# Advanced Auto Trends, Inc.

# QUALITY MANUAL

# ISO 9001:2015 / IATF 16949:2016

**September 28, 2021**
**Rev. Level: 16**

Section Contents

- 7.2.2 Training on the Job
- 7.3.2 Employee Motivation and Empowerment

**7.5 Documentation Requirements**

- 7.5.1 General
- 7.5.1.1 Quality Manual
- 7.5.2 Control of Documents
- 7.5.3 Control and Retention of Records
- 7.5.3.2.2 Engineering Specifications

**Computer Backup**

**8.0 Product Realization**

- 8.1 Planning of Product Realization
- Planning of Product Realization-Supplement
- Acceptance Criteria
- 8.1.2 Confidentiality
- 8.2.1 Customer Communication

**8.2.3 Customer-Related Processes-Determination of Requirements Related to Product and Service**

- 8.2.3.1.2 Customer0Designated Special Characteristics
- 8.2.3.1.3 Review of Requirements Related to Product, Manufacturing Feasibility
- 8.2.4 Change Control

**8.3 Design and Development-General-EXCLUSION**

- 8.3.2.1 Design and Development Planning EXCLUSION
- Multidisciplinary Approach EXCLUSION
- 8.3.2.2 - 8.3.3 EXCLUSION
- 8.3.3.3 Special Characteristics
- 8.3.4.1 Design and Development Review, Monitoring EXCLUSION
- 8.3.4.2 Design and Development Validation EXCLUSION
- 8.3.4.3 Prototype Program
- 8.3.4.4 Product Approval Process
- 8.3.5 Manufacturing Process Design and Development Output
- 8.3.6 Control of Design and Development Changes

**8.4.1.1 Purchasing Process**

**8.4.2.2 Regulatory Conformity**

**8.4.2.3 Supplier Quality Management System Development**

- Customer-Approval Sources
- Purchasing Information
- 8.4.2.4 Supplier Monitoring
- 8.4.2.5 Verification of Purchased Product and Incoming Product Quality

**8.5.1 Control of Production and Service Provision**

- 8.5.1.1 Control Plan
- 8.5.1.2 Work Instructions
- 8.5.1.3 Verification of Job Set-ups
- 8.5.1.5 Preventive and Predictive Maintenance
- 8.5.1.6 Management of Production Tooling
- 8.5.1.7 Production Scheduling
- Feedback of Information from Service
- Service Agreement with Customer
- Validation of Processes for Production and Service Provision

**8.5.2 Identification and Traceability**

**8.5.3 Customer Property**

- Customer Owned Production Tooling

**8.5.4 Preservation of Product**

- Storage and Inventory

**8.5.6.1 Customer Waiver**

**Analysis and Use of Data**

**8.6.3 Appearance Items**

**8.7.1.2-8.7.1.7 Control of Nonconforming Product and Rework Product**

**9.1.1.1 Control of Monitoring and Measuring Devices**

- Measurement System Analysis
- Calibration/Verification Records
- 9.1.1.2 Identification of Statistical Tools
- 9.1.1.3 Knowledge of Basic Statistical Concepts

**9.1.2.1 Customer Satisfaction**

**9.2.2.1 Internal Audit of the Quality Management System**

- 9.2.2.3 Manufacturing Process Audit
- 9.2.2.4 Product Audit
- Internal Audit Plans
- Internal Auditor Qualification

**Monitoring and Measurement of Processes**

- Monitoring and Measurement of Manufacturing Processes
- Monitoring and Measurement of Product
- Layout Inspection and Functional Testing

**9.3 Management Review**

- 9.3.1 General-Quality Management System Performance
- 9.3.2 Review Input
- 9.3.3 Review Output

**10.1 Measurement, Analysis and Improvement**

- General

**10.3 Improvement-General**

- Continual Improvement
- Manufacturing Process Improvement
- 10.2.3 Problem Solving
- 10.2.4 Error-Proofing
- Corrective Action Impact
- Reject Product Test/Analysis
- Preventive Action

**Signature Page**

**Revision Control Page**

## Quality Policy and Mission

**1.0Scope**
Manufacture of plastic injected molded parts, metal stampings and assemblies.

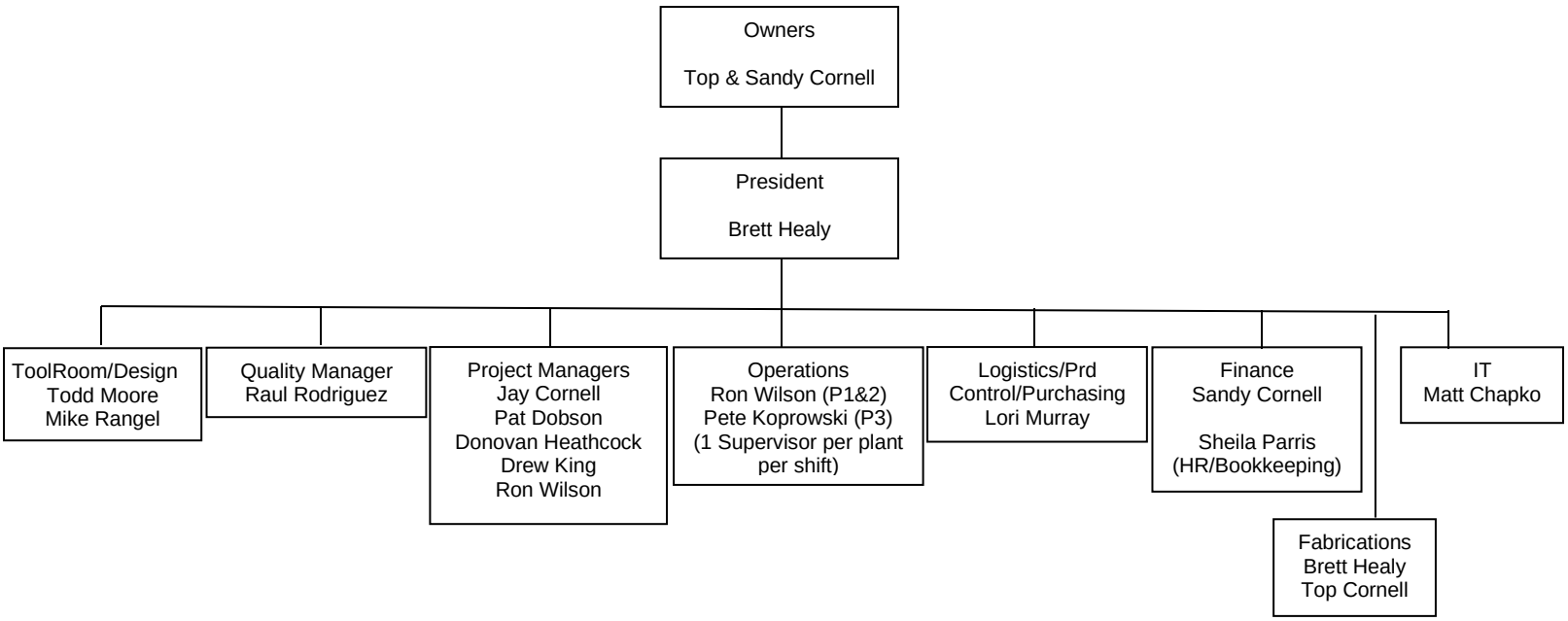
## Exclusions & Justifications to Standard
## (8.3 Design & Development of Products & Services)

Advanced Auto Trends, Inc., takes exclusion to the following sections: 8.3.1 thru 8.3.6. - Design and Development; Design and development planning; Multidisciplinary approach;Design and development review, monitoring; Design and development verification and Design and development validation.

Advanced Auto Trends, Inc. takes the above exclusion and the justification: Where we provide design assistance, any and all assistance is provided and addressed in the APQP process. All documents and records are maintained and retained electronically and hardcopy, during and throughout the entire APQP process.

# A.A.T. Inc. Organization

**KEY PERSONNEL**




**Updated: 07/26/2022**

## 1.3Quality Mission/Policy

The focus of Advanced Auto Trends, Inc. is to realize financial success and provide employment in the local community for many years to come. AATI is committed to meeting and exceeding our customer's requirements and expectations through our commitment to the ISO9001:2015 / IATF 16949:2016 standard. Furthermore, by concentrating our resources on efficiency in our operations, attention to detail, and through teamwork and a commitment, we will endeavor to continually improve our products and processes, ultimately retaining continual customer satisfaction.

### Quality Statement (Slogan)

Advanced Auto Trends, Inc. is committed to Quality through Teamwork, Pride and Continuous Improvement.

### Objectives

- Using quality and promptness as the two main determining factors in selection and monitoring of our suppliers.
- Determining baseline measured criteria for current efficiencies and then improving them annually.
- Removing wasted or non-value added steps and time in our processes where feasible.
- All new fixtures are to include sensors and poke-yoke systems where feasible.

**4.0 Quality Management System**
Referenced procedures: Document and Data Control Engineering, Document Control, Control of Records

**4.1 – 4.1.1 General Requirements**

a) It is the responsibility of the **Top Management**to:
   - Ensure that the quality management system of Advanced Auto Trends, Inc. is established, documented as required, implemented, managed and maintained according to the requirements of ISO9001:2015 / IATF 16949:2016
   - Continual improvethe effectiveness of the quality management system
   - Are operational and administrative activities affecting quality of the departments, e.g. Engineering, Manufacturing, Quality, Purchasing, Warehouse, Toolroom,Customer Service and Quality Management System Administration are in compliance with ISO9001:2015 / IATF 16949:2016

b) Ensure that the activities/processes included in the scope of the quality management system are identified and are performed in compliance with ISO9001:2015 / IATF 16949:2016

c) Ensure that the sequence and interaction of processes or activities of this quality management system are determined in a suitable manner, such as quality plans, flow charts, operating procedures, etc.

d) Toapply the necessary techniques and criteria in order to verify that established processes/activities and their implemented controls are effective.

e) Ensure that the necessary human and material resources as well as the necessary information are available to ensure the effective operation and control of the processes of the quality management system.

f) Ensure that the processes/activities, which are part of the quality management system, are monitored, measured and analyzed regarding their achievement of planned results.

g) Ensure that action is taken to obtain expected results of processes/activities, as well as the continual improvement of these processes/activities.

In the event that processes, which do affect product conformity, are outsourced, Quality establishes and implements the necessary controls for approval processes to ensure conformance to specified requirements. These implemented controls however, do not absolve Advanced Auto Trends, Inc. from the responsibility of supplying products and service that meet customer requirements.**(ISO 9001:2008 / TS 16949:2009)**

**5.1.2 Customer Focus**
**Top Management**is to ensure that procedures for determining and meeting customer requirements are established and implemented by the responsible departments. The effectiveness of these procedures is discussed, as necessary, during weekly management meetings. Key Measureables (KPI's) are also part of the measurement activities and reviewed monthly.

### 5.2 Quality Policy

The management of AATI has developed a companyquality policy, which meet the needs of AATI and its customers.

## Company Quality Policy

**Policy:** The focus of Advanced Auto Trends, Inc. is to realize financial success and provide employment in the local community for many years to come. AATI is committed to meeting and exceeding our customer's requirements and expectations through our commitment to the ISO9001:2015 / IATF 16949:2016 standard. Furthermore, by concentrating our resources on efficiency in our operations, attention to detail, and through teamwork and a commitment, we will endeavor to continually improve our products and processes, ultimately retaining continual customer satisfaction.

**Slogan:** Advanced Auto Trends, Inc. is committed to Quality through Teamwork, Pride and Continuous Improvement.

#### 5.2.2 Communicating the Quality Policy

It is the responsibility of AATI's management to implement and maintain this quality policy. The quality policy includes AATI's commitment for continual improvement, for meeting internal requirements and customer requirements, and provides a basis for the establishment and review of quality objectives. The quality policy is made known within the organization and understood and adhered to by employees. During management reviews, the quality policy is reviewed for its continuing suitability.

### 5.3 Management Responsibility, Authority and Communication

#### 5.3.1 Management Commitment – Process Efficiency

The management of AATI is committed to the development, implementation and well functioning of the quality management system and the continual improvement of its effectiveness. In order to provide this evidence, Top Management ensures that:

- a company quality policy is established
- quality objectives are established by selected departments
- The importance of meeting customer requirements and statutory and regulatory requirements is part of the training of each employee.
- Resources for the implementation and maintenance of the quality management system and its processes are provided in a timely manner.
- At a minimum, yearly management reviews are conducted to verify the effectiveness, efficiency and proper functioning of the quality management system, including product realization processes and support processes. Monthly reviews are conductedto address current KPI's.
- An annual plan is drafted each year with team involvment, along with previous plan discussion.

**Note:** Quality planning for manufacturing processes and service activities is performed by the Quality Planning Team under the responsibility of the Engineering department.

**Responsibility and Authority**
The management of AATI consists of the President, Owners, Quality, Manufacturing, Engineering, Sales/Engineering and Administration. It is the responsibility of Top Management to develop and maintain an organization chart of AATI.
Updated charts are electronically maintained and available for department heads for review. All employees also have access to this document.

**Corrective Action**
It is the responsibility of **Top Management**to implement and maintain the documented procedure for Corrective Action, which defines a company approach for corrective action.

Following the established procedure for corrective action, nonconformities are identified, root causes are determined, corrective action is evaluated and defined, recurrence of the nonconformity is prevented, corrective actions and their results are recorded, and the effectiveness of corrective action taken is reviewed. Corrective actions are appropriate to the importance and impact of the addressed nonconformity.

It is the responsibility of the department heads to inform the Engineering/Sales department of all customer complaints and related corrective actions. (Quality will issue a Customer Quality Concern email which is received by all of management.)

Quality establishes and maintains records of corrective actions and their results.

**5.3.2 Responsibility and Authority for Product Requirements & Corrective Actions**
It is the responsibility of personnel in the Quality department, or personnel in production and warehouse or the personnel in technical service, to inform the responsible department head of any nonconformity of products or processes. Corrective action is taken as appropriate, including action for the review and improvement of processes. Documents are updated as required.

If necessary, the department head can forward the nonconformity to the quality planning team for review and action. In the event of nonconformity in production, personnel responsible for product quality have the authority to stop production in order to correct any quality problems. It is ensured that an employee responsible for quality is present at all times during production.

**Departmental responsibility for quality:**
Responsibility for quality in all departments, rest withdepartment heads. The department head is responsible for the development and approval of the department's procedures and work instructions. The department heads ensure that the department staff understands and follows the applicable policies and guidelines outlines in the quality manual, that the department's personnel adheres to all applicable procedures and work instructions and participates, as appropriate, in the quality improvement process.

In addition, employees are made aware of the importance to meet customer requirements and expectations. It is the responsibility of the department heads to

ensure that customer requirement and customer expectations, which relate to activities under the department's responsibility, are identified, defined, documented and met. Department heads ensure that the responsibility of employees or functions whose activities affect quality, are defined in procedures and job descriptions. In yearly performance reviews, or when required, these responsibilities for quality, together with other responsibilities of the function, are reviewed and discussed between the department head and the employee, and are assessed and re-defined as necessary.

**Individual responsibility:**
All employees follow the policies and guidelines outlined in the quality manual and in established procedures. It is the duty of each employee to inform the department head or **Top Management**, when performed activities do not match the established procedures, or when established procedures and work instructions are unclear or ambiguous. The department head is notified of any identified nonconformity or deficiency where the correction or prevention of such nonconformity or deficiency is out of the employee's scope of responsibility.

**Top Management:**
Has assigned the inter-departmental coordination of customer requirements to the Program Management/Sales & Quality Managerwith direct responsibility of addressing customer requirements to the company. Requirements include:

Project Managers (Sales – Service):
- coordination and approval of issues related to customer requirements
- recommendations for corporate quality objectives, including quality objectives for other departments
- approval of quality objectives
- approval of temporary deviations
- analysis of feedback from customers and service regarding nonconformity's
- follow-up on corrective actions

Engineering:
- quality planning activities
- communication with customers on technical issues
- customer prototype support

Manufacturing
- special training requirements for production and warehouse
- production planning
- issues related to customer supplied products (in coordination with purchasing)
- delivery requirements – shipping inspection

Project Management / Engineering, are informed of corrective actions taken by the responsible department head regarding the compliance with customer requirements.

**Internal Communication:**
Effective internal communication is essential for the proper functioning of the quality management system. **Top Management**ensures that required communication and information between departments and functions is defined in documented procedures, memos, forms and/or documents.
The assigined responsible peron/s, are to address any communication problemsregarding the quality management system, and are to take the necessary corrective actions.

## 6.0 Planning

### 6.1.1 Quality Objectives

**General**

Each year, management defines quality objectives and measurements, which are included in the business plan. In addition, department heads for their departments establishes yearly quality objectives. **Top Management** approves these departmental quality objectives.

Established quality objectives are consistent with the quality policy, included, as appropriate, are objectives to meet product requirements (see 7.1.a), and are defined in such a way that their degree of achievement and results can be measured.
At least two quality objectives of the departments Manufacturing, Quality and Technical Service are related to the performance of product and/or service.

The completion and achievement of yearly quality objectives included in the business plan and departmental quality objectives are reviewed during management review regarding their level of achievement.

Company quality objectives
Based on the company quality policy, the management of AATI has established the followingquality objectives:

- Using quality and promptness as the two main determining factors in selection and monitoring of our suppliers.
- Determining baseline measured criteria for current efficiencies and then improving them annually.
- Removing wasted or non-value added steps and time in our processes where feasible.
- All new fixtures are to include sensors and poke-yoke systems where feasible.

Based on internal and external audit results, these company quality objectives are reviewed during management reviews to discern their continuing suitability.

### 6.1.2.3 Contingency Plans

Management, which includes participation from Manufacturing, Engineering and Sales, develops contingency plans to meet customer requirements in the event of a production halt or labor shortage. Contingency plans are reviewed yearly regarding their validity. New plans are developed as required.

### 6.2.2.1 Quality Management System Planning

Annually, the company has~~Management Representative calls for~~ a meeting with all management~~of the department heads~~, with the purpose to review, coordinate and plan the efficiency and effectiveness of the quality management system and the realization of established quality objectives of the departments, as well the coordination of improvement opportunities. The *General Requirements* of clause 4.1 of ISO9001:2015 / IATF 16949:2016 are included in this planning process.

The output of these planning activities includes the identification of required resources. As appropriate, results from audits of the quality management system as well as permissible exclusions according to ISO9001/2015 / IATF 16949:2016 are considered. Planning activities are documented and are consistent with other requirements of the quality management system.

It is the responsibility of **Top Management**to ensure that resulting organizational changes and their consequences are identified and defined. The changes resulting from planning activities are coordinated and implemented in a controlled manner, that changes to the qualitymanagement system are documented, implemented and approved, and that the quality management system is properly maintained during these changes.

## 7.0 Resource Management

Referenced procedures: Advanced Quality Planning and Processes / Contract Review, Health and Safety Training, Regulatory Requirements, compliance,Housekeeping,Training

### 7.1 Provision of Resources

**Top Management** ensures that approved material and human resources, which have been identified by the department heads during budget planning and quality planning, are available in a timely manner. This refers to resources required for the implementation, maintenance and continual improvement of the processes of the quality management system, for meeting customer requirements and achieving customer satisfaction. Also included are resource requirements for new projects and other quality-related activities. Related expenses are included in the company's financial budget.

### 7.1.2 Human Resources

**General**

It is the responsibility of the department heads to identify qualification requirements of functions or personnel assigned to defined activities that affect quality of product or service. Qualification requirements include education, training, skills, experience and overall competence, as appropriate. In the department's budget are provisions for the employment and assignment of qualified and trained personnel. **(ISO 9001:2015)**

**Training**

**Top Management**establishes and maintains the documented procedure Training for identifying training needs and for providing required training to employees whom are performing activities affecting product quality. The procedure includes training for the fulfillment of specific customer requirements. Training for safety and the handling of hazardous materials is provided by the Safety Coordinator.

### 7.1.3 Infrastructure

The required infrastructure and resources for manufacturing and service activities are identified during quality planning. As applicable, this includes building facilities, necessary workspace and utilities as well as needed equipment and services such as maintenance, warehousing and transportation. Management ensures the timely availability of identified and approved resources. This also includes sources of electronic communication systems such as EDI, etc. **(ISO 9001:2015)**

### 7.1.3.1 Plant, Facility and Equipment Planning

Plant, facility and equipment planning of the effectiveness of existing equipment and facilities are the responsibility of Manufacturing, and are to involveall departments and functions concerned. The productivity and effectiveness of existing operations is reviewed, monitored and evaluated considering:

- Human factors
- Operator and line balance

- Availability of supplies
- Use of automation
- Work plans

Records of planning activities are maintained as per applicable master list of records.

**7.1.4.1 Work Environment**

The quality planning team defines special conditions of the work environment, which are necessary for the processes to meet defined requirements of product and service quality. These special conditions are included in the quality plan, manufacturing plan, process sheet or other documents. It is the responsibility of the department head to implement these requirements.

To ensure product quality is maintained, in addition to ergonomics, other environmental conditions are considered, including noise, temperature, humidity, lighting and weather. **(ISO 9001:2015)**

**Personnel Safety to Achieve Product Quality**

It is the responsibility of the department heads to ensure the safety of employees and to minimize risk of injuries when performing their duties. Accidents at the workplace are recorded with copy to the Safety Coordinator who keeps a master list of accidents for corrective or preventive actions. Any issues or concerns regarding health and safety of processes are reported to the departmental representative. Product safety is addressed during the design and development process under the responsibility of Engineering.

**Cleanliness Premises**

It is the responsibility of Administration to ensure that the premises of AATI are kept clean and in a state of order. It is the responsibility of Manufacturing and Warehouse to ensure that production facilities and the warehouse are kept clean and in good order.

**7.1.5.3 Laboratory Requirements**

**7.1.5.3.1 Internal Laboratory**

It is the responsibility of Quality to define and document the scope of capability of tests and inspection activities, which can be performed by the in-house laboratory facility of the Quality department. Quality has specified and implemented technical requirements for the

- Suitability of implemented procedures
- Competency of personnel
- Testing of product
- Capability to perform these services correctly and according to pertinent process standards
- The review of related records

**7.1.5.3.2 External Laboratory**

As required, qualified laboratories are used for inspection, test and calibration services. Only laboratories are used which include in their defined laboratory scope the required service to be performed, and which are either capable based on business history and/or previous services provided, or laboratories that are accredited to ISO/IEC 17025 or other equivalent national standard. If a specific calibration service cannot be performed by an external laboratory, or in the absence of such a laboratory, the original equipment

manufacturer or their accredited representative can provide this service, as long as the requirements of clause 7.6.3.1 are met.

## 7.2 Competence

### 7.2.1 Competence, Awareness and Training

Department heads ensure that the qualification requirements (such as education, skills, training, and experience) for each job are identified, determined and documented in job descriptions. Training is provided to employees or other actions are taken in order to meet defined qualification requirements. The effectiveness of provided training or related actions is evaluated to assess the required skills and competence necessary. **(ISO 9001:2015)**

Employees are made aware of the importance and the impact of their work in relation to product quality, to the achievement of quality objectives and customer satisfaction.

Records of employee's education, experience and other qualifications are maintained.

### 7.2.2 Training on the Job

Department heads ensure that personnel assigned to new or modified responsibilities affecting product quality are trained on-the job. This applies also to contracted personnel. Personnel performing activities that can affect quality are informed of potential consequences to the customer in the event that defined requirements will not be met

### 7.3.2 Employee Motivation and Empowerment

To promote innovation and motivate employees in accomplishing quality objectives and to participate in the continual improvement process,the company has incorporated a monitor system at all 3 plants. This allows all employees to monitor their progress and compare it to their peers. Accompanying this, suggestion boxes have also been placed at each plant, allowing employees to offer suggestions of improvements to parts, process, and/or improvements to the company in general.

## 7.5 Documentation Requirements

### 7.5.1 General

As a minimum, the documentation of Advanced Auto Trends, Inc. quality management system includes

- A quality policy and objectives
- A quality manual
- Required documented procedures (per ISO/IATF16949), for clauses: 4.2.3 Control of Documents; 4.2.4 Control of Records; 6.2.2.2 Training; 8.2.2 Internal Audit; 8.3 Control of Nonconforming Product; 8.5.2 Corrective Action and 8.5.3 Preventive Action
- Other documents which are necessary for the effective planning, operation and control of processes of the quality management system.
- Records required by ISO9001:2015 and by Advanced Auto Trends, Inc. to ensure appropriate control and evidence of compliance with requirements.

The document structure of Advanced Auto Trends, Inc. quality management system consists of four criteria:

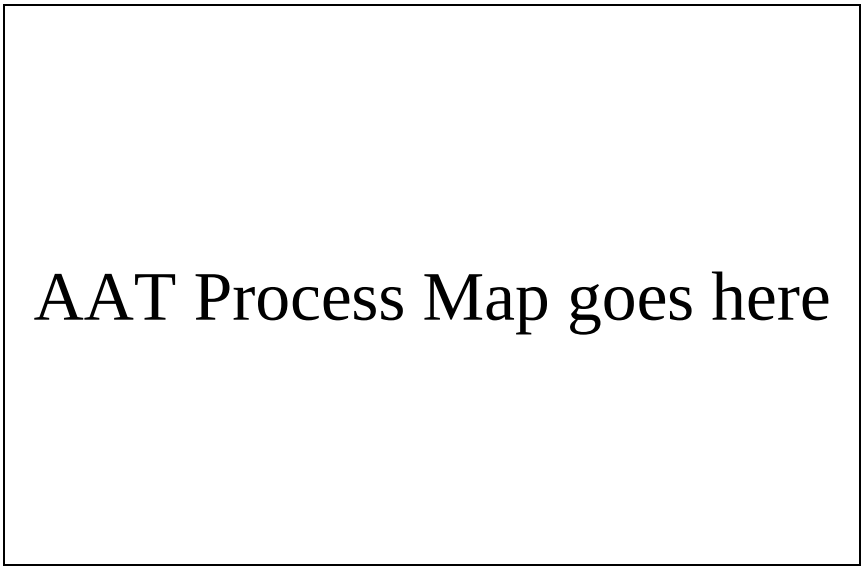
1) The Quality Manual, describing the Quality Management System of AATI and its compliance with ISO9001:2015 / IATF 16949:2016
2) Supplier Quality Manual, describing Supplier requirements to AATI.
3) Operating procedures, work instructions, forms, master lists, operating instructions, quality plans, control plans and other necessary documents for the effective and efficient operation of the quality management system.
4) Any external documents necessary that ensure compliance to customer and/or national / international standards, e.g., all relevant supplier PPAP documents; AIAG reference manuals; ASQ national standards, etc.**(ISO 9001:2008)**

    - In addition, records are created as required by ISO9001:2015 / IATF 16949:2016, as well as records necessary to meet other internal and external requirements.

It is the responsibility of **Top Management** to ensure the availability of company documents of the Quality Management System and documents required by ISO9001:2015 / IATF 16949:2016. It is the responsibility of the department heads to ensure the development and availability of documented procedures, work instructions, operating instructions and any other documents related to their departments, and which are necessary to ensure the effective implementation, control and functioning of the quality management system and its processes.

### 7.5.1.1 Quality Manual

This Quality Manual includes the Scope of the Quality Management System and applicable permissible exclusions from the requirements of ISO9001:2015 / IATF 16949:2016 and their justification makes reference to applicable operating procedures and other pertinent documents.The following is a description of the interaction of processes of the Quality Management System.



Documents required by the Quality Management System are controlled documents. It is the responsibility of **Top Management**to implement and maintain the documented procedure Control of Documents, which defines the responsibilities for the development of controlled documents, their approval for adequacy, changes and re-approval, revision status, document formats, identification codes and distribution. This includes all necessary external documents required to ensure compliance to the quality management system.**(IS0 9001:2015)**

### 7.5.3 Control and Retention of Records

Records are maintained to provide evidence of activities and their results, of conformance to requirements and of the effective operation of the Quality Management System. Department heads are responsible for the proper identification, storage, retrieval, protection, retention time and disposition of records according to the established documented procedure.

Reference Procedures: Regulatory Requirements, Compliance, Training, and Customer Satisfaction Measurement.

### 7.5.3.2.2 Engineering Specifications

Following the documented procedure for Document and Data Control, the Engineering department is responsible for the identification, control and distribution of technical engineering documents, including documents and data of external orgin such as standards and customer drawings. Engineering documents developed by Engineering or engineering documents from the customer, including the distribution of these documents, are recorded. Incoming customer engineering standards and specifications, including changes, are reviewed as soon as possible by Engineering, and are then distributed and implemented as required. Records of implementation dates in production are maintained.

It is the responsibility of the applicable department head to ensure that current revisions of controlled documents are legible, readily available where needed, that obsolete copies are replaced and destroyed or invalidated, and that obsolete documents retained for any purpose are clearly identified.

**Computer Backups:**
Backups of the overall computer systems are conducted frequently.
- All company data are backup hourly and daily.
- The method used to backup data on storeage arrays, is disc to disc deduplication with periodic snapshot replicas.
- Data are also replicataed to an off-site location on an hourly basis.
- Email backups are performed twice daily.

## 8 Product Realization

Established Methods: Advanced Quality Planning and Process/Contract Review, Cycle Counts, Production Scheduling, Material Resource Planning – MRP, Manufacturing Process Control, Preventive Maintenance of Equipment, Regulator Requirements, compliance, Purchase Orders, Supplier Database, Customer Satisfaction Measurement, Control of Nonconforming Product, Receiving Inspection, In-Process Inspection, Inspection Measuring and Test Equipment, Measurement Device Analysis, Statistical Techniques, Customer approval of production parts, Shipping of Product, Receiving of Product, Handling and Storage of Product.

### 8.1 Planning of Product Realization

The Engineering department is responsible for the quality planning of the production processes of new products and for changes of existing products, as well as service activities. Planning activities are consistent with other requirements of the quality management system. Prior and during the planning process, quality objectives and quality requirements for product and/or service related to the planning project are established by the quality planning team.

As appropriate, the planning process covers provision of resources, necessary manufacturing processes and documents, required verification, validation, monitoring, inspection and test activities, and criteria for product acceptance.

Records for providing evidence that manufacturing processes, and manufactured product meet requirements, are defined and specified.

**Planning of Product Realization – Supplemental**

Customer requirements and references to technical specifications are included in quality plan.

**Acceptance Criteria**

Acceptance criteria are defined in the planning process and, as required, approved by the customer. Acceptance for attribute data sampling is zero defects, to include control plans.

### 8.1.2 Confidentiality

Confidentiality of information and data about customer-contracted products/projects is ensured.

### 8.2.1 Customer Communication

In order to meet customer requirements and to ensure the proper and effective communication between the various departments within AATI and the customer, Sales/Engineering establishes a list with some main contacts within AATI regarding customer inquiries. This list is updated as required is distributed to functions concerned and is attached to the main directory available at the reception.
Internal and external communication related to the planning of products and processes is defined by Engineering and/or Sales/Engineering and/or the quality planning team, as applicable.

It is the responsibility of the Project Managers (Engineering), with the assistance of the IT-department, to install and use electronic communication and design systems (CAD) which are compatible with the customers systems, in order to effectively communicate and interchange information with the customers.
It is the responsibility of Manufacturing, with the assistance of the IT-department, to develop, implement and maintain a computerized system for the receipt of planning information of customer orders, shipping schedules and shipping information.

### 8.2.3 Customer-Related Processes

**Determination of Requirements Related to Product and Service**

It is the responsibility of the Engineering/Sales Department to ensure that customer requirements related to the delivery of product and post-delivery of required services and other requirements are identified and defined. **(ISO 9001:2015/IATF 16949)**

It is the responsibility of the Project Managers (Engineering), represented by the Quality Planning Team, to identify and determine requirements not specified by the customer but necessary for the proper and intended use of the product or service. This also includes other requirements identified during product development and quality planning, including regulatory and statutory requirements. Once these requirements are determined, they are used as input for product or service development and quality planning, and other functions concerned are informed as appropriate.
In addition to customer requirements included in design and development and quality planning, department heads ensure that other requirements specified by customers, as well as customer needs and expectations are identified, determined and documented by the responsible department, and that these requirements are met as appropriate. The Project Managers or responsible department head/s also ensures that during set-up maintenance of new customer files, order taking and processing, customer returns and shipping of products, customer requirements are identified and documented, and understood by all functions concerned.

Based on sales forecast and/or other special requirements documented by the Sales department, Manufacturing prepares production schedules and material requirement reports to ensure availability of product for the fulfillment of customer orders.

#### 8.2.3.1.2 Customer-Designated Special Characteristics

It is the responsibility of Engineering, the quality planning team and Manufacturing to apply, document and control special characteristics designated by the customer, with focus on processes affecting safety, compliance with regulatory requirements, the fit or function of a product or any other requirement of importance. Symbols to be used for these special characteristics are those designated by the customer or other commonly used symbols used in the industry.

#### 8.2.3.1.3 Review of Requirements Related to Product, Manufacturing Feasibility

The Project Managers are responsible for the review of product specifications and customer requirements. Prior to the submission of a quotation to the customer, or the acceptance or confirmation of an order from a customer, the order or quotation is reviewed to ensure that:

- the product and customer requirements are clearly defined and documented
- AATI has the capability to meet the requirements of the quotation or order
- Requirements of verbal orders are recorded and confirmed prior to acceptance
- Any differences between the customer's order and AATI quotation are clarified and resolved.

Waiving the requirement for a formal review requires customer approval. Manufacturing feasibility is analyzed and a risk analysis is performed, confirmed and documented. The results of reviews and required actions are documented.

In the event of changes to product requirements, or other changes to a quotation or order, it is ensured that relevant documents and data are updated and that other functions concerned are notified. Records of contract reviews are maintained.

### 8.2.4 Change Control

Changes to production processes and service activities, including changes to products/materials from suppliers, are assessed, validated and approved by the Engineering Department, prior to use and implementation. For proprietary designs, the impact of changes is reviewed with the customer. If requested by the customer, additional verification/identification requirements are met.

**8.3 Design and Development**
General - exclusion

**8.3.2.1 Design and Development Planning**
Exclusion
***Multidisciplinary Approach**
Exclusion

**8.3.2.2 - 8.3.3**
Exclusion

**8.3.3 Design and Development Input**
*AATI Engineering, Tooling, and other departments, as needed, will determine tool design and equipment needed to manufacture the product that will ensure conformity to print specifications.

**8.3.3.3 Special Characteristics**
Special characteristics for product and processes, and which are specified by the customer or by AATI, are identified and included in control plans, FMEA's and applicable documents in order to ensure proper identification of special requirements of product and processes.

**8.3.4.1 Design and Development Review, Monitoring**
Exclusion

**8.3.4.2 Design and Development Validation**
Exclusion

**8.3.4.3 Prototype Program**
If required by the customer, the product development includes the development of a control plan and prototype processes, equipment and materials used for the prototype should be the same as those used for final production runs. Testing activities are monitored regarding timely completion and compliance with requirements. In the event that services for prototype development are outsourced, it is understood that AATI is still responsible for the quality and performance of the prototype. As required, AATI provides technical assistance and support to contractors/suppliers.

**8.3.4.4 Product Approval Process**
Sample submission of production parts for consequent customer approval is the responsibility of the Quality. Methods and guidelines specified by the customer are followed. Production part approval is requested for production parts, engineering change of production part, manufacturing location, material suppliers and production process environment. Any change to these conditions requires customer notification and possible re-submission of production parts for approval. AATI is responsible for contracted materials and services. As appropriate, production part approval is extended

for engineering approval of purchased products. The Quality Planning Team properly validates engineering changes.

**8.3.5 Manufacturing Process Design and Development Output**
During the manufacturing design review with Engineering, Tooling, Manufacturing and Quality, all relevant documents/procedures are to be considered, e.g. drawings, flow charts, PFMEA's, control plans, work instructions, measurement methods, and error-proofing activities.The development of the above documents are to include characteristic monitoring frequency and their acceptance criteria.

**8.3.6 Control of Design and Development Changes**
Requests for design and development changes, including proposed changes from suppliers, are documented. Requests are reviewed and approved by Engineering. Results and necessary actions are documented and records are maintained.

**8.4.1.1 Purchasing Process**
The purchasing department is responsible for the effective and efficient operation of purchasing functions and activities.

Depending on the effect of the purchased product on the final product, on production processes and/or service activities, the type of control applied to the supplier and the method used for verification of purchased product are identified and established by Engineering with Quality input.

Materials, products and services are only purchased from approved suppliers. Suppliers are evaluated and selected according to defined selection criteria and their ability to supply product that meets specified requirements. Performance recordsare reviewed by quality and purchasing, including any related actions, and are maintained by Quality. Supplier performance is monitored through evaluation of product quality, problems reported by the customer involving supplied product, and delivery performance. As needed, a quarterly scorecard is issued to relevant suppliers.

**8.4.2.2 Regulatory Conformity**
Quality verifies that incoming purchased products and materials used in production are in compliance with applicable regulatory requirements.

**8.4.2.3 Supplier Quality Management System Development**
The purchasing staff encourages suppliers to prepare for and/or implement the necessary procedures in order to meet the requirements of ISO 9001:2015 and to become certified.
The assistance of **Top Management**is requested, as needed. Quality maintains an active list of those suppliers who are ISO certified (at minimum), and requires an updated certificate as they become expired.

**Customer-Approved Sources**
Where according to customer contract, a product or material is purchased from a customer-designated supplier, it is the responsibility of the purchasing department to ensure that these materials or products are only purchased from the customer-designated supplier. Customer must approve other suppliers for the product/material. Materials supplied by customer designated suppliers are subject to receiving inspection

by Quality. For the supply of materials for other applications, the customer-approved supplier must be approved according to AATI's approval criteria.

**Purchasing Information**
For products and services purchased, including customer-supplied product, Purchasing ensures that required recordsaremaintained. The data describe and identify clearly the product to be ordered, requirements for the approval of product, procedures, processes and equipment, statutory and regulatory requirements, requirements for qualification of personnel, and quality management system requirements, as applicable. As appropriate, standards or other documents are referenced. The adequacy of specified purchase requirements is ensured prior to submission to the supplier.

**8.4.2.4 Supplier Monitoring**
Supplier performance is monitored through evaluation of product quality, problems reported by the customer involving supplied product, delivery performance, and customer feedback.

Quality develops quarterly performance ratings of approved suppliers if any issues are reported. Suppliers are informed of their rating and corrective action is taken as required. Records of supplier performance ratings are maintained

**8.4.2.5 Verification of Purchased Product and Incoming Product Quality**
The extent of quality control exercised over a supplier or over the supplied product is determined by Quality and depends on the importance of the product or product class. Controls include the initial evaluation of the supplier, and/or type and extent of inspection performed by the supplier, and/or the results of ongoing performance ratings of the supplier. Incoming purchased product is submitted to a receiving inspection performed by Quality. In the event that AATI or one of AATI's customers want to verify purchased product at the suppliers premises, these verification requirements and/or the method of product release are requested and defined by either Engineering and/or Quality, and are specified in the purchase order. Supplier activities are verification and coordinated through the Purchasing and/or Quality.

**8.5.1 Control of Production and Service Provision**
Manufacturing processes and service activities are performed under controlled conditions. Based on the output from quality planning, Manufacturing and Technical Service ensure that the necessary documents, data and operating instructions for the performance of manufacturing processes and service activities are developed and available to personnel. These documents or data describe in sufficient detail the product characteristics, production processes and/or service activities, the equipment to be used, as well as the activities for monitoring and measuring of these processes. Included are procedures for release, delivery and post-delivery activities.

The Manufacturing department ensures that operating instructions, including instructions for special processes, are available at the workstation where production activities ensure verification results and SPC records are recorded, and that activities for the monitoring and measurement of production processes are implemented and followed.

It is also the responsibility of the Manufacturing department to ensure that the work environment is appropriate for the work being performed and meets statutory

requirements. The Safety Coordinator is responsible for compliance with regulatory requirements.

#### 8.5.1.1 Control Plan

Control plans are developed during quality planning and define the development of prototypes, pre-launch and production processes, as applicable. Control plans are available for all production stages of products or parts, including assembly. Pre-Launch control plans heed the outputs of DFMEA's (if accessible) and PFMEAS.

As applicable, control plans specify

- The required controls for manufacturing processes
- The methods used for monitoring applied controls over special characteristics (customer/AATI)
- Customer required information
- The reaction plan to be initiated when the process becomes unstable or not capable

With changes of product and service specifications, or any changes affecting the product, manufacturing processes, service activities, inspection activities, logistics, supply sources or FMEAS, control plans are updated by the quality planning team. If required, customer approval is obtained for the change.

#### 8.5.1.2 Work Instructions

It is the responsibility of the department heads to develop and maintain documented work instructions and operating instructions that are necessary for the performance of processes and activities affecting quality of products or service. These documents are made accessible to personnel at the work place. Work instructions and operating instructions are derived from the output data from quality planning, such as the quality plan or control plan.

#### 8.5.1.3 Verification of Job Set-ups

Manufacturing is responsible for proper set-ups of production equipment. In case of set-up difficulties, a last-off comparison is performed by Quality, as appropriate. First-Off's are approved by Quality. As applicable, statistical verification methods are used.

#### 8.5.1.5 Preventive and Predictive Maintenance

A master list of all key machinery and equipment is maintained in the AAT3 Mpulse Maintenance software database. Machine manufacturer's documentation is utilized as a foundation to establish written maintenance tasks along with the time frame for those tasks to be performed. With the maintenance tasks and schedules in place, we can ensure continuous process capability is developed and maintained by Manufacturing. Preventive maintenance objectives are established and documented annually. These objectives are to be evaluated annually, as well, regarding their achievement and additional opportunities for improvement.

A designated staffmemberwithin Manufacturing, performs the required preventive maintenance task as scheduled. The actual maintenance status of all equipment is to be identified in Mpulse, as required.Utilizing the machine manufacturer's recommendations, along with our parts suppliers, an inventory of parts on the shelf are maintained (on hand), to keep downtime to a minimum. The equipment, tooling, and gauging that are kept in Manufacturing, are to be packaged and preserved according to manufacturer's guidelines and recommendations.

**8.5.1.6 Management of Production Tooling**
As applicable, the departments of Engineering, Tool room and Quality are responsible for the design, construction, review and approval of production tooling and fixtures.

A designated area inside the manufacturing facilities are identified for locating the work space and equipment required by the tool room to maintain and repair the tools ran at that facility. When required, due to space or location availability, management may designate a facility to perform the tool work for a sister facility. The tool room will be staffed by individuals with the skills and abilities required to utilize the equipment and maintain the tools.

- The status or availability of tooling and fixtures is maintained.
- The tool room is responsible for preventive maintenance, repair, storage and recovery of production tooling.
- The set-up of tooling and equipment to run production is the responsibility of Manufacturing. Manufacturing will provide set up instructions for the tooling and equipment required to run production.
- Manufacturing establishes programs for changes of perishable tools in production.
- The engineering department is responsible for maintaining the documentation and the coordination of design changes of tooling and fixtures, including engineering change level. As required, these changes are passed on to the toolroom for implementation.
- Tool modification and revision to documentation are coordinated between Engineering and the Tool room.
- As required, Engineering, Tool Room and Manufacturing is involved in the planning of changes to tooling and fixtures, with Quality input, as needed.

In the event that design or construction is contracted to outside sources, Engineering or Manufacturing puts a tracking and follow-up system in place.

Customer-supplied tooling is inspected and approved by Manufacturing, Tool Room and Quality.

Upon being awarded a new part by a customer, a part/tool number will be established and entered into the MRP system so it can be tracked in the system. The status of the tool will be kept in the AATI MRP system on the ancillary page under “Part Status”.

**8.5.1.7 Production Scheduling**
Manufacturing is responsible for production scheduling. The production scheduling of customer made parts is order driven. At least quarterly, the inventory turnover rate is calculated and corrective action is taken in case that the turnover rate is below the established minimum.

**Feedback of Information from Service**
All reported nonconforming concerns, whether they are formal or informal, are reviewed during the established weekly management review meetings. Review of these concerns include Engineering/Sales, Manufacturing, Quality, and Tooling. Corrective and/or preventive action is taken by Quality, as required.

**Service Agreement with Customer**
It is the responsibility of the Engineering/Salesdepartment to ensure that required product information, service instructions and service information is developed, printed and distributed to customers/distributors when applicable.

**Validation of Processes for Production and Service Provision**
Where the resulting process output cannot be verified through monitoring or measurement, the Quality Planning Team validates production and service processes with the assistance of Manufacturing and Sales/Technical Service, regarding their ability to achieve planned results.

The quality planning team establishes procedures for the review and approval. The requirements of these processes, including – as applicable: criteria for review and approval, approval of equipment and qualified personnel, the use of methods and procedures, required records, and re-validation in case that expected results are not achieved.

Attention is given to special processes where the results cannot be verified through measurement or testing, such as the processing of *Appearance Items* or where deficiencies become apparent when the product is already in use or the service has been supplied.

### 8.5.2 Identification and Traceability
Designated personnel in Quality, Manufacturing and Warehouse identify incoming product and material, product and material during production, and product and material in storage with the product identification and inspection status.

Using lot number verification and date wheels in Manufacturing, products manufactured by AATI are traceable by lot number, date and year of manufacturing.

### 8.5.3 Customer Property
Customer owned product supplied for production is inspected by Quality according to defined inspection requirements.

The responsible department head ensures that customer owned product is identified, stored, used, handled and shipped in an appropriate manner in order to ensure its suitable condition for use.

During periodic cycle counts conducted by designated personnel in Manufacturing, a visual inspection of products, including customer owned product, is performed to verify the product's condition and proper identification. Any loss, damage or deterioration of customer supplied product is recorded and the customer is notified.

**Customer Owned Production Tooling**
It is the responsibility of the Tool room to ensure that customer owned tooling and fixtures are clearly identified with a metal plate showing the ownership of the equipment.

### 8.5.4 Preservation of Product
It is the responsibility of Manufacturing and the Warehouse to ensure the proper identification, handling, packaging, storage and protection of product and materials during receiving, handling and storage, shipping and production. This includes constituent parts of a product.
Temperature sensitive products and materials are stored in the temperature-controlled room, if necessary.

**Storage and Inventory**
During periodic cycle counts, the condition of materials and products in the warehouse is verified to ensure that any deterioration or dame is detected and recorded, and that required corrective action is taken.

The MRP-system in Manufacturing is used to ensure optimized inventory turns over time, minimum inventory levels and appropriate stock rotation (FIFO) of product and raw materials. Manufacturing is responsible for keeping established inventory levels of finished product, using the computerized production scheduling system.

The inventory turnover rate is reviewed during the monthly KPI review during the Manager Meetings. As necessary, corrective action is taken in the event that the turnover rate is below the established minimum.

When processing shipping/inventory control orders, the staff in shipping/inventory control ensures that FIFO is applied.

**8.5.6.1 Customer Waiver**
In the event that manufactured product, or purchased product, or manufacturing processes are different from the product or process approved by the customer, or that temporary change to product and processes is required, the request for temporary change or deviation is submitted to Engineering for approval. As required, customer production part approval is obtained.

Manufacturing keeps records of expiration dates and quantities of authorized deviations and ensure that normal production activities are re-instated after expiration of engineering deviations.

Products manufactured and shipped on customer authorization are identified as such on each packaging unit or container.

**Analysis and Use of Data**
The Quality Manager reports monthly, relevant statistics regarding the performance of the Quality Management System. Ratings on supplier performance are issued by Quality. The statistics are analyzed by the Quality Manager regarding the effectiveness, suitability and opportunities for improvement of the processes of the quality management system, and by department heads regarding the performance and suitability of activities and processes under their responsibility. This includes the analysis of customer complaints and customer returns.

The Quality Manager receives and forwards summary reports on: customer satisfaction or dissatisfaction, product quality, characteristics and trends of processes and products including opportunities for preventive action, and supplier performance.

The Quality Manager controls and coordinates the implementation of required corrective or preventive actions. The department heads reports analysis results of statistics and actions to the Quality Manager who monitors the progress and results of these actions. In addition, trends in quality and operational performance are compared with progress towards objectives that lead to actions to support - the development of priorities to resolve customer-related problems, to determine customer related trends and correlation for status review, decision making and longer term planning, and an information system for reporting of product information related to usage.

### 8.6.3 Appearance Items

Manufacturing ensures that proper condition such as lighting and masters for appearance and color are available at the workstation. Appropriate controls and maintenance for these masters as well as for the evaluation equipment are implemented. The operator's performance is periodically evaluated to ensure required qualifications and training.

### 8.7.1.2 – 8.7.1.7 Control of Nonconforming Product and Rework Product

Nonconforming product, suspect and product without proper identification is quarantined and controlled according to the documented procedure. The nonconformity of the product is verified and confirmed by Quality and verification results and recommended disposition or action is recorded. Functions concerned are notified.

Quality, with Manufacturing or Engineering/Sales input, review and authorizes the release of quarantined product for its final disposition, according to the following options:

- Rework to meet specified requirements
- Accept with or without repair by concession
- Re-grade for alternative applications
- Reject or scrap

If the acceptance with or without repair requires the concession of the customer or the approval or permit of a regulatory body or other authority, Manufacturing ensures that the required concession is received prior to initiation of the repair.

Qualified personnel in manufacturing process rework Orders. Detailed instructions for required rework are available to operators.
Reworked product is re-inspected by Quality.

As appropriate and required, the customer is notified by the Sales/Engineering of the proposed use or repair of nonconforming product. Where applicable, Manufacturing ensures that the reworked product is identified with the actual condition of the product, including the customer's release authorization.

Records of nonconforming product, including the type of nonconformity, actions taken and concessions obtained are maintained.

In the event that nonconforming product is detected after the product was shipped to the customer, or after its use in production or service, the Engineering and Quality departments analyze the impact of the nonconformity and take appropriate action. As required, the customer is informed and the nonconforming product is recalled.

Nonconforming purchased product and material is returned to the supplier with a Discrepant Material Report issued by Quality.

### 9.1.1.1 Control of Monitoring and Measuring Devices

To ensure accurate and reliable monitoring and inspection results, Quality, Manufacturing, Tool room and Engineering/Salesensure that monitoring and measuring equipment and devices are controlled, calibrated and maintained.
The type of monitoring and measuring equipment/device/software to be used in Manufacturing, by Quality, Tool Room and Technical Service, and the required accuracy of these monitoring and measurement activities are defined during quality planning and specified in the manufacturing plan, process sheet and/or inspection reports.

It is the responsibility of the applicable department to ensure that monitoring and measuring processes are capable for their intended purpose and are performed in a manner that is consistent with requirements.

To ensure valid results, measuring equipment is

- Calibrated and/or checked in defined intervals or prior to use, and according to a recognized standard; where no recognized standard is used, the basis applied for the calibration is documented.
- Adjusted and re-adjusted as necessary to ensure required accuracy
- Identified with a unique identification number and the current calibration status.
- Kept in a secure and restricted location to prevent misuse and improper adjustments, which could invalidate calibration settings.
- Protected from damage and/or deterioration during handling, maintenance and storage.

In the event that monitoring and measuring devices are found out-of-calibration, previous measuring results are reviewed regarding their validity. Corrective action on the measuring device or product affected is taken, including recall of nonconforming product, if required.

Prior to the use of computer software for monitoring and measuring activities, it is verified and confirmed by IT and the using department that the software produces defined results. Records of these verifications are maintained. **(ISO 9001:2015/IATF16949)**

**Measurement System Analysis**

It is the responsibility of Quality to ensure that a Repeatability and Reproducibility study is conducted for each measuring device referenced in control plans. Records of these studies provide evidence of the variations present in the results of each type of measuring device and are taken into consideration when inspection reports are developed.

**Calibration/Verification Records**

The department performing the calibration of monitoring and measuring devices is responsible for the record keeping of calibration activities. These records include the identification of the equipment and the calibration standard, revisions due to engineering changes, and calibration results such as out-of-specification/conformity to specifications. When monitoring and inspection equipment is found out-of-specifications, the impact on product previously measured with this equipment is reviewed and validated and an out-of-calibration report is initiated as appropriate. If suspect product/material has been shipped, the customers are informed and the product is recalled as required.

**9.1.1.2 Identification of Statistical Tools**

During product quality planning, appropriate statistical tools are determined for each process and are included in the control plan. This includes statistical methods for product development (variation analysis, dependability analysis etc.), for product verification (process capability, variation analysis, control charts, etc.), and other processes.

**9.1.1.3 Knowledge of Basic Statistical Concepts**

**Top Management**are to ensure that persons responsible, aretrained in the use and application of basic statistical concepts defined by quality planning and used in their respective departments. Training records are maintained.

### 9.1.2.1 Customer Satisfaction

Customer concerns and external PPM data of returns/nonconforming product and delivery performance are analyzed, evaluated and posted. As required, management takes appropriate corrective and preventive actions. The Quality Manager monitors the effectiveness of these corrective and preventive actions. Additionally, customer performance reports are reviewed, along with any corrective measures needed to improve score. **(ISO 9001:2015/IATF16949)**

### 9.2.2.1 Internal Audit of the Quality Management System

Following the established documented procedure for Internal Quality Audits, **TopManagement** is responsible for internal audits. Internal audits are planned and scheduled in such a way that all applicable clauses of ISO9001:2015 / IATF 16949:2016 and other additional quality system requirements are audited to ensure the quality management systems compliance. Audits also verify if the quality management system is effectively implemented and maintained, and that it meets the requirements of AATI, including planned actions, objectives and results.

To perform auditing activities, **Top Management** selects the auditors based on first-hand experience and knowledge.

Parts or processes to be audited, are scheduled randomly unless there has been an issue requiring a particular part/process to receive an accelerated activity.

Audit activities are assigned to personnel not responsible for the area or activity to be audited.

Audit results are recorded and corrective action is taken as required. Where applicable, follow-up audits are conducted to ensure that corrective action was implemented and is effective.

As appropriate, management is informed of the results of audits and follow-up audits and takes additional corrective action. As necessary, audit results may be part of Management Review. Records of internal audits are maintained. **(ISO 9001:2015 / IAFT 16949:2016)**

### 9.2.2.3 Manufacturing Process Audit

In addition to the normal internal audits of the quality management system, Top **Management** coordinates with the Manufacturing department, the auditing of all manufacturing processes. Audits of manufacturing processes are performed at least once per year. Responsible personnel in Manufacturing take any required corrective actions. A summary of audit results of the manufacturing processes is prepared and included in management reviews, as required.

### 9.2.2.4 Product Audit

During the auditing of process in Manufacturing and the Warehouse, inspection and test results of product in process and finished product are audited to verify conformity to specified requirements. Incoming product, product in inventory and product ready for shipping is audited regarding compliance with packaging and labeling requirements. As appropriate, physical product can be inspected and tested by the auditor to confirm the product's conformance to requirements and proper functionality.

**Internal Audit Plans**
Internal audits cover the entire quality management system and its processes, including all shifts of these processes, and are scheduled according to a yearly auditing plan and schedule prepared by **Top Management**. Due to special circumstances, such as nonconformity's and customer complaints, the auditing frequency is increased as appropriate.

**Internal Auditor Qualification**
It is the responsibility of **Top Management** to ensure that internal auditors of the quality management system have the necessary experience and qualification for performing internal quality audits. Training needs, as needed, are identified and training is provided as required.

**Monitoring and Measurement of Processes**
During Quality Management System planning, and based on statistics of operational performance and the achievement of quality objectives, **Top Management** and responsible department heads ensure that methods of inspection/measuring are suitable to determine the impact of potential nonconforming product. Corrective action/s are implemented to - achieve planned results, product conformity, correct nonconformance, or to improve the operational effectiveness and efficiency of the processes of the quality management system. **(ISO 9001:2015)**

**Monitoring and Measurement of Manufacturing Processes**
To verify process capability and provide additional input for process control, the quality planning team arranges for the monitoring of new and modified manufacturing processes. Results are documented and include instructions for production processes, verification and maintenance as well as objectives for manufacturing process capability, reliability, maintainability and availability.
Manufacturing ensures that processes are implemented according to control plans and other applicable procedures or documents in order to ensure that process capability and process performance is maintained according to customer part approval process requirements.

Control plans and process flow diagrams are implemented, including adherence to specified measurement techniques, sampling plans, acceptance criteria and reaction plans.
It is the responsibility of Manufacturing to monitor process capability and to ensure that process capability and performance is according to applicable control plans. In case of nonconformity of processes, defined reaction plans are followed.
(Important events that are occurring during production, such as down times, are recorded.)

If identified characteristics on the control plan become unstable or non-capable, the applicable reaction plan is followed. If appropriate, these reaction plans include containment of produced parts or products and 100% inspections. Corrective action is taken as per established procedure in order to restore required process capability and product quality. If required, these corrective action plans are reviewed with and approved by the customer.
Effective dates of process changes are documented by Manufacturing.

**Monitoring and Measurement of Product**
It is the responsibility of Quality to establish and maintain procedures and inspection reports for receiving inspection, in-process inspection and final inspection of product and materials.
Product is not released for delivery or servicing, until all specified requirements have been met, unless otherwise approved by an authorized function, and where applicable by the customer. Records of released product are maintained, which also include the release of product by authorizing personnel. **(ISO 9001:2015 / IAFT 16949:2016)**

The warehouse staff performs a visual inspection of outgoing product to ensure that the product and packaging is in good condition and that marking and labeling requirements are met.

In the event that purchased product is released for urgent production prior to inspection and acceptance by Quality, the product is recorded and controlled in order to permit recall and replacement in case of nonconformity of the product.

Product that does not meet specified requirements is rejected and quarantined as per established documented procedure.

As required, Quality selects accredited laboratories for certain inspection or testing activities. Records of these inspection results are verified, reviewed and maintained.

Inspection results are recorded and records are maintained. These inspection records document acceptance criteria, inspection results, whether the product was accepted or rejected and the inspection authority responsible for the product release.

**Layout Inspection and Functional Testing**
At least once every twelve months or as otherwise specified by the customer, Quality performs a layout inspection and functional verification for each product specified in control plans. Results are available to the customer upon request.

### 9.3 Management Review

#### 9.3.1 General – Quality Management System Performance
At least once per year, management has a formal meeting to discuss and review the continuing effectiveness and adequacy of the Quality Management System. The review includes the evaluation of the need for changes to the quality management system, the quality policy and quality objectives, as well as the assessment of improvement opportunities. This review covers all clauses of the Quality Management System. As required, department heads and employees are invited to attend the meeting when issues of his/her area of responsibility are discussed.

Top Managementprepares the agenda of upcoming meetings, ensures that the required data and documents are available for management review, writes the minutes of the meeting, reports results to the department heads and individuals concerned and follows-up on required actions resulting from these meetings. All Management are kept informed on the status of follow-up activities. Records of management reviews are maintained.

### 9.3.2 Review Input

As a minimum, the following input is included in the meeting agenda:

- performance of production and service processes, and product and service conformity, including performance trends
- status and effectiveness of corrective and preventive actions
- follow-up actions from previous management reviews
- planned changes that could affect the Quality Management System
- assessment of improvement opportunities and recommendations for improvements
- employee's knowledge, understanding and adherence to quality policies, directives and procedures, and their involvement in the quality improvement process
- availability and effectiveness of internal and external information within the company, at all levels
- human resources, training and staffing requirements
- suitability of working environment
- availability of material resources
- effectiveness of quality planning (quality system,)
- achievement of corporate quality objectives, including those specified in the business plan
- achievement of departmental quality objectives
- effectiveness of continual improvement activities of products, processes, service and Quality Management System
- results of internal and external audits of the quality system, incl. Audits of manufacturing processes
- Statistical results of operational performance, based on the analysis of collected data, which includes:
  -Quality system audits conducted by the Registrar
  -Internal quality audits
  -Customer satisfaction surveys and other customer feedback regarding customer satisfaction
  -Customer complaints
  -Suppliers performance
  -Product and service quality and nonconformity's
- direct and indirect costs and benefits of the quality system (relation cost – benefit)
- Cost-of-poor-quality, i.e. scrap, rework, returns, and excessive freight charges, etc.
- the impact or potential impact of charges that could affect the quality management system
- opportunities for improvement resulting from additions or changes

### 9.3.3 Review Output

Results of the assessment and conclusions of management reviews include the following output:

- Effectiveness of corrective and or preventive actions
- The suitability and effectiveness of the Quality Management System
- Improvement of the effectiveness of the Quality Management System and its processes
- Improvement of product with focus on customer requirements
- Availability of human and material resources
- Suitability of the company quality policy
- Frequency of Management Reviews
- Required corrective and or preventive actions regarding items reviewed

## 10.1 Measurement, Analysis and Improvement

Referenced procedures: Advanced Quality Planning Process/contract review, Production Scheduling, Customer/Supplier Approval of Production parts, Control of Nonconforming Product, Receiving Inspection, In-process Inspection, Discrepant Material Report, Document Review, Training, Customer Complaints, Internal Quality Audits, Preventive Action, Corrective Action, Continual Improvement, Shipping of Product, and Customer-Satisfaction Measurement.

**General**
In order to demonstrate conformity of manufactured product, the conformity of the Quality Management System and its continual improvement, the Quality Manager develops and distributes monthly Company-Wide & Plant-Specific charts. These charts are analyzed during the monthly management review meetings. These charts are also discussed during plant-wide meetings that are conducted bi-monthly. All corrective & preventive actions are reviewed to help ensurecontinual improvement of the quality management system, with actions taken as appropriate.

## 10.3 Improvement
**General**
AATI management identifies, forms, and implements a Quality Team for the handling of assigned activities related to the quality management system.

The purpose of the quality team is to review, analyze and make final decisions on Corrective Action Requests and Quality Improvement Proposals. Make recommendations for preventive actions and quality improvements, to coordinate and implement preventative actions and quality improvement projects, monitor results, and to provide a forum for any quality issue which required a cross-functional approach. Nonconformity's and deficiencies are analyzed, root causes are determined and required action is taken or recommended as appropriate.

As required and/or decided by management, selected Quality Improvement Proposals are referred to the Quality Planning Team for review regarding their feasibility and benefits.

### 10.3.1 Continual Improvement
The planning, coordination and control of activities for continual improvement is the responsibility of the Quality, Manufacturing, and Engineering Team (Quality Team). Continual improvement activities include – but are not to be limited to the following:

- Activities of the Quality Team
- Actions on results from analysis of data
- Evaluation of suppliers
- Achievement of departmental quality objectives
- Results from internal quality audits
- Quality improvement proposals
- Corrective actions and preventive actions
- Periodic review of controlled documents

The objectives of the company quality policy are taken into consideration for planning of improvement. During Management Reviews, the effectiveness of continual improvement is reviewed and opportunities for improvement are identified.

**Manufacturing Process Improvement**
It is the responsibility of personnel in manufacturing to continually monitor the performance of manufacturing processes regarding conformity with product characteristics and process parameters. In meetings with the product staff, process performances of production areas are analyzed, and opportunities for improvement are identified and implemented.

**10.2.3 Problem Solving**
To determine the root cause of the problem or deficiency, and to establish required corrective action, a disciplined problem solving method as outlined in the work instruction, or any other suitable method, is used as appropriate.

**10.2.4 Error-Proofing**
As appropriate, the Quality Team applies error-proofing methods in the corrective action process to prevent recurrence of the problem.

**Corrective Action Impact**
As applicable, the Quality Team applies implemented corrective action to other similar processes or products in order to correct nonconformity.

**Reject Product Test/Analysis**
Product returned from customers is analyzed by Quality in order to initiate appropriate corrective action and to prevent recurrence.

**Preventive Action**
It is the responsibility of **Top Management** to implement and maintain the documented procedure Preventive Action that defines a corporate approach for preventive action to prevent the occurrence of potential nonconformity's, deficiencies or problems. Any employee can suggest a preventive action to the responsible department head by initiating a CAR.

The process of preventive action includes the following steps:
- Identify potential nonconformity's, deficiencies or problems
- Determine the root causes
- Determine the necessary preventive action
- Implement the action
- Follow-up on status and results
- Review the effectiveness of preventive action

Department heads analyze and evaluate data of statistics and perform periodic reviews of procedures in order to detect deficiencies and problems and to take preventive action as required.

Quality establishes and maintains records of preventive actions and their results. The Management Representative ensures that relevant information on preventive actions are on the agenda of management reviews.

**Acknowledgements/Approvals:**

**Brett Healy:** _____
**President**

**Richard C. Koshorek:** _____
**Quality Manager**

## Advanced Auto Trends, Inc. Quality Manual – Revision Control

| Page No. / Initials | Reference | Revision | Date | Description of Change |
|---|---|---|---|---|
| All (1-40 ) / CMB | 1st Issue | 0 | 04/01/06 | No change-1st |
| 4 / MM | 2nd Issue | 01 | 03/12/07 | Updated Org Chart |
| All (1-32) / RCK | 3rd Issue | 02 | 10/01/07 | Removed any reference to TS |
| All (1-32) / RCK | 4th Issue | 03 | 03/18/08 | Changed Quality Mgr. Name; other minor editing |
| All (1-33) / RCK | 5th Issue | 04 | 01/16/09 | - Revisions made to ensure compliance to revised ISO9001:2008 standard.<br>- Added Content page -<br>Reworded various sections of this document, none of which altered the original meaning or intent. |
| All (1 – 35) / RCK | 6th Issue | 05 | 10/28/10 | Revised Quality Policy and Statement |
| All (1-35) / RCK | 7th Issue | 06 | 04/02/12 | Corrected Org Chart |
| All (1-35) / RCK | 7th Issue | 07 | 11/28/12<br>*01/04/13 | New Org chart; manual review; *Added signature page. |
| All (1-35) /reviewedRCK | 9th Issue | 08 | 12/11/14 | Revisions made to Sec. 4; 5; 7; 8; Org chart; other content for clarity |
| Page 21 / RCK | 10th Issue | 09 | 01/06/16 | Revisions to 7.3.1.1; 7.3.2.2; 7.3.3.2& Org Chart |
| Updated Manual / RCK | 11th Issue | 10 | 05/25/16 | Updated to reflect TS certification |
| Updated Manual / RCK | 12th Issue | 11 | 06/21/17 | Updated Keith as PltMgr for P1 & corrected mis-use of word under Mgt Rep. |
| Updated Manual / RCK | 13th Issue | 12 | 05/01/18 | Revised TS to IATF |
| Update to some missed IATF / RCK & JP | 14th Issue | 13 | 06/13/18 | Updated Standard #'s |
| Page 7 JP | 15th Issue | 14 | 03/06/20 | Updated QA Mgr on Org Chart |
| Page 18 JP/RR | 16th Issue | 15 | 01/08/2020 | Updated Map |
| Remove page column, added annual plan | | | 9-28-2021 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |