Quality Assurance Manual, Revision F

AUTOMATION TECHNOLOGY

QUALITY ASSURANCE MANUAL

Prepared By: Joseph Pollard Date: 7/6/2015
Quality Assurance Manager
Quality Management System Representative

Approved By: Brent York Date: 7/6/2015
President

QUALITY ASSURANCE MANUAL
Table of Contents

QUALITY ASSURANCE MANUAL
Table of Contents

List of Referenced Procedures

QP1000 – Document Control
QP1010 – Quality Records
QP1100 – Design and Development
QP1150 – Quality Control Inspection
QP1220 – Control of Monitoring & Measuring Devices
QP1240 – Internal Quality Audits
QP1260 – Control of Nonconforming Product
QP1280 – Corrective / Preventive Action
QP1400 – PED Products
QP1500 – PED/ATEX Products

Quality Assurance Manual Revision History

Revision	Date	Description of changes	Prepared By
A	4/29/11	Initial Release	Brad Myers
B	10/10/11	Added revision level to page 2, Section 2.0 – changes “automated widgets” to “Valve Automation Devices”, Section 7.3.3 – changed “sage” to “safe”, Section 7.3.5 – changed “be met” to “been met”, Section 7.4.1 – Removed word “Obviously”, Section 7.5.1 – Changed “Our companies” to “ATI’s”	Mitchell Anderson
C	04/27/12	Removed reference to procedures not currently used in QMS, updated all sections to match processes currently followed	Mitchell Anderson
D	9/14/2012	Formatting	Mitchell Anderson
E	6/2/2014	Formatting	Aneil Ali
F	7/6/2015	Updated Quality Policy, Section 5.3	Joseph Pollard

1.0 PURPOSE

The purpose of this quality assurance manual is to establish and state the general policies governing Automation Technology Inc.'s (herein referred to as "**ATI")** Quality Management System. These policies define management's intended arrangements for managing our operations and activities in accordance with the framework established by ISO 9001:2008. These are the top-level policies representing the company's plans or protocol for achieving quality assurance and customer satisfaction.

All departmental or functional policies and procedures written must conform and parallel these policies. All changes to policies and procedures are required to be reviewed to ensure that there are no conflicts with these policies stated in this Quality Assurance Manual (QAM).

2.0 SCOPE

The policies stated in this manual shall apply to all operations and activities at **ATI**. The scope of our quality management system may be stated as follows:

The design and manufacture of Valve Automation equipment.

It is the responsibility of all department managers to help define, implement and maintain the procedures required by this manual and to ensure all processes conform to these requirements. It is the responsibility of all employees to follow procedures that implement these policies and to help strive for continuous improvement in all activities and processes of **ATI**.

2.1 Exclusions:

None.

3.0 RELATION TO ISO 9001:2008

For ease of reference, the sections of this manual are numbered to coincide with the equivalent section numbers of the ISO 9001:2008 standard.

4.0 ATI QUALITY MANAGEMENT SYSTEM

4.1 GENERAL REQUIREMENTS

Through this manual and associated procedures and documents, **ATI** has established, documented, and implemented a Quality Management System conforming to the requirements of ISO 9001:2008. The system is designed to result in continually improving the effectiveness of **ATI** in the operation of the quality management system and in our ability to satisfy our customers' requirements.

Maintenance of this system is the responsibility of the Quality Management System Representative in conjunction with all Department Managers.

This Quality Assurance Manual along with the associated procedures identifies the processes needed for the Quality Management System at **ATI** (see table 1. General Process Sequence flowchart)

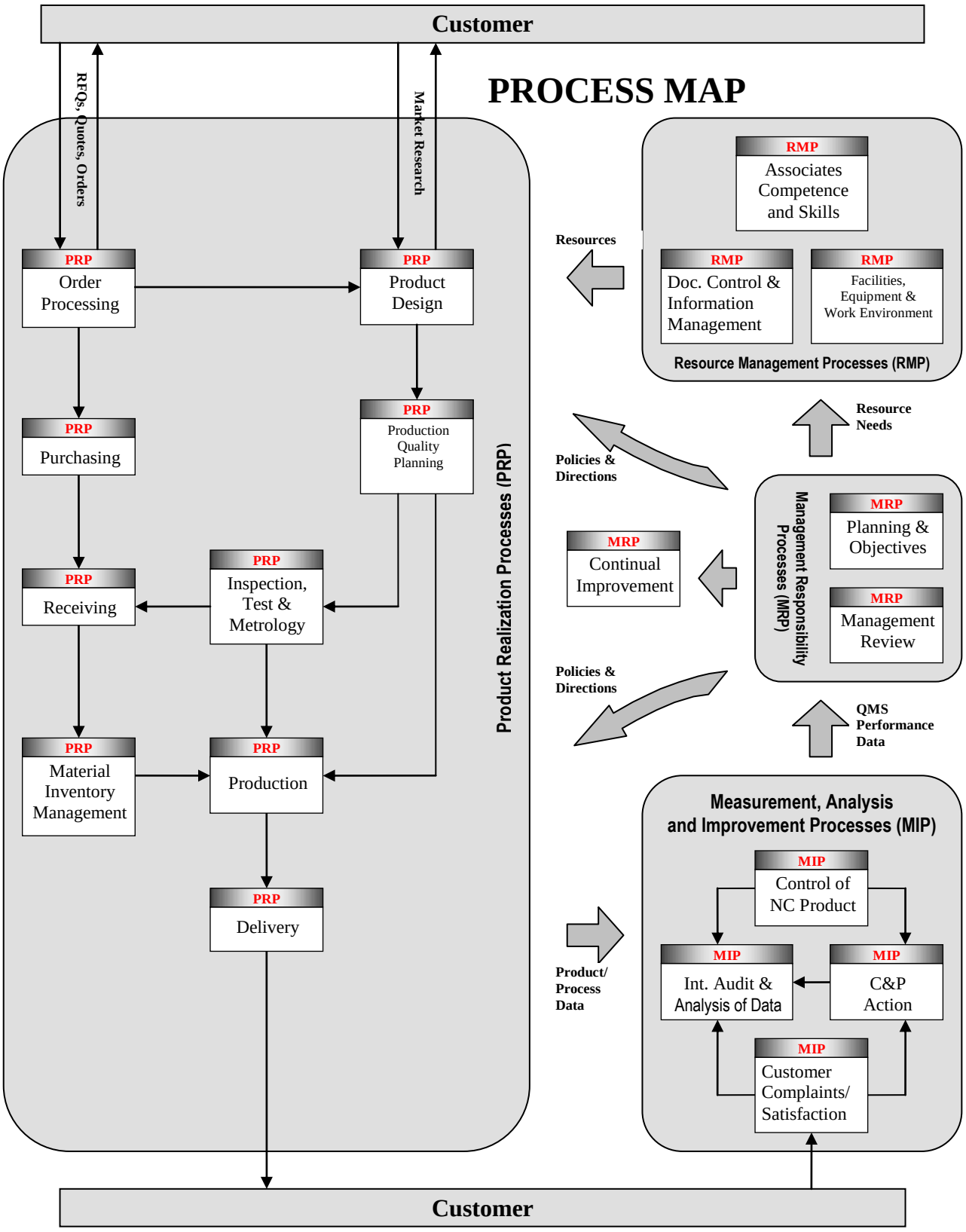

Table 1: General Process Sequence Flow Chart

The Quality Management System Representative shall maintain these documents which identify the sequence of these processes and, in conjunction with the appropriate department managers,

defines the interactions of the processes within the procedures defining these processes. Processes for management activities, provision of resources, product realization, effectiveness and measurement are included. These processes will be managed in accordance with the requirements of ISO 9001:2008.

Top Management shall ensure the availability of resources to support the operation and monitoring of processes through regular interaction with department managers and through review activities at Management Review meetings. Department Managers and the Management Rep will monitor, measure and analyze processes and implement any actions necessary to achieve intended results and continual improvement of the processes. These results will also be monitored at Management Review meetings.

Any processes that are outsourced that may affect our product's conformity to requirements shall be controlled. The Quality Manager and appropriate department manager(s) are responsible for defining the methods to control outsourced processes in procedures.

4.2 DOCUMENTATION REQUIREMENTS

4.2.1 General

This Quality Assurance Manual and the associated procedures are intended to satisfy the ISO 9001:2008 documentation requirements for a quality assurance manual, procedures and statements of the quality policy and quality objectives. Records required by the ISO 9001 standard are identified in the appropriate procedures or the Quality Records procedure.

Department managers and supervisors are responsible for identifying any additional documents needed to ensure the effective planning, operation and control of processes.

Procedures may vary in detail based on the size of the department or organization involved and the type of activity performed. Procedure developers shall consider this as well as the complexity of the processes and interactions, and the competence of the associates involved. Where competence is used to minimize the content in procedures, records (see QAM section 6.2.2 Competence, Awareness, and Training) must support the decision.

Documents may be any medium including: software programs, electronic text files, or hardcopy documents for example.

4.2.2 Quality Assurance Manual

This Quality Assurance Manual includes the scope of the **ATI** quality management system. Exclusions, if any, are documented in QAM section 2.1. Each section of the manual references appropriate implementation procedures. Interactions between processes are defined in the manual or in the referenced procedures.

4.2.3 Control of Documents

All Documents required by the quality management system shall be controlled. The Document Control Procedure defines the controls needed to:

a) Approve documents for adequacy prior to issue
b) Review and update as necessary and re-approve documents
c) Ensure that changes and the current revision status of documents are identified
d) Ensure that relevant versions of applicable documents are available at points of use
e) Ensure that documents remain legible and readily identifiable
f) Ensure that documents of external origin are identified and their distribution controlled
g) Prevent the unintended use of obsolete documents, and to apply suitable identification to them if they are retained for any purpose

4.2.4 Control of Records

Procedures define appropriate records to be maintained in order to provide evidence of conformity to requirements and of the effective operation of the quality management system. Records shall

remain legible, readily identifiable and retrievable. The Quality Records Procedure defines the controls needed for the identification, storage, protection, retrieval, retention time and disposition of records.

Referenced Procedures:

QP1000 – Document Control

QP1010 – Quality Records

5.0 MANAGEMENT RESPONSIBILITY

5.1 MANAGEMENT COMMITMENT

Top Management at **ATI** shows its commitment to the quality management system through the development and implementation of this quality assurance manual. Additionally, management commitment is demonstrated through the **ATI** Quality Policy, the specific objectives that are set and reviewed during Management Review Meetings and by providing the resources required to meet our objectives for continually improving the effectiveness of our operations and quality management system.

The management team consisting of the President and all department managers is responsible for ensuring **ATI** products and services meet customer as well as statutory and regulatory requirements.

5.2 CUSTOMER FOCUS

Top management ensures the focus on improving customer satisfaction is maintained by setting and reviewing objectives related to customer satisfaction at Management Review Meetings.

5.3 QUALITY POLICY

A

Absolute Customer Satisfaction.

T

Timely delivery of superior products to all customers.

I

Innovation and Continuous Improvement of our Quality Management System.

5.4 PLANNING

5.4.1 Quality Objectives

ATI shall review and / or establish quality objectives at least on an annual basis during Management Review and/or Strategic Planning Meetings. These objectives shall be measurable and consistent with the Quality Policy.

5.4.2 Quality Management System Planning

As part of annual Management Review and Strategic Planning meetings, **ATI** shall establish strategic objectives for improvement of our products, processes and customer satisfaction. These objectives are supported by specific measures that track performance against those objectives.

As situations arise that demand changes to the quality management system either to meet objectives or because of changing business conditions, all changes will be reviewed by the management team to ensure the integrity of the quality management system is maintained.

5.5 RESPONSIBILITY, AUTHORITY, AND COMMUNICATION

5.5.1 Responsibility and Authority

Responsibilities and authorities at **ATI** shall be defined in each Job Description and shown in the Organizational chart. Job Descriptions and the Organizational Chart are available on the company file server and are controlled by the Human Resources Department.

5.5.2 Management Representative

ATI's President shall appoint the Quality Manager as the Quality Management System Representative. In the absence of a Quality Manager, **ATI**'s President shall document the appointment of the Quality Management System Representative.

Irrespective of other responsibilities, the Quality Management System Representative has the responsibility and authority to:

a) Ensure that processes needed for the quality management system are established, implemented and maintained
b) Report to top management on the performance of the quality management system and any need for improvement
c) Ensure the promotion of awareness of customer requirements throughout the organization
d) Serve as the liaison with external parties on matters relating to the quality management system

5.5.3 Internal communication

In line with **ATI's** policy of leadership through employee involvement, **ATI's** associates policies have established open communication throughout the organization.

The effectiveness of our quality management system is evident through Internal Audit results, Corrective and Preventive Actions, and the departmental performance measures. Other than confidential information, company and departmental performance measures are posted on bulletin boards throughout **ATI**. Internal Audit results, Corrective Actions and Preventive Actions are shared at departmental meetings as appropriate.

5.6 MANAGEMENT REVIEW

5.6.1 General

The President and management team shall review **ATI's** quality management system on an annually basis to ensure its continuing suitability, adequacy, and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives.

The Quality Management System Representative is responsible for maintaining records from management reviews.

5.6.2 Review Input

The Quality Management System Representative and department managers shall provide the following information for Management Review meetings:

a) Results of audits
b) Customer feedback
c) Process performance and product conformity
d) Status of preventive and corrective actions
e) Follow-up actions from previous management reviews
f) Changes that could affect the quality management system
g) Recommendations for improvement

5.6.3 Review Output

Records shall include the output from the management review and shall include any decisions and actions related to:

a) Improvement of the effectiveness of the quality management system and its processes
b) Improvement of product related to customer requirements
c) Resource needs

6.0 RESOURCE MANAGEMENT

6.1 PROVISION OF RESOURCES

During planning and budgeting processes and as needed throughout the year, the President and management team determine and ensure the appropriate resources are available to implement and maintain the quality management system and continually improve its effectiveness and enhance customer satisfaction by meeting customer requirements.

6.2 HUMAN RESOURCES

6.2.1 General

Associates performing work affecting product quality shall be competent based on appropriate education, training, skills and experience.

6.2.2 Competence, Awareness, and Training

The minimum competencies required for each position at **ATI** are defined in each position's Job Description. Human Resources and department managers and supervisors are responsible for ensuring job descriptions are current.

Where otherwise qualified associates require additional training or other action to meet the minimum competency requirements, these needs are identified. The department provides task-specific training. General training or education is provided or coordinated by Human Resources. The department or Human Resources evaluate the effectiveness of training or other actions taken as appropriate.

The department generates records of task-specific training. Human Resources maintain records of all training and education, skills and experience.

Department managers are responsible for ensuring their employees are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives.

6.3 INFRASTRUCTURE

ATI provides the infrastructure necessary to achieve conformity to product requirements. During the annual budgeting and strategic planning processes, buildings, workspace, and associated utilities requirements are evaluated. When new associates are added, Human Resources coordinates activities to ensure appropriate process equipment including hardware and software if required and supporting services such as telephones etc., are available based on defined job functions.

6.4 WORK ENVIRONMENT

The management team determines and manages the work environment to ensure **ATI** provides a safe and desirable place to work. They ensure the environment is appropriate for achieving conformity to product requirements.

7.0 PRODUCT REALIZATION

7.1 PLANNING OF PRODUCT REALIZATION

ATI has planned and developed the processes needed to provide our customers with products and services that meet their requirements. The results of this planning are the processes and procedures defined in our Quality Management System documentation. These processes and procedures include the quality objectives and requirements for our products, the required verification, validation, monitoring, inspection and test activities specific to our products and the criteria for product acceptance verification. The records needed to provide evidence that these processes and resulting product meet requirements are defined in the procedures. Consideration is given for the need to establish processes, documents, and obtain resources specific to new product as they are developed or during contract review.

7.2. CUSTOMER RELATED PROCESSES

7.2.1 Determination of Requirements Related to the Product

During the quotation process, requirements specified by the customer, including delivery and post-delivery activities are defined. Requirements not stated by the customer but necessary for specified or intended use, where known, are identified by both Sales and Engineering. Engineering also identifies statutory and regulatory requirements related to the product. Any additional requirements determined by **ATI** are communicated at review meetings.

7.2.2 Review of Requirements Related to the Product

Before committing to the customer, **ATI** reviews the customer's requirements related to the product to ensure all requirements can be met. These reviews include reviews of quotations before submission, and reviews of orders or change orders before acceptance. The purpose of these reviews is to determine if the products requirements are adequately defined, any requirements differing from those previously agreed to are resolved, and **ATI** has the ability to meet the defined requirements for both the product and delivery. Where a customer only provides a verbal order, an order confirmation is generated and sent to the customer to ensure agreement on the requirements.

Sales Department processes change orders or contract amendments to ensure these items are reviewed by the appropriate departments and that work orders, sales orders and any other documents are updated and affected associates are made aware of the changes.

Marketing and the Information Systems department manage the corporate web site. New web pages or changes to contents are reviewed to ensure commitments expressed in the catalogue and advertising in the website can be met.

7.2.3 Customer Communication

In keeping with our commitment to customer satisfaction, **ATI** views effective customer communication as an essential element of customer satisfaction. Appropriate handling of communications can reduce customer dissatisfaction in situations and in many cases turn a dissatisfying scenario into a satisfying experience.

The Sales Department is responsible for establishing communication methods to ensure inquiries, contracts or order handling, including amendments, and customer feedback, including customer complaints are handled expeditiously and professionally.

The Sales & Marketing department has primary responsibility for developing product information and literature. Sales & Marketing are the primary customer contacts for product information.

7.3 DESIGN AND DEVELOPMENT

The design phase is the most important phase in the life cycle of a product. The inherent quality, effectiveness, safety and customer satisfaction of a product are established during this phase.

To ensure that specified requirements are met, the following activities as applicable for the design project will be performed:

7.3.1 Design and Development Planning

A Design Plan will be prepared for new design projects or extensive modification to an existing product. The associate assigned is responsible for developing a Design Plan that defines the design and development stages, and the review, verification, and validation that are appropriate to each design and development stage.

Responsibilities and authorities for design and development are defined in Job Descriptions. Responsibilities and authorities for tasks related to specific design and development projects are

assigned by the Engineering Manager and may be reflected in the project plan. The Design Plan will be updated as changes occur and the design evolves.

The associate assigned is responsible for managing the scheduling and planning of the project and the interfaces between all organizations involved. The associate assigned ensures action items assigned during design review meetings are followed-up communicated to the design team or appropriate department.

7.3.2 Design and Development Inputs

Design Input requirements that are applicable to the product shall be identified, documented and reviewed for adequacy. They shall be complete, unambiguous, and not in conflict with each other. The Design Inputs shall include functional and performance requirements, applicable statutory and regulatory requirements, information derived from previous similar designs, and other requirements essential for design and development.

7.3.3 Design and Development Output

Design and development output will be provided in a form that enables verification against the design and development input. This may be in the form of technical specifications, documents, drawings, bills of material, etc.

Design and development output shall be approved before release. The review shall ensure:

- The outputs meet the requirements for design and development
- Appropriate information for purchasing, production and provision of services is available
- Product acceptance criteria are identified or referenced
- The characteristics of the product that is essential for its safe and proper use are specified.

7.3.4 Design and Development Review

At the appropriate stages defined in the Design and Development Plan, systematic reviews of design and development shall be performed:

- To evaluate the ability of the results of design and development to meet requirements
- To identify any problems and propose necessary actions

The associate assigned ensures participants in such reviews shall include representatives of functions concerned with the design and development stages being reviewed. Records of the results of the reviews and any necessary actions shall be maintained

7.3.5 Design and Development Verification

Design and development verification confirms, by objective evidence, that the specified design requirements have been met. Verification shall be performed at the stages identified in the Design and Development Plan. One or more of the following methods may be acceptable for design Verification:

- Performing alternate calculations
- Comparing a new design with a similar proven design
- By tests or demonstrations
- Reviewing the Design Stage Documents before release

Records of the results of the verifications and any necessary actions shall be maintained.

7.3.6 Design and Development Validation

Design and Development Validation will normally follow the successful Design and Development Verification activities. This activity will be performed according to the Design and Development Plan. The validation ensures that the resulting product is capable of meeting the requirements for the specified application or intended use, where known.

Wherever practicable, validation shall be completed before the delivery or implementation of the product. Records of the results of validation and any necessary actions shall be maintained.

7.3.7 Design and Development Changes

An Engineering Change Notice (ECN) is used to identify and record design and development changes. The changes shall be reviewed, verified and validated, as appropriate, and approved before implementation.

The review of design and development changes shall include evaluation of the effect of the changes on constituent parts and product already delivered. Records of the results of the review of changes and any necessary actions shall be maintained.

Referenced Procedures:

QP1100 – Design & Development

7.4 PURCHASING

7.4.1 Purchasing process

The purchasing process is essential to **ATI**'s ability to provide our customers with products that meet their requirements. **ATI** ensures that purchased product conforms to specified purchase requirements. **ATI** accomplishes this by controlling our supply chain and inspecting purchased product as required. The type and extent of control applied to the supplier and the purchased product shall be dependent upon the effect of the purchased product on subsequent product realization or the final product.

It is the responsibility of the Purchasing Department and the Quality Manger to evaluate and select suppliers based on their ability to supply product in accordance with specified requirements. Engineering may be called on to assist as required. Records of the results of evaluations and any necessary actions arising from the evaluation are maintained.

7.4.2 Purchasing information

ATI uses purchase orders (POs) to describe the product to be purchased, including where appropriate:

- Requirements for approval of product, procedures, processes and equipment
- Requirements for qualification of associates
- Quality management system requirements

The Purchasing Department is responsible for ensuring the adequacy of specified purchase requirements before their communication to the supplier.

7.4.3 Verification of purchased product

Purchased items and materials are verified for correctness by the Receiving Department. If additional inspection is required, it is noted on the purchase order and the item is sent to Quality Control for inspection.

Should **ATI** or any of our customers decide to perform verification at the supplier's premises, the verification arrangements and method of product release shall be stated in the purchasing information.

7.5 PRODUCTION PROVISION

7.5.1 Control of Production Provision

ATI plans and carries out production activities under controlled conditions. Controlled conditions shall include, as applicable:

- The availability of information that describes the characteristics of the product
- The availability of work instructions, as necessary
- The use of suitable equipment
- The availability and use of monitoring and measuring devices
- The implementation of monitoring and measurement
- The implementation of release, delivery and post-delivery activities

Manufacturing Procedures, Travelers/Routers, and Inspection Procedures define **ATI**'s plan for manufacturing and service. These procedures provide detailed planning of all phases including the methods and equipment to be used and workmanship criteria. This detailed planning will be documented for each product in the form of work instructions, drawings or specifications.

7.5.2 Validation of Processes for Production Provision

Engineering with assistance from Manufacturing is responsible for ensuring any processes for production provision where the resulting output cannot be verified by subsequent monitoring or measurement are validated. This includes any processes where deficiencies become apparent only after the product is in use or the service has been delivered.

Validation shall demonstrate the ability of these processes to achieve planned results.

Validation documentation for these processes will include, as applicable:

- Defined criteria for review and approval of the processes
- Approval of equipment and qualification of associates
- Use of specific methods and procedures
- Requirements for records
- Revalidation

7.5.3 Identification and Traceability

All associates are responsible for identifying the product, by suitable means, throughout the process from receipt of material through shipment of the final product. Product identification will be provided by using the company's part numbering system to assign unique identification for all components and internally manufactured parts. Where not otherwise obvious due to part shape, color, etc., tags, labels, and routers are used as appropriate to clearly identify products and materials throughout the manufacturing process and in storage.

Associates performing monitoring and measuring activities are responsible for clearly identifying the product status with respect to monitoring and measurement requirements. To ensure that only items, assemblies or final products that have passed required tests and/or inspections proceed to the next operation or process, all products or assemblies will be appropriately labeled, tagged, stamped, or accompanied by routers or check-out sheets to properly indicate their inspection status. The inspection status shall clearly indicate pass or fail as appropriate.

In products where component traceability is a requirement, the Router or Work Order will be used to record the unique identification of the traceable components used in the final product. Product traceability will be provided by the use of a serial number system for all completed products.

7.5.4 Customer Property

ATI shall exercise care with customer property while it is under our control or being used. The Receiving Department shall identify customer-supplied product upon receipt and verify it is correct and not damaged. Manufacturing associates shall protect and safeguard customer property provided for use or incorporation into the product while it is in **ATI** possession. If any customer property is lost, damaged or otherwise found to be unsuitable for use, this shall be recorded on a Nonconformance Report and reported to Sales Department for notification to the customer.

If the customer property is intellectual property, it is received directly by Engineering. Appropriate safeguards to protect the confidentiality of intellectual property shall be taken. Engineering may contact the customer directly if the intellectual property is lost, damaged, or found to be unsuitable. Records of these situations may be a letter to the customer or a memo to the customer file.

7.5.5 Preservation of Product

All associates shall handle materials, components, and products in a manner that preserves the conformity of product during internal processing and delivery to the intended destination. This preservation shall include identification, handling, packaging, storage and protection.
Preservation shall also apply to the constituent parts of a product and includes items such as special storage requirements, and monitoring of shelf life.

Referenced Procedures:

QP1150 – Quality Control Inspection

7.6 CONTROL OF MONITORING AND MEASURING DEVICES

Engineering and/or customers define monitoring and measuring requirements on product and component drawings and specifications. Monitoring and measuring requirements are also defined by Manufacturing and Engineering for process characteristics where required for process validation. Associates performing monitoring and measurement activities shall determine the monitoring and measuring devices needed to provide evidence of conformity of product to determined requirements. The Quality Department will provide assistance in selecting the appropriate device as required.

The Quality Department is responsible for the Calibration activities at **ATI**. They are responsible for establishing and maintaining processes to ensure that monitoring and measurement can be carried out and is carried out in a manner that is consistent with the monitoring and measurement requirements, taking into account the tolerances required for the measurement and the accuracy and precision of the instrument.

Where necessary to ensure valid results, measuring equipment shall be included in the calibration program. The calibration program ensures measuring equipment is:

- Calibrated or verified at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration or verification shall be recorded;
- Adjusted or re-adjusted as necessary
- Identified to enable the calibration status to be determined
- Safeguarded from adjustments that would invalidate the measurement result
- Protected from damage and deterioration during handling, maintenance and storage
  In addition, the Quality Department shall assess and record the validity of the previous measuring results when the equipment is found not to conform to requirements. The organization shall take appropriate action on the equipment and any product affected. Records of the results of calibration and verification shall be maintained.

When used in the monitoring and measurement of specified requirements, the ability of computer software to satisfy the intended application shall be confirmed. This shall be undertaken before initial use and reconfirmed as necessary. Records of this confirmation shall be maintained with calibrations records through the use of the Control of Monitoring & Measuring Devices procedure.

Referenced Procedures:

QP1220 – Control of Monitoring and Measuring Devices
QP1260 – Control of Nonconforming product

8.0 MEASUREMENT, ANALYSIS, AND IMPROVEMENT

8.1 GENERAL

As part of our quality management system and our commitment to continuous improvement, **ATI** has planned and implemented the monitoring, measurement, analysis and improvement processes needed to demonstrate conformity of the product, to ensure conformity of the quality management

system, and to continually improve the effectiveness of the quality management system. This includes determination of applicable methods, including statistical techniques, and the extent of their use, with the intention of converting data to information and presenting it in a suitable format for decision-making.

8.2 MONITORING AND MEASUREMENT

8.2.1 Customer Satisfaction

As one of the measurements of the performance of the quality management system, **ATI** monitors information relating to customer perception as to whether we have met customer requirements.

8.2.2 Internal Audit

ATI conducts internal audits at planned intervals to determine whether the quality management system conforms to the planned arrangements for product realization, to the requirements of the ISO9001:2008 standard, **ATI** quality management system requirements, and to determine if the quality management system is effectively implemented and maintained.

The Internal Audit Procedure details the requirements for the audit program including requirements that the audit program shall be planned, taking into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits. The audit criteria, scope, frequency and methods shall be defined. Selection of auditors and conduct of audits shall ensure objectivity and impartiality of the audit process. Auditors shall not audit their own work.

The Quality Management System Representative is responsible for the Internal Audit Program. The responsibilities and requirements for planning and conducting audits, and for reporting results and maintaining records are further detailed in the Internal Audit Procedure.

The management team member responsible for the area being audited shall ensure that actions are taken without undue delay to eliminate detected nonconformities and their causes. Follow-up activities shall include the verification of the actions taken and the reporting of verification results as indicated in the Corrective Action Procedure.

8.2.3 Monitoring and Measurement of Processes

Department Managers and the Quality Management System Representative are responsible for monitoring the effectiveness of the processes under their control. These methods shall demonstrate the ability of the processes to achieve planned results. Correction /Preventive action shall be taken, as appropriate, to ensure conformity of the product when planned results are not achieved. Information from process monitoring shall also be considered for continual improvement efforts.

Each process may require different measures depending on its nature. Examples of potential measures include: process capability, cycle times, efficiency and effectiveness measures, cost reduction.

8.2.4 Monitoring and Measurement of Product

ATI quality planning defines points at which the characteristics of products are monitored and measured to verify that product requirements have been met (see 7.1).

Inspection records show evidence of conformity with the acceptance criteria. Records shall indicate the person(s) authorizing release of product.

Release of our products or delivery of services shall not proceed until the activities defined in the quality plan have been satisfactorily completed. Any exceptions must be approved by management and, where applicable, by the customer.

Referenced Procedures:

QP1240 – Internal Quality Audits

QP1280 – Corrective / Preventive Action

8.3 CONTROL OF NONCONFORMING PRODUCT

All product that does not conform to specifications shall be identified and controlled to prevent its unintended use or delivery. The Nonconforming Product Procedure defines controls and related responsibilities and authorities for dealing with nonconforming product.

ATI handles nonconforming product by one or more of the following ways:

- By taking action to eliminate the detected nonconformity;
- By authorizing its use, release or acceptance under concession by a relevant authority and, where applicable, by the customer;
- By taking action to preclude its original intended use or application.

Records of the nature of nonconformities and any subsequent actions taken, including concessions obtained shall be maintained.

When nonconforming product is corrected, it shall be subject to re-verification to demonstrate conformity to the requirements.

When nonconforming product is detected after delivery or use has started, **ATI** shall take action appropriate to the effects, or potential effects, of the nonconformity.

Referenced Procedures:

QP1260 – Control of Nonconforming Product

QP1010 – Quality Records

8.4 ANALYSIS OF DATA

8.4.1 Quality Management System Evaluation

The Quality Management System Representative and department managers are responsible for determining, collecting and analyzing appropriate data to demonstrate the suitability and effectiveness of the quality management system and to evaluate where continual improvement of the effectiveness of the quality management system can be made.

This shall include data generated as a result of monitoring and measurement and from other relevant sources. The analysis of data shall provide information relating to:

- Customer satisfaction
- Conformity to product requirements
- Characteristics and trends of processes and products including opportunities for preventive action, and suppliers

Referenced Procedures:

QP1010 – Quality Records

QP1260 – Control of Nonconforming Products

8.5 IMPROVEMENT

8.5.1 Continual Improvement

ATI shall continually improve the quality management system effectiveness using the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions, and management review programs.

8.5.2 Corrective Action

The Quality Management System Representative is responsible for managing the Corrective / Preventive Action Program. As defined in the Corrective / Preventive Action Procedures, all associates are responsible for taking action to eliminate the cause of nonconformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the nonconformities encountered.

The Corrective /Preventive Action Procedure defines requirements for:

- Reviewing nonconformities (including customer complaints)

- Determining the causes of nonconformities
- Evaluating the need for action to ensure that nonconformities do not recur
- Determining and implementing action needed
- Records of the results of action taken
- Reviewing corrective action taken

8.5.3 Preventive Action

The Quality Management System Representative is responsible for managing the Corrective / Preventive Action Program. As defined in the Corrective / Preventive Action Procedure, all associates are responsible for taking action to eliminate the causes of potential nonconformities in order to prevent their occurrence. Preventive actions shall be appropriate to the effects of the potential problems.

The Corrective / Preventive Action Procedure defines requirements for:

- Determining potential nonconformities and their causes
- Evaluating the need for action to prevent occurrence of nonconformities
- Determining and implementing action needed
- Records of results of action taken
- Reviewing preventive action taken

Referenced Procedures:

QP1280 – Corrective / Preventive Action