled through daily contacts, e-mail, or status meetings. Customer complaints are managed through the Corrective Action process.

7.3 Design and/or Development

7.3.1 Design and Development Planning

A design project may be initiated internally as a result of predicted needs from market analysis, product improvement or by a customer placing an order for a customized product.

A design plan, defining responsibilities and the key activities, including verification and validation, shall be derived from the design inputs. In the early stages of development the plan may be tentative. The lead designer is responsible for initiating appropriate reviews, verifications and validations as the project develops.

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7.3.2 Design and Development Inputs

Design input requirements are defined and documented to cover at least the following elements as appropriate:

- a) the quotation
- b) the customer's drawings, specifications and concepts
- c) performance criteria
- d) information derived from similar products
- e) design requirements for raw materials and/or components
- f) considerations of manufacturability
- g) requirements for regulatory and safety practices
- h) validation and verification activities

The design inputs shall be reviewed for adequacy at appropriate stages of design, product review and design and development planning.

7.3.3 Design and Development Outputs

Design output requirements are defined, documented, and include the following, as appropriate:

- a) engineering drawings
- b) bill of materials
- c) component and raw material specifications
- d) production instructions
- e) inspection, verification, and calibration criteria
- f) a definition of any characteristics of the product essential to safe and proper use

The design outputs shall be in a form suitable for verification against the design input.

7.3.4 Design and Development Review

At suitable stages during development, design reviews shall be undertaken by appropriate personnel to assess the progress achieved, to identify any problem areas and to agree on any action to be taken. Such reviews may be undertaken with the customer as appropriate. Records shall be maintained to document the reviews and any resulting action taken.

7.3.5 Design and Development Verification

Design verification is planned and performed to ensure that the design inputs meet the design output. Records of the results of verifications shall be maintained.

7.3.6 Design and Development Validation

Design validation is planned. All designs are validated by successful performance of the product in meeting the intended use. Verification and validation activities shall be performed by our personnel at our facility, prior to delivery whenever practical. Records of the results of validation activities shall be maintained.

7.3.7 Control of Design and Development Changes

Design changes are documented, reviewed and approved, prior to implementation by authorized personnel. The review of design changes shall include an evaluation of the effect of the change on any constituent product, including product already delivered.

Details of methods, responsibilities, and documentation are defined in the Documented Procedure (DP) **Design Control**.

7.4 Purchasing

7.4.1 Purchasing Process

We ensure that purchased product conforms to specified purchase requirements. The type and extent of control applied to the supplier and the purchased product is dependent upon the effect of the purchased product on subsequent product realization or the final product. The company evaluates and selects suppliers based on their ability to supply product in accordance with the specified requirements. Criteria for selection, evaluation and re-evaluation are established. Records of the results of evaluations and any necessary actions arising from the evaluation are maintained.

7.4.2 Purchasing Information

A clear description of the product or service being ordered shall be defined and communicated to the supplier. Such description contains, as appropriate, product/service specifications, part numbers, grades and any other relevant data.

Purchasing shall be performed by the authorized buyer who shall select the supplier, and ensure the adequacy of the product or service prior to placing the order.

7.4.3 Verification of Purchased Product

Receiving is accomplished only by designated PG&T personnel. Verification and/or inspection activities include the verification that the correct material, quantity and attending paperwork match. The purchase order is initialed and dated to reflect the receipt of the order. Suspect or non-conforming material is identified and processed per our control of non-conforming product procedure. Where PG&T, or its customers, intends to perform verification at the supplier's premises, PG&T states the intended verification arrangements and method of product release in our purchasing documentation.

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7.5 Production and Service Provision

7.5.1 Control of Production and Service Provision

Production, service and repair operations are carried out under controlled conditions, which include the following:

- a) the availability of engineering drawings and specifications
- b) the availability of documented procedures and instructions
- c) the availability of information that specifies any special arrangements agreed with the customer, including release and delivery requirements
- d) monitoring of the production and servicing/repair stages through defined inspection stages
- e) the provision of suitable equipment and tools, including calibrated measuring equipment

7.5.2 Validation of Processes for Production and Service Provision

We shall establish controls for the production processes to ensure the process requirements are met in a consistent manner. Such controls shall include, as applicable:

- a) the use of written instructions and methods
- b) the qualification of equipment
- c) training of personnel
- d) defined requirements for records

7.5.3 Identification and Traceability

Raw materials component parts and work in progress shall be suitably identified during storage and processing.

Work in progress shall be suitably identified by related paperwork to show the inspection status. When specified by the customer, or internally, traceability shall be maintained through the provision of manufacturing records. The extent of traceability required shall be defined on the relevant Shop Order (SO). Details of methods, responsibilities and documentation are defined in written procedures.

7.5.4 Customer Property

We hold customer supplied products for repair and calibration purposes. Such products shall be suitably identified and safeguarded while under our control. Any customer property that is damaged or otherwise unsuitable for use shall be reported to the customer, and records maintained until the situation is resolved.

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7.5.5 Preservation of Product

We follow the appropriate methods/instructions to preserve product conformity to customer requirements during internal processing and delivery to the intended destination. This includes identification, handling, packaging, storage and protection. Preservation also applies to the constituent parts of a product.

7.6 Control of Monitoring and Measurement Equipment

We determine the monitoring and measuring to be undertaken and the devices needed to provide evidence of conformity of our product. We have established a procedure that details the monitoring and measuring requirements and ensure they are carried out in a manner consistent with monitoring and measuring requirements. Where necessary, our equipment is:

- a) Calibrated at specified intervals
- b) Adjusted or re-adjusted as necessary
- c) Identified to enable calibration status to be determined
- d) Safeguarded from adjustments that would invalidate the measurement
- e) Protected from damage and deterioration during handling, maintenance and storage

We assess and record the validity of previous results when equipment is found not to conform to requirements. We take appropriate action on equipment and product affected. Records of calibrations are maintained. Currently computer software is used in the control of monitoring and measuring equipment.

8 Measurement, Analysis and Improvement

8.1 General

We carry out monitoring, measurement, analysis and improvement in order to demonstrate the conformity of our product. To continually improve our quality system, we perform internal audits. These audits focus on conformity to the ISO 9001:2008 Standard, and our quality documentation and their effectiveness as practiced for each process audited. The opportunities for improvement that are discovered are used to drive improvements within our system. All PG&T employees are also encouraged to suggest actions that can lead to improvements. We may, at appropriate times, utilize statistical methodology to assist in these improvement efforts. The results from these audits and other process data are furthered reviewed at management review in order to facilitate these continual improvement efforts within the organization.

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8.2 Measurement and Monitoring

8.2.1 Customer Satisfaction

As a measure of the performance of our QMS, we survey our customers relating to their perception of our ability to meet their requirements. The surveys are analyzed and the results are reviewed during management review. We also review customer complaints, reports issued by customers and other data to ensure we capture and respond to all opportunities to improve customer satisfaction.

8.2.2 Internal Audit

We conduct internal audits in accordance with our Documented Procedure (DP) **Internal Audits**. This procedure specifies that all system processes are audited every three years, at a minimum. Consideration is also given to processes vital to PG&T and to those whose status warrants additional auditing. The objectives of our internal audits are to determine if the process being audited conforms to the ISO 9001:2008 Standard and all other appropriate PG&T requirements and that the process is effectively implemented. Opportunities to improve upon each process is noted by our internal audit staff and delivered to management for suitable action.

Our procedure further details the audit criteria, the scope of the audit and its frequency. The methods to be used are also detailed. To ensure impartiality, no auditor may audit his or her own work. The responsibility and requirements for the planning of these audits and their reporting and maintaining of audit records are also detailed in the above procedure.

When actions are warranted as a result of an internal audit, the manager of the area being audited is responsible to take those actions in a timely manner. Follow-up activities include the verification of those actions and their results as detailed in the above referenced procedure.

We reserve the right to hire a qualified outside source to assist in the accomplishment of our internal audits. We may also use our subcontractor's documentation as the record of fulfillment of our internal audits.

8.2.3 Monitoring and Measurement of Processes

The quality system processes defined in this manual are monitored by the management to ensure they are effective in meeting the planned results.

The monitoring of the quality system processes is achieved by internal audit results, nonconformance reports and management reviews. When areas of concern are identified, corrective action shall be taken.

8.2.4 Monitoring and Measurement of Product

We monitor and measure the characteristics of our product in order to ensure that product requirements have been met. Monitoring and measurement is carried out during all stages of product realization and is detailed in our procedures. Evidence of conformity and acceptance criteria is maintained. Records indicate the person(s) authorizing release of product. Release ensures that all planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority, and where applicable by the customer.

8.3 Control of Nonconforming Product

We ensure that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. The controls and related responsibilities and authorities for dealing with nonconforming products are identified in the Documented Procedure (DP) **Control of Nonconforming Product**. The organization deals with nonconforming product by taking action to eliminate the detected nonconformity, authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer, and/or by taking action to preclude its original intended use or application.

Records of the nature of the nonconformities and any subsequent actions taken, including concessions obtained, are maintained using a corrective/preventive action report, if appropriate. When nonconforming product is corrected, the product is subject to re-verification to demonstrate conformity to the requirements. When nonconforming product is detected, after delivery or use has started, we take action appropriate to the effects, or potential effects, of the nonconformity.

8.4 Analysis of Data

Collected data is analyzed to determine the suitability and effectiveness of the production processes and quality management system, and to identify improvements that can be made. This includes data generated by measuring and monitoring activities and other relevant sources.

Analysis of data includes but is not limited to:

- a) customer satisfaction
- b) conformity to product requirements
- c) characteristics and trends of processes and products including opportunities for preventive action, and
- d) suppliers

8.5 Improvement

8.5.1 Continual Improvement

PG&T management shall facilitate continual improvement of the quality management system through the use of:

- a) the quality policy
- b) quality objectives
- c) audit results
- d) analysis of data
- e) corrective and preventive actions
- f) management reviews

8.5.2 Corrective Action

We take action to eliminate the cause of nonconformities in order to prevent recurrence. Corrective actions are appropriate to the nonconformities encountered. A corrective/preventive action report is used to document the nature of the nonconformance and monitor the effectiveness of the corrective action taken. A Documented Procedure (DP) **Corrective Action** has been established to define requirements for the reviewing of nonconformities (including customer complaints), determining the cause, evaluating the need for actions to prevent recurrence, determining and implementing actions needed, recording the results of the actions taken, reviewing corrective actions taken.

8.5.3 Preventive Action

To eliminate the causes of potential problems, PG&T utilizes a formal preventive action process. The details of which are further clarified in our Documented Procedure (DP) **Preventive Action**. Our procedure covers the determination of potential nonconformities, their root causes along with evaluation of the need for action and its successful implementation. Preventive actions are reviewed for their effective implementation and records are maintained.

We consider continual improvements to be preventive in nature. As such, our *action register*, which is part of our management review meeting minutes, also serves as a record of accomplishment of improvement actions (preventive actions).