Quality Manual

Revision History

Rev.	Date	Description of Change	Approver
A	4/2/07	Initial Release	T. Roberts
B	6/8/07	Updates to 4.2.2, 5.6, Appendix II	T. Roberts
C	6/22/07	Changed 5.5.3	T. Roberts
D	7/11/07	Changed 8.2.1	T. Roberts
E	7/26/07	Changed 5.3, Appendix I	T. Roberts
F	9/10/07	Changed 5.6	T. Roberts
G	1/15/08	Updated Appendix II	T. Roberts
H	1/23/08	Updated references in 8.2.1	T. Roberts
I	3/27/08	Updated 5.6 to Mgt review held quarterly	T. Roberts
J	5/8/08	Updated Appendix I , 7.5.5 added WI reference	T. Roberts
K	6/17/08	Updated Appendix II	T. Roberts
L	2/3/09	Changed references from 9001:2000 to 9001:2008, made wording changes in sections 4.2, 4.2.4, 6.2, 6.3, 7.1, 7.2.1, 7.3.2, 7.3.3, 7.5.1, 7.5.2, 7.5.5, 7.6, 8.1, 8.2.2, 8.2.3, 8.2.4, 8.3, 8.5.2 to conform with new standard.	T. Roberts
M	09/03/09	Minor changes and clarifications	T. Roberts
N	10/08/09	Revised Key Processes	T. Roberts
O	12/01/09	Mgt Rep changed to V.P. Operations	T. Roberts
P	02/24/10	Updated based on the new organizational structure	T. Roberts
Q	01/16/13	Updated Management Review from quarterly to semi-annually	P. Ambuske
R	01/26/2017	Updated to ISO9001:2015	P. Ambuske
S	4/10/2018	Updated appendix II	P. Ambuske

INTRODUCTION

Nature of Business

AIDA-America Corporation (AAC) is a sales, design, manufacturing and service center for metal stamping presses. AAC is part of the Aida family founded in 1917, and continues to build on a rich heritage of selling and servicing quality products in many markets.

Scope of Quality Management System (QMS)

This Quality Manual applies to the AAC facility located at 7660 Center Point 70 Blvd, Dayton, Ohio, 45424.

This Quality Manual is AAC's top-level document in its ISO 9001:2015 based QMS, as well as applicable customer standards.

AAC will provide products and services according to established written procedures complying with ISO 9001:2015 requirements; as well as government, regulatory and registration body authorities, where applicable; and/or to specific customer contract requirements.

Company Vision

The Vision of AIDA-America is:

1. AAC is an indispensable component of the AIDA Group mission to "advance globally as a forming systems builder, and continue to be a company that contributes to people and society."
2. AAC values our associates and will join together to continuously enhance our work environment and well-being, thereby improving the quality of AAC services and profitability.
3. By providing the highest value services through cost-effective solutions and managing on-time delivery of AIDA products, AAC is the recognized leader in customer satisfaction and quality for our metal forming markets.

TABLE OF CONTENTS

4.0 Context of the Organization

4.1 Understanding the organization and it's context

AAC top management understands to achieve sustained success it must focus on both their customers and their interested parties.

Management Review

Top management, AAC Executive Steering Committee (ESC) will conduct Management Review semi-annually as part of that month's ESC meeting. The purpose of the review is to ensure that the AAC QMS is suitable, adequate, and effective. The review will include the assessment of opportunities for improving the QMS, and identify any risk that affect the organizations ability to achieve the intended results of the QMS, and the need for changes to the QMS. These changes may include changes to the Quality Policy and Quality Objectives.

External and Internal issues that are relevant to the organization and affect the AAC Quality Management System:
Global and Domestic Markets, Competition, Cost, and Delivery have an adverse effect on the whole AAC organization and all interested parties

Reference: AAC-F-QA-04, Management Review Form
Reference: AAC-F-QA-38-A (Interested Parties and Positive-Negative Issues)

4.2 Understanding the needs and expectations of interested parties

The interested parties identified by ESC is determined during Management Review. The requirements of these parties and the affect they have on our abilities to achieve customer satisfaction, long term growth and profit, is reviewed by AAC executive management.

Reference: AAC-F-QA-38-A (Interested Parties and Positive-Negative Issues)

4.3 Determining the Scope of the Quality Management System

AAC top management has defined the following product and services, and established and maintained the QMS to support every ISO 9001 requirement, as determined relevant to the interested parties referred to in 4.2 of the standard

"Design, sales, manufacturing, distribution and repair of stamping presses."

4.4 Quality Management System and it's Processes

AAC has determined, established, documented, implemented, and maintained processes for a QMS (Quality Management System) and will monitor, measure (where applicable), review and analyze these processes for any external and internal issues. Compliance to these

processes is reviewed at Management Review. The type and extent of control regarding outsourced processes will be defined in the scope of a purchase order. AAC's quality management system documentation is inclusive of the following:

Quality Manual (Level 1)

The purpose of this Quality Manual is:

- To document AAC's QMS, while also serving as an overall reference in the implementation and maintenance of that system.
- To demonstrate to customers and certification agencies that our QMS has been systematically planned and complies with the quality system requirements of ISO 9001:2015.
- To outline the description of the interaction between the key processes:
  See **Appendix II: Key Processes in the QMS** for a description of the interaction between key processes.
- For an overflow Risk Analysis of the key processes:
  See **AAC-F-QA-39-A Risk Analysis of Processes**

Standard Operating Procedures (SOP's) (Level 2)

- The SOP's are comprised of documented procedures required by the ISO 9001:2015 and documents determined by AAC to ensure the effective implementation and control of its processes.

Work Instructions (Level 3)

- Work Instructions have been prepared, as applicable, to provide a clear, detailed and systematic way of conducting or implementing a specific activity.

Supporting Documentation (Level 4)

- Engineering Drawings, Specifications, Labels, Forms, Checklists, Records, Job Descriptions, etc, determined by AAC to ensure the effective implementation and control of its processes.

The ESC has determined the suitable leadership at all levels to support the organizations objectives and assigned the responsibilities and authority to manage its resources and these processes.
Reference: AAC Organization Org Chart

5.0 Leadership

5.1 Leadership and Commitment

The information and documentation defined in this manual applies to all processes performed by AAC's Associates (full, part, temporary and/or contract).

Furthermore, AAC is committed to meeting Customer requirements, needs and expectations on a continual basis. Continual improvement to the quality policy, objectives, procedures, documentation, and promoting the use of a process approach and risk-based thinking will be a top priority of both our Management Team and our Associates.

5.1.1 General

ESC is accountable to provide leadership within the organization. Committed to promoting, communicating, engaging and supporting the QMS, and shall be responsible for maintaining and controlling the Quality System. Changes to the QMS will be discussed and approved as needed during Management Review.

5.1.2 Customer Focus

ESC shall ensure that customer requirements are determined and are met with the aim of enhancing customer satisfaction. The importance of meeting customer requirements and statutory and regulatory requirement shall be communicated to the organization.

- Customer and applicable statutory and regulatory requirements are determined, understood and consistently met.
- The risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed.
- The focus on enhancing customer satisfaction is maintained.

5.2 Quality Policy

The management of AIDA-America is committed to the policy of:

We will maintain and continuously improve our Quality Management System to meet our company's goals and to satisfy the needs of our Customers.

The Quality Policy shall be communicated and understood throughout the organization and relevant interested parties. AAC is committed to continual improvement to ensure that an efficient and effective QMS is implemented.

5.3 Organization roles, responsibilities and authorities

The responsibility, authority and interrelation of AAC's Associates who manage, perform and verify work affecting quality are clearly defined in the following documents:

a) Job Descriptions are documented for each respective designation;
b) written documents that define the process and the person responsible for performing and verifying the work as applicable;

c) and roles communicated by the company organizational chart

The responsibility and authority of the ESC includes:
a) Ensuring that processes needed for the QMS are established implemented and maintained;
b) reporting to management on the performance of the QMS and any need for improvement;
c) ensuring the promotion of awareness of customer requirements throughout the organization;
d) that the integrity of the QMS is maintained when changes to the QMS are planned and implemented

Reference: AAC-PLCY-EXEC-04.1 and 04.2 AIDA America Corporation Organizational Job Assignment List for group roles and responsibilities within the organization.

6.0 Planning

6.1 Actions to address risk and opportunities

The planning of the QMS is carried out in such a way that the processes needed for the QMS are identified and documented and evaluated in an effective manner for the actions taken, and to address any risk or opportunities, and interested parties and their requirements identified in 4.1 and 4.2, discussed at Management Review.

6.1 .2 The organization shall plan

a) actions to address these risks and opportunities;
b) how to

1. integrate and implement the actions into its quality management system processes
2. evaluate the effectiveness of these actions.

Actions taken to address risks and opportunities shall be proportionate to the potential impact on the conformity of products and services.

NOTE 1 Options to address risks can include avoiding risk, taking risk in order to pursue an opportunity, eliminating the risk source, changing the likelihood or consequences, sharing the risk, or retaining risk by informed decision.

NOTE 2 Opportunities can lead to the adoption of new practices, launching new products, opening new markets, addressing new customers, building partnerships, using new technology and other desirable and viable possibilities to address the organization's or its customers' needs.

6.2 Quality objectives and planning to achieve them

In line with the above Quality Policy, companywide Quality Objectives have been established. Quality objectives are reviewed and evaluated at Management Review.

1. Safety, with a Goal "0" Accident
2. Improved Customer Satisfaction
3. On-Time Delivery
4. On-Time Customer Acceptance

*Reference Company Goals for Quality Objectives, (Company Financials, Company Metrics, and Safety)

6.3 Planning of changes

Having identified any external or internal issues, Management Review will determine the need and effectiveness of planned changes and any risk or opportunities. (see 4.4)

a) the purpose of the changes and their potential consequences;
b) the integrity of the quality management system;
c) the availability of resources;
d) the allocation or reallocation of responsibilities and authorities.

Reference:
AAC-SOP-QA-06-A (Management Review)
AAC-SOP-QA-03, Corrective and Preventive Action Procedure.

7.0 Support

7.1 Resources

7.1.1 General

Management Review shall review and determine the resources needed, to implement, maintain and improve the QMS, including internal or external provider, to enhance customer satisfaction.

7.1.2 People

The AAC Organizational Chart, Job Descriptions, and Skill Maps are used for communicating to the organization each responsible role, the job requirements and workers competency.

Reference: AAC-PRGM-QA-01, Training and Review Program

7.1.3 Infrastructure

The infrastructure needed to support the QMS is determined and maintained by the ESC and Management Review

a) building and associated utilities
b) equipment, including hardware and software
c) transportation resources
d) information systems and communication technology

7.1.4 Environment for the operation of processes

Management Review shall review and determine the resources needed, to implement, maintain and improve the environment necessary for the operation of its processes and to achieve conformity to product and services.

Reference:
AAC-HB-HR-002 Associate Handbook
AAC-HB-QA-001 Quality Department Handbook
AAC-HB-SAFE-001 Safety Department Handbook
AAC-QM-SAFE-001 Health and Safety Manual
AAC-QM-SAFE-002 Contractor Safety Manual

7.1.5 Monitoring and measuring resources

7.1.5.1 General

AAC determines the monitoring and measurement to be undertaken, and the monitoring and measuring equipment, including resources and people who are trained and skilled in using the equipment needed, and to provide evidence of conformity of product and service to customer requirements. AAC has established the processes to ensure that monitoring and measurement can be carried out, and carried out in a manner consistent with the monitoring and measurement requirements.

a.) to determine the type monitoring and frequency of measurement is suitable.
b.) be protected from damage and deterioration during handling, maintenance and storage, and is maintained to ensure their continuing fitness for their purpose.

7.1.5.2 Measurement traceability

Measuring equipment used for establishing product conformity to requirements is calibrated on a regular basis. Records of this activity are kept. If the coating is not removed from the monitoring and measuring equipment, then the equipment does not require calibration.

AIDA and/or the third party calibration service will also assess and record the validity of the previous measuring results when the equipment is found not to conform to requirements. The V.P. of Operations will take appropriate action on the equipment and any product

affected. Records of the results of calibration and verification will be maintained in the calibration database.

Where necessary to ensure valid results, measuring equipment will:

a.) be calibrated or verified, or both, at specified intervals by an outside 17025 calibration service;

b.) be adjusted or re-adjusted as necessary;

c.) have identification in order to determine its calibration status;

d.) be safeguarded from adjustments or damage that would invalidate the measurement results.

Confirmation of the ability of computer software to satisfy the intended application would typically include its verification and configuration management to maintain its suitability for use.

Reference: AAC-PRGM-QA-02, Calibration Program.

7.1.6 Organizational knowledge

The ESC have identified, established and acquired the knowledge and safeguarding to meet or exceed the QMS requirements; such as intellectual property, software, engineering designs, drawings, implemented processes, personnel experience, customer confidential information, internal and external resources, etc... As determined by the organization, this knowledge is maintained by regular review at MR, and improved as necessary to achieve its Quality Objectives. If the Quality Objectives are consistently achieved, the ESC determines that the organizational knowledge is in place. If the Quality Objectives are not consistently achieved, then review of the org chart and the overall processes (FMEA) is accomplished to determine where the knowledge needs to be obtained.

Reference:
Org Chart
AAC-F-QA-39-A Risk Analysis of Processes

7.2 Competence

The organizations has recognized the importance of retaining competent employees based on education, skills and product knowledge experience to ensure conformity of products and services. This requirement includes anyone under our control that affect the performance and effectiveness of the quality management system.

Job descriptions have been established to determine the necessary competence for Associates performing work affecting product quality.

Personnel performing work affecting conformity to product requirements (directly or indirectly) shall be competent on the basis of appropriate education, training, and experience.

Skill maps, (e.g. Department Training Logs) have been established to identify training needs. Training, once completed, is evaluated to verify that competencies have been met through performance review, testing and observation.

Reference: AAC-PRGM-QA-01, Training and Review Program

7.3 Awareness

All personnel doing work under our control are made aware of;

a) the quality policy;
b) relevant quality objective;
c) their contribution to the effectiveness of the management system, including the benefits of improved performance;
d) the implications of not conforming with the quality management system requirements.

7.4 Communication

ESC shall ensure that appropriate communication processes are established within the organization such that all members of the organization are involved in the achievement of Quality Objectives and the continual improvement of an effective QMS. The activities for communicating include Management Review Meetings and Departmental Meetings, and external communications, such as website, flyers, business planned sessions, trade shows, etc.;

a.) on what will it communicate;
b.) when to communicate;
c.) with whom to communicate;
d.) how to communicate;
e.) who communicates.

Reference:
AAC-F-QA-04, Management Review Form
AAC-PLCY-EXEC-01, Departmental Meetings Policy).

7.5 Documentation information

7.5.1 General

Quality Manual

The purpose of this Quality Manual is:

- To document AAC's QMS, while also serving as an overall reference in the implementation and maintenance of that system.
- To demonstrate to customers and certification agencies that our QMS has been systematically planned and complies with the quality system requirements of ISO 9001:2015.
- To outline the description of the interaction between the key processes.
- See **Appendix II: Key Processes in the QMS** for a description of the interaction between key processes.

Standard Operating Procedures (SOP's)

- The SOP's are comprised of documented procedures determined by the organization to ensure the effective implementation and control of its processes.

Work Instructions

- Work Instructions have been prepared, as applicable, to provide a clear, detailed and systematic way of conducting or implementing a specific activity.

Supporting Documentation

- Engineering Drawings, Specifications, Labels, Forms, Checklists, Records or Information, Job Descriptions, etc, determined by AAC to ensure the effective implementation and control of its processes.

7.5.2 Creating and updating

A documented procedure has been established to define the controls needed for documentation.
Reference: AAC-SOP-QA-01, Document Control.

The documents required by the QMS such as the Quality Manual, Procedures and Work Instructions shall be approved for adequacy prior to issue, and reviewed and updated as required by Document Control.

AAC's QMS documentation is listed in the Master Document List. The file exists within the applicable departmental folders of the AAC Controlled documents folder. (**G: AAC Controlled Documents**). Reference the Master Document List for latest document revision.

7.5.3 Control of documented information

A documented procedure has been established to define the controls needed for the identification, storage, protection, retrieval, retention, disposition and maintaining of information.
Reference:

AAC-SOP-QA-02, Documented Information.
AAC-WI-ENG-18-A (AE External Document Control Distribution)

8.0 Operation

8.1 Operation planning and control

AAC has planned and developed the processes needed for operational planning control. This planning has included:
a.) determining the requirements for the product and services;
b.) establishing criteria for:
    1.) the processes;
    2.) the acceptance of products and services;
c.) determining the resources needed to achieve conformity to the product and service requirements;
d.) implementing control of the processes in accordance with the criteria;
e.) determining, maintaining and retaining documented information to the extent necessary;
    1.) to have confidence that the processes have been carried out as planned;
    2.) to demonstrate the conformity of product and services to their requirements.

The monitoring, inspection, and testing activities specific to the product and the criteria for product acceptance is documented in **Appendix I: Inspection and Test Plan.**
Planning changes as indicated in QMS **6.3 Planning of Changes**

8.2 Requirements for products and services

8.2.1 Customer communication

Product information, including technical information, is communicated to the customer through documents such as the technical specifications, drawings, etc.
Specific customer requirements for contingency action, when relevant is communicated. By modified/updated proposals, customer emails and modified schedules

Customer property is protected and managed as per work instruction
Reference: AAC-WI-QA-01 Control of Customer Property

Customer complaints that are received are handled as per procedure
Reference: AAC-SOP-QA-03 Corrective and Preventive Action Procedure.

8.2.2 Determination of requirements for products and services

AAC shall determine the requirements specified by the Customer including any statutory and regulatory requirements applicable to the product before acceptance of a purchase order. Any additional requirements considered necessary by the organization. Post-delivery requirements may include actions under warranty provisions, contractual obligations such as

maintenance services, and supplementary services such as recycling or final disposition. Programs such as customer surveys provide the feedback to support these claims.

Reference: AAC-F-SALE-210- Customer Survey - Sales

8.2.3 Review of the requirements for products and services

AAC shall review the requirements related to the product. This review shall be conducted prior to AAC's commitment to supply the product to the customer per Work Instruction **AAC-WI-SALE-100, Sales Order Realization**. This review is to ensure that the order requirements are defined and that AAC has the ability to meet the defined requirements.

8.2.4 Changes to requirements for products and services

If the order and product requirements change from those previously expressed, it shall be resolved through communication with the customer, and the relevant documents shall be amended with the changes denoted

8.3 Design and development of products and services

8.3.1 General

AAC maintains procedures to control and verify the design of the product in order to ensure that specified requirements are met.

The responsibility and authority for design and development belong to the respective Engineering Manager or designee. The review, verification and validation appropriate to each design and development stage is documented (can be conducted and recorded separately or in any combination).

AAC will manage the interface between different groups involved in design and development to ensure effective communication and clear assignment of responsibility. The design policy will be updated, as appropriate, as the design and development progresses.

8.3.2 Design and development planning

AAC shall plan and control the design and development of products according to **AAC-WI-ENG-01, Design Control Process**.

8.3.3 Design and development inputs

Inputs relating to product requirements, design and development (See **Appendix II: Key Processes of QMS**) will be determined and records maintained. The inputs will include:

a) functional and performance requirements,
b) applicable statutory and regulatory requirements,
c) where applicable, information derived from previous similar designs, and
d) standards or codes of practice that the organization has com mitted to implement;
e) potential consequences of failure due to the nature of the products and services.

8.3.4 Design and development controls

At suitable stages, systemic reviews of design and development will be performed in accordance with **AAC-JS-ENG-01, The Design Review Standard:**

a.) to evaluate the ability of the results of design and development to meet requirements, and

b.) to identify any problems and propose necessary actions.

Participants in such reviews will include representatives of functions concerned with the design and development stage(s) being reviewed. Records of the reviews and any necessary actions will be maintained.

Verification will be performed in accordance with **AAC-WI-ENG-01, Design Control Process** to ensure that the design and development outputs have met the design and development input requirements. Records of the results of the verification and any necessary actions will be maintained.

Design and development validation will be performed to ensure that the resulting product is capable of meeting the requirements for the specified application or intended use, where known. Wherever practicable, validation will be completed prior to the delivery or implementation of the product.
Records of the results of validation and any necessary actions will be maintained.

8.3.5 Design and development outputs

The outputs of design and development will be in a form suitable for verification against the design and development input and will be approved prior to release, and shall retain the documented information on design and development outputs. Information for production and service provision can include details for the preservation of product.

Design and development outputs will:
a) meet the input requirements for design and development,
b) provide appropriate information for purchasing, production and service provision,
c) contain or reference product acceptance criteria, and
d) specify the characteristics of the product that are essential for its safe and proper use.

8.3.6 Design and development changes

Design and development changes will be identified and records maintained per **AAC-WI-ENG-15, Engineering Change Management Process**. The changes will be reviewed, verified and validated, as appropriate, and approved before implementation. The review of design and development changes will 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 will be maintained.

8.4 Control of externally provided processes products and services

8.4.1 General

AAC shall ensure that purchased product conforms to specified purchase requirements. 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.
The controls as noted in this section of the quality manual are applicable to product and services incorporated into AAC, product re adversely delivered directly to suppliers and outsource activities. See **AAC-WI-PUR-105, Purchase Order Procedure**

AAC will evaluate the select suppliers based on their ability to supply products in accordance with AAC's requirements. Criteria for selection, evaluation and re-evaluation shall be established and monitored on a regular basis.
Records of the results of evaluations and any necessary actions arising from the evaluation shall be maintained. See **AAC-PRGM-PUR-003, Supplier Management Program**.

8.4.2 Type and extent of control

AAC shall ensure that purchased product and external providers meet the specified purchasing requirements.

Reference:
AAC-WI-QA-04 Supplier QA Purch Part Verification
AAC-WI-QA-05 Supplier Flash Audit
AAC-WI-QA-06 Supplier Disqualification
AAC-WI-QA-07 Annual Supplier Performance Eval
AAC-PRGM-PUR-003-K (Supplier Mgt Program)
Management Review determines if the controls in place to manage external providers and services are effective and consistently meet the customer and applicable statutory and regulatory requirements.

Reference:
Appendix I: Inspection and Test Plan
AAC-WI-LOG-05, Receiving
AAC-WI-QA-35 Quality receiving inspection

8.4.3 Information for external providers

Where AAC or the customer intends to perform verification at the supplier's premises, the intended verification arrangements shall be stated and included in the purchasing information.
The requirements for verification of product from the supplier, such as certificate of conformance, inspection reports, etc., will be stated in the purchase order.
Communication with the suppliers shall include the product and services required and the approval method. Compliancy verification required from the supplier is one methods of interacting between us and the external provider to control and monitor their performance.

8.5 Production and service provision

8.5.1 Control of production and service provision

AAC shall plan and carry out the production and service provision under controlled conditions.

AAC documents (i.e., command sheets, technical specifications documents, work orders, drawings, bill of materials) describe the specifications and characteristics of the product and are provided to the necessary personnel to produce the product accordingly.

Instructions are documented to provide a clear and detailed description of work for the production personnel as needed.

Reference: AAC-WI-MFG-02, In-House Assembly.

Suitable machinery is used and maintained to ensure the smoothness of production and the capability of meeting the customer requirements. All of the machines shall be maintained according to a Preventive Maintenance Schedule. Regular maintenance is carried out and recorded in the relevant machine maintenance record. If any defects or breakdown of machinery is found, the machinery shall be repaired internally according to the machine manual. However, if a repair is beyond the capability of AAC, an external service shall be called. The details shall be recorded in the relevant machine maintenance record.

Reference:
AAC-WI-FAC-01, Scheduled Prev Maintenance,
AAC-WI-FAC-02, Regular Preventive Machine Maintenance
AAC-WI-FAC-03, Breakdown Machine Maintenance.

The monitoring and measurement of product is implemented at appropriate stages. Refer to **Appendix I: Inspection and Test Plan**. The necessary monitoring and measuring resources are available and used as needed.

AAC shall validate any process for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement, and as a consequence, deficiencies may become apparent only after the product is in use or the service has been

delivered. Validation shall demonstrate the ability of the processes to achieve planned results.
AAC shall establish arrangements for these processes including, as applicable:

a.) the availability of documented information that defines:
    1.) the characteristics of the products to be produced, the services to be provided, or the activities to be performed;
    2.) the results to be achieved;
b.) the availability and use of suitable monitoring and measuring resources;
c.) the implementation of monitoring and measurement activities at appropriate stages to verify that criteria for control of processes or outputs, and acceptance criteria for products and services, have been met;
d.) the use of suitable infrastructure and environment for the operation of processes;
e.) the appointment of competent persons, including any required qualification;
f.) the validation, and periodic revalidation, of the ability to achieve planned results of the processes for production and service provision, where the resulting output cannot be verified by subsequent monitoring or measurement;
g.) the implementation of actions to prevent human error;
h.) the implementation of release, delivery and post-delivery activities.

Reference:
Employee Skill Maps
AAC-WI-QA-07 Annual Supplier Performance Eval.
AAC-PRGM-QA-01 Training and Review Program

8.5.2 Identification and traceability

Where traceability is required, the unique product identification will be controlled and records maintained throughout product realization.

8.5.3 Property belonging to the customer or external providers

AAC shall exercise care with customer or external provided property including, intellectual property while it is under AAC's control. AAC shall identify, verify, protect, and safeguard customer or external provider property provided for use of incorporation into the product. If any customer or external provider property is lost, damaged or otherwise found to be unsuitable for use, it shall be reported to the customer or external provider and records will be maintained. Customer or external provider property can include material, components, tools and equipment, customer premises, intellectual property and personal data.

Reference:
AAC-WI-QA-01, Control of Customer Property.
AAC-HB-PUR-001, Purchasing Department Handbook

8.5.4 Preservation

Preservation of product shall be established and maintained during internal processing and

delivery to the intended destination in order to maintain conformity to requirements. As applicable, preservation includes identification, handling, packaging, storage, and contamination control, transmission of data, and transportation, as well as protection. Preservation also applies to the constituent parts of the product.

8.5.5 Post-delivery activities

Post-delivery activities is determined and controlled to provide product and services thorough the intended lifetime of the product to the customers' requirements specified by the contractual obligations, and warranty provisions set aside for this purpose.
To provide customer feedback, and consideration for statutory and regulatory requirements, and the potential undesired consequence associated with product and services.

Reference: AAC-PLCY-ACC-05 Warranty Reserve

8.5.6 Control of changes

Changes made to processes to ensure product and services conform to the specified requirements will be identified and records maintained.
The changes will be reviewed, verified and validated, as appropriate, and approved before implementation. The review of design and development changes will 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 will be maintained.

Reference:
AAC-WI-PLN-08 Planning Eng. Change Mgt.
AAC-WI-PUR-102 Engineering Change Management
AAC-WI-SALE-207 Change Order Request
AAC-WI-ENG-15 Engineering Change Management Process.
AAC-SOP-QA-01 Document Control

8.6 Release of products and services

In order to ensure that the product requirements are met, the monitoring shall be carried out at appropriate stages of the product realization process.

Reference: Appendix I: Inspection and Test Plan.

The release of product and delivery of service to the customer shall not proceed until the necessary monitoring and measuring activities have been satisfactorily completed, unless otherwise approved by a relevant authority and, where applicable, by the customer.
Evidence of conformity with the acceptance criteria shall be maintained. Records shall indicate the person(s) authorized to release product for delivery to the customer.

Reference: AAC-WI-MFG-04, Disassembly Approval

8.7 Control of nonconforming outputs

AAC shall ensure that product which does not conform to product requirements is identified and controlled to prevent its unintended use or delivery. The controls and related responsibilities and authorities for dealing with non-conforming product is defined in the documented procedure

Reference: AAC-SOP-QA-04, Control of Non-Conforming Material Procedure.

9.0 Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

AAC shall plan, implement and evaluate the performance by monitoring, measurement, analysis, and improvement processes including applicable methods such as statistical techniques, needed for the following:

a.) what needs to be monitored and measured;
b.) the methods for monitoring, measurement, analysis and evaluation needed to ensure valid results;
c.) when the monitoring and measuring shall be performed;
d.) when the results from monitoring and measurement shall be analyzed and evaluated.

AAC shall apply suitable methods for monitoring the QMS processes. Processes used for the Product Realization shall be monitored and measured through inspections, testing and/or verifications as applicable, customer feedback, management review, internal/external audits, corrective preventive actions, etc. When planned results are not achieved, corrective actions and improvement actions are taken as appropriate. The organization will consider the type and extent of monitoring or measurement appropriate to each of its processes in relation to their impact on the conformity to product requirements and on the effectiveness of the QMS.

Reference:
Appendix II: Key Processes of QMS
Appendix I: Inspection and Test Plan.

9.1.2 Customer satisfaction

As one of the measurements of the performance of the QMS, AAC shall conduct surveys to monitor information relating to customer perception as to whether AAC has met customer requirements.

The Customer Satisfaction Survey shall be sent to the customer after each installation, and on a scope basis for Service related work.

Executive Management shall study and analyze the rating given for each aspect of the survey. The survey result will be an input to the Management Review.

Reference:
AAC-PRGM-SALE-02, Customer Satisfaction Program
AAC-WI-SERV-04, Service Customer Survey
AAC-WI-SERV-113, Parts Customer Survey

9.1.3 Analysis and evaluation

Data from Management Review and the Departmental Meetings are required to determine the effectiveness of the QMS and identifying where improvements can be made, PDCA (plan–do–check–act) method.

It shall be the Management Representative's responsibility to ensure that all data is analyzed and reported to the Management Team for continual improvement purposes.
To the performance of evaluations, **refer to paragraph 9.1.1**
Refer to Company Metrics for measurable to determine effectiveness of the QMS.
MR determines the effectiveness of the QMS, if planning, risk and opportunities action are effective.

9.2 Internal audit

9.2.1 The internal audit shall be conducted to the requirements of the International Standard and the organizational own QMS requirements, at planned intervals per the internal audit schedule.

A procedure has been established and documented to define the responsibilities and requirements for planning, conducting audits, establishing records, and reporting results. Records of the audits and their results shall be maintained.

Reference procedure:
AAC-SOP-QA-05, Internal Audit Procedure.

9.2.2 The organization shall

a) plan, establish, implement and maintain an audit program(s) including the frequency, methods, responsibilities, planning requirements and reporting, which shall take into consideration the importance of the processes concerned, changes affecting the organization, and the results of previous audits;
b) define the audit criteria and scope for each audit;
c) select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
d) ensure that the results of the audits are reported to relevant management;
e) take appropriate correction and corrective actions without undue delay;

9.3 Management review

9.3.1 General

ESC will conduct Management Review semi-annually as part of that month's ESC meeting. The purpose of the review is to ensure that the AAC QMS is suitable, adequate, effective and preforming to the organizations strategic direction.

Reference: AAC-F-QA-04, Management Review Form

9.3.2 Management review inputs

The review will include status of previous management reviews actions, the assessment of opportunities for improvement, risk to the organization, changes externally and internally that are relevant to the organization (QMS) strategic direction, and the need for changes to the QM. These changes may include changes to the Quality Policy and Quality Objectives. The required inputs for management review are:

a.) the status of actions from previous management reviews;
b.) changes in external and internal issues that are relevant to the quality management system;
c.) information on the performance and effectiveness of the quality management system, including trends in:
d.) customer satisfaction and feedback from relevant interested parties;
e.) the extent to which quality objectives have been met;
f.) process performance and conformity of products and services;
g.) nonconformities and corrective actions;
h.) monitoring and measurement results;
i.) audit results;
j.) the performance of external providers;
k.) the adequacy of resources;
l.) the effectiveness of actions taken to address risks and opportunities (see 6.1);
m.) opportunities for improvement.

9.3.3 Management review outputs

The outputs of the management review shall be documented and retained as evidence of the results of decisions and actions related to:

a.) opportunities for improvement;
b.) any need for changes to the quality management system;
c.) resource needs.

10.0 Improvement

10.1 General

Various sources of information shall be used to make improvements to the QMS.

These shall include:

a.) improving products and services to meet requirements as well as to address future needs and expectations;
b.) correcting, preventing or reducing undesired effects;
c.) improving the performance and effectiveness of the quality management system.

NOTE Examples of improvement can include correction, corrective action, continual improvement, breakthrough change, innovation and re-organization

Reference: AAC-PRGM-QA-03, Continuous Improvement Program

10.2 Nonconformity and corrective action

AAC shall take necessary corrective action to eliminate the causes of non-conformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the non-conformities encountered including the non-conformities of product, customer complaints, and non-conformities of QMS.

Reference procedure: AAC-SOP-QA-03, Corrective and Preventive Action Procedure.

10.3 Continual improvement

Preventive actions are planned and implemented for process improvement, and to eliminate potential causes of non-conformities.

Reference procedure: AAC-SOP-QA03, Corrective and Preventive Action Procedure.

Appendix I: Inspection Test Plan

No.	Item	Control Point	Required Information	Frequency of Check	Dept. /Section in Charge	Method	Equipment	Type of Record
1	Incoming Material	Receiving	Inspection Report from Supplier, Part Dwg., P.O., Packing Slip	Visual Inspection: Every delivery Formal Inspection: Only for parts deemed "critical"	Logistics, Inspector	Visual Inspection AAC-WI-LOG-05, Receiving AAC-PRGM-PUR-003, Supplier Mgt. Program AAC-WI-QA-35 Quality receiving inspection	SAP As determined by part	SAP Receipt Transaction, DMR, Inspection Report, Part Dwgs.
2	Assembly	Designated Area	Where Applicable: Press Serial No., Drawings, Command Sheet, Tech. Spec, Checklists, Inspection Report from Supplier	Every job	Inspector	In-Process Checks AAC-WI- MFG-02, In-house Assembly	As determined by part	Checklists; Supplier Inspection Form, Marked-Up Aida Dwg, Part Dwg
3	Inspection	At Press	Press Serial No., Drawings, Command Sheet, Tech. Spec, Inspection Checklists	Every job	Inspector	Mechanical & Electrical Inspection AAC-WI-QA-08, Press Inspection	As required by press, options, and accessories	Inspection Checklists, Deviation Record, Inspection Report, DMR, AAQS 900-0145 (Disassembly Approval Form)
4	Shipping	Shipping Area	Packing Checklist, Shipping Manifest	Every job	Logistics, Inspector	Visual Inspection AAC-WI-MFG-05, Packaging & Shipping	Not Applicable	Packing List Packing Checklist Shipping Manifest

Appendix II: Key Processes in QMS

Key Process	Supporting Process	Inputs to Key Processes	Outputs to Key Processes	Measurable** Reference measurables in business plan
Sales Order Realization (AAC-WI-SALE-100) ↓	• AAC-WI-ENG-13 (QCD Response) • AAC-HB-SALE-001 (Sales Department Handbook)	• Customer Purchase Order • Customer Proposal Request Form (PRF)	• Command Sheet • 3rd Party Quotes	• Time from P.O. receipt to issuance of Command Sheet • Timely customer acceptance, target vs. actual and reasons • Customer Satisfaction • Turnaround time on issued QCD's
Design Control (AAC-WI-ENG-01) ↓	• AAC-WI-SALE-200 (Main Proj. Mgt.) • AAC-WI-PLN-43 (Print Control) • AAC-HB-ENG-001 (Engineering Department Handbook)	• Command Sheet • 3rd Party Quotes	• Tech. Spec. • Bill of Material • Drawings	• BOM Release Date, Target vs. Actual • ECNs • Engineering Utilization, Direct vs. Total • Target Hrs vs. Actual Hrs per Job
Purchasing (AAC-WI-PUR-105) ↓	• AAC-WI-PLN-37 (Planning Overview) • AAC-WI-PLN-43 (Print Control) • AAC-WI-QA-03 (DMR Process-Supplier Return) • AAC-WI-ENG-05 (Drawing Release) • AAC-HB-PUR-001 (Purchasing Department Handbook)	• Command Sheet • Drawings • Tech. Spec. • Planning Demand	• Purchase Orders	• Supplier On-Time Delivery
Production & Service (AAC-WI-MFG-01) (AAC-WI-MFG-02) ↓	• AAC-WI-PLN-37 (Planning Overview) • AAC-WI-PLN-43 (Print Control) • AAC-WI-PLN-05 (Receiving) • AAC-WI-SALE-200 (Main Proj. Mgt.) • AAC-WI-QA-08 (Press Inspection) • AAC-WI-ENG-05 (Drawing Release)	• Command Sheet • Drawings • Tech. Spec. • Production Orders • Planning Schedule • Disassembly Approval	• Shipping Document Package • Customer Signoff (Mfg. led installation)	• On-time Shipment
Shipping (AAC-WI-LOG-06) ↓	• AAC-WI-SALE-200 (Main Proj. Mgt.) • AAC-WI-MFG-05 (Packaging-Shipping) • AAC-HB-LOG-001 (Logistics Department Handbook)	• Command Sheet • Drawings • Tech. Spec. • Shipment Release	• Commercial Invoice • Packing Slip • Customs Documents • Purchase Order	• Transit Time, Target vs. Actual and reasons
Installation (AAC-WI-MFG-07) (AAC-WI-SERV-05) ↓	• AAC-WI-SALE-200 (Main Proj. Mgt.) • AAC-WI-MFG-05 (Packaging-Shipping) • AAC-WI-QA-08 (Press Inspection)	• Command Sheet • Final Inspection Report (except for knock-down press) • Installation Schedule • Drawings • Pre-Install Checklist (Only for Service) • Press Installation Checklist	• Certificate of Completion • Field Report • Final Inspection Report (for knock-down press)	• Customer Satisfaction • Timely Customer Acceptance, Target vs. Actual
Service (AAC-WI-SERV-01)	• AAC-WI-SERV-100 (Parts Department Quote)	• Service Order Request Form • Job Schedule Estimate Form • Tool Request Form	• Service Report	• Warranty Expense • Customer Satisfaction

Management Review (AAC-SOP-QA-06-A (Management Review)	• AAC-SOP-QA-06-A (Management Review)	• MR Meeting notes. Ref Agenda • Interested Parties and Positive-Negative Issues) • Risk Analysis of Processes	• Review of the effectiveness of the actions discuss at past MR • Overall re-view of the QMS	• Company Metrics
Internal Audits AAC-SOP-QA-05-O (Internal Audit)	• AAC-SOP-QA-05-O (Internal Audit)	• Evidence of conformance to ISO 9001	• Audit results	• SAP(CAPA) review of non-conformaces