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**Quality Assurance Manual**

**AS 9100**

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# Revision & Amendment Record

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| **REVISION HISTORY** |
| **REV** | **DATE** | **DESCRIAIMON OF CHANGE** | **APPROVAL** |
| Draft Ver. 1 | 11/22/2016 | Initial draft for internal review and comment; sections 1 through 6.3 only. | N/A |
| Draft Ver. 2 | 2/19/2017 | Initial draft of additional sections for internal review and comment;6.4 – 11.3 and Appendix A. | N/A |
| Draft Ver. 3 | 3/19/2017 | Incorporate initial draft review comments. Move procedures into separate documents and add applicable cross-references. | N/A |
| A | 8/26/2017 | Initial release to support first Internal Audit cycle. Add TOC and Org Chart (Appendix B). Minor editorial corrections throughout. | J. Lord, Quality Assurance |
| B | 10/27/17 | Added functional department responsibilities | J. Lord |
| C | 11/29/17 | Revised Document Numbering throughout and added design and development of services. | J. Lord |
| D | 12/4/2023 | Revised for AS9100 Standard. | J. Lord & E. Arthur |
| E | 5/15/2024 | Updated to include new procedures. | J. Lord & E. Arthur |
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# Quality Assurance Manual Introduction

## Scope

This Quality Assurance Manual is published under the authority of the AIM Precision Machining, Inc. (AIM) President/Vice-President of Operations. It is reviewed and updated as required to reflect policy changes and quality system practices. Changes or amendments to this manual will be referenced in the Revision & Amendment Record section of this manual.

The policies in this Quality Assurance Manual apply to all AIM process operations and activities applicable to business.

The scope of our QMS registration is:

"Contract Manufacturing Services providing Computer Numerical Control Turning and Milling, Metal Inert Gas, Tungsten Inert Gas & Inertia Welding, Wire Electrical Discharge Machining, Grinding, Sawing, Broaching, Polishing, Marking and Mechanical Assembly” to meet customer and legal requirements.

Exclusions: AIM Inc. does not design or develop products or services.

AIM’s work environment does not manage protection from electrostatic discharge; our customer requirements do not include handling electrostatic-sensitive devices.

The scope of our QMS process includes our facility located in Parkton, Maryland.

This Quality Assurance Manual describes and defines our company’s conformance to the ISO 9001:2015 international standard and the SAE AS9100 aerospace standard.

## 1.2 Distribution Policy & Distribution List

This manual is available to AIM personnel, the ISO 9001/AS9100 registrar assessor, customers, and other organizations as authorized by our president/vice president of operations.

Master Quality Assurance Manual: The Master Quality Assurance Manual is maintained in the Document Control System.

Controlled Copies:The Quality Assurance manager controls the Quality Assurance Manual. Controlled copies are available and maintained through the document control system. Revision notification will be distributed to all applicable our President/Vice-President of Operations.

Uncontrolled Hard Copies: Uncontrolled hard copies of the Quality Assurance Manual are available to Customers for reference. Uncontrolled copies will be identified as uncontrolled copies. These are not automatically updated, and holders are not notified of revisions. It is the holder’s responsibility to verify currency before use.

## 1.3 Company Profile and Scope of Operations

AIM's continual re-investment in state-of-the-art equipment has kept our company at the forefront of military and industrial requirements. We constantly explore new and better ways to produce the finished product, meet customer requirements, and set the standard for product quality and performance excellence. Maintaining our machining technology capabilities assures our customers of receiving the most cost-effective products and practical solutions for their precision machining needs.

Our Company employees are all professionals at the leading edge of their craft. They do more than manufacture a product; they deliver excellence for every customer and product application.

# Documentation

The following documentation applies to the extent as specified herein this manual:

Industry/Government Standards

ISO 9001:2015 Quality Management System

AS9100 Quality Management System

Internal Document(s)

CGP-1001 Contracts Documentation System

CGP-1002 Proposal Quotation Development

CGP-1003 Customer Satisfaction

DCP-1001 Document Control

DGP-1300 Design & Development of Services

GMI-3004 Forklift Operation Instructions

GMP-0001 Manufacturing Ethics

GMP-0002 Safety Precautions and Hazards Prevention

GMP-0003 Production Lot Traveler (Router)

GMP-0006 Preservation of Product

GMP-0007 Limited Shelf-Life Material Control

GMP-0013 Preventive Maintenance

GMP-0017 Product Identification and Traceability

GMP-0018 CNC Programming

GMP-0019 Production Planning

GMP-0020 Tool Room Management

GMP-1000 Contract Manufacturing Services

GMP-1101 Issuing Material/Product from Stock

GMP-1201 Cut to Length Saw

GMP-1301 CNC Milling

GMP-1302 CNC Lathe

GMP-1401 Welding and Brazing

GMP-3001 Packaging and Shipping

GMP-3002 Receiving

GMP-3003 Packaging Instructions

GMP-3005 Electro-Mechanical Workmanship Standard

GTP-0001 Production Test System

GTP-1101 Test Hydro Procedure

GTP-1102 Burst Test Procedure

HRP-1001 Training and Certification

PGP-1001 Purchasing System

PGP-2001 Supplier Evaluation and Approval/Disapproval

PGP-2002 Supplier Control

QAI-1603 Micrometer, Outside Mechanical Inch/Metric

QAP-1101 Quality Policy

QAP-1102 Quality Objectives and Planning

QAP-1103 Continuous Improvement

QAP-1104 Quality Records

QAP-1105 Nonconforming Material System

QAP-1106 Inspection and Test Codes

QAP-1107 Leadership Procedure

QAP-1108 Key Process Indicators Procedure

QAP-1201 Corrective Action(s) System

QAP-1301 Internal Audits

QAP-1302 Management Review

QAP-1401 In-Process Inspection

QAP-1402 Final Inspection

QAP-1403 RMA and Material Processing

QAP-1404 First Piece Inspection

QAP-1406 Shipping Inspection

QAP-1410 Analysis of Data

QAP-1411 Risk Management

QAP-1415 First Article Inspection

QAP-1503 Receiving Inspection

QAP-1504 Software Validation Procedure

QAP-1601 Calibration System

QAP-1701 Customer Property

QAP-1801 Counterfeit Parts

QAP-1901 Foreign Object Elimination

QPP-1101 Macro Level Business Procedure

Forms See AFRR-1

**Legend**

CGP – Contracts General Procedure

DCP – Document Control Procedure

DGP- Design General Procedure

GMI – General Manufacturing Instructions

GMP – General Manufacturing Procedure

GTP - General Test Procedure

HRP – Human Resources Procedure

PGP – Purchasing General Procedure

QAP – Quality Assurance Procedure

QPP – Quality Planning Procedure

QTP – Quality Test Procedure

# Terms and Definitions

Product: Implies both products and services.

Tender: Offer made by a supplier in response to an invitation to satisfy a contract award to provide the product.

Contract, Accepted Order: Agreed requirements between a supplier and customer transmitted by any means.

Counterfeit Part: An unauthorized copy, imitation, substitute, or modified part (E.g., material, part, component) that is knowingly misrepresented as a specified genuine part of an original or authorized manufacturer.

Critical items: Those items (e.g., functions, parts, software, characteristics, process) having a sufficient effect on the provision and use of the products and services, including safety, performance, form, fit and function, producibility, service life, etc.; that require specific actions to ensure they are adequately managed. Examples of critical items include safety-critical items, fracture-critical items, mission-critical items, key characteristics, etc.

Key characteristics: An attribute or feature whose variation has a significant effect on a product fit, form, function, performance, service life, or producibility that requires specific actions for controlling variation.

Product Safety: The state in which a product can perform its designed or intended purpose without causing unacceptable risk of harm to persons or property damage.

Special requirements: Those requirements identified by the customer or determined by the organization have high risks of not being met, thus requiring their inclusion in the risk management process. Factors determining special requirements include product or process complexity, experience, and product or process maturity.

# Context of the Organization

##  4.1 Understanding the Organization and Context

As outlined in the following paragraphs, our President/Vice President of Operations/Contracts departments determine external and internal issues relevant to our purpose and strategic direction and affect our ability to achieve our intended quality management system goals and objectives.

 External and internal issues are limited to our Customer Orders. There are no other external or internal issues that influence the way we conduct business. Understanding the external context can be facilitated by considering issues arising from legal, technological, competitive, market, cultural, social, and economic environments, whether international, national, regional, or local.

 **Internal and External issues affecting Customer Orders**

|  |  |
| --- | --- |
| **Internal** | **External** |
| Product and service offerings | Competition |
| Management, responsibilities, organization | Technology |
| Values, knowledge, performance | Material, product availability, lead-time, cost |
| Capabilities of processes and systems |  |
| Employee morale and view of the Company |  |
| Delivery Performance. |  |

 Our President working with Contracts personnel monitors and reviews information about these external and internal issues. This information is documented as warranted as part of the Management Review meeting per QAP-1302, Management Review, and driven by CGP-1001, Contract Documentation System, which identifies risks and opportunities outlined in our QAP-1411, Risk Management.

AIM's organizational structure is organized to determine and respond to relevant internal and external issues affecting our business and the quality management system.

Refer to APPENDIX B - QMS Organizational Chart and a management roles and responsibilities list.

## 4.2 Understanding the Needs and Expectations of Interested Parties

To ensure AIM’s ability to consistently produce machined products and assemblies that meet all technical and quality requirements, Quality Assurance monitors and reviews information about relevant external and internal issues related to our business:

* + Available manufacturing tools and equipment upgrades
	+ Maintaining capable partners and subcontractors
	+ Improved manufacturing techniques and technologies used for similar product lines
	+ Local, state, and national regulatory and environmental requirements
	+ National and international market forces affecting our customers
	+ Raw materials availability, specification changes, and market pricing
	+ Changes in customer supply chain requirements

The interested parties that are relevant to the quality management system are:

|  |  |
| --- | --- |
|  **Interested Parties** | **Needs and Expectation** |
| Customers | * Quality of product
* Price
* On-time delivery
* Technical support when needed
 |
| Owner | * Profitability
* Return on investment
* Continued growth in the market
 |
| Management | * Increased growth, sales and

 profitability* Efficiency and effectiveness of processes
 |
| Employees | * Suitable work environment
* Health and safety
* Proper training of job being

 performed* Availability of tools to complete required job
 |
| Suppliers | * Feedback on product/service

 Performance* Increased scope and volume of purchases
* Long-term contractual

 arrangements* Insight and information on

 future needs |
| Regulatory Bodies/Government | * Compliance to applicable

 requirements and industry standards* Submission of applicable forms and reports
 |

b) the requirements of these interested parties that are relevant to the Quality Management System are processed through our Contracts Department during contract review and any risk-oriented issues are identified and resolved before approving the Quote/Order.

AIM also understands and is compliant with International Traffic in Arms Regulations (ITAR) regulations, as they apply to any United States Munitions List (USML) components or products identified by AIM customers and contracted to be manufactured by AIM. ITAR applies to defense articles and services governed by 22 U.S.C. 2778 of the Arms Export Control Act (AECA) and Executive Order 13637. The ITAR, Section 22 of the Code of Federal Regulations (CFR), parts 120-130, implements the AECA.

## 4.3 Scope of the Quality Management System

Our President/Vice-President Operations/Quality Assurance Staff is responsible for establishing, implementing, maintaining, and continuously improving our quality management system (QMS), including the processes needed and their interactions, per the requirements of ISO 9001 and AS9100. As described in this Quality Assurance Manual, Production Operations & Quality Assurance management has determined the processes needed for our QMS and their application, excluding:

1. AS9100 8.3 AIM is a Contract Manufacturer and does not do Design & Development

The scope of the AIM's QMS is available and maintained as documented in this Quality Assurance Manual and covers the products and services described in the preceding sections.

## 4.4 Quality Management System Processes

Our President/Vice-President of Operations has committed to establishing, implementing, maintaining, and continually improving our quality management system (QMS), including the processes needed and their interactions, per ISO 9001 and AS9100 requirements. As described in this Quality Assurance Manual, Production Operations & Quality Assurance management has determined the processes needed for our QMS and their application, including:

* Inputs required and the outputs expected from these processes
* Sequence and interaction of these processes
* Criteria and methods (including monitoring, measurements, and related performance indicators) needed to ensure the effective operation and control
* Resources needed for these processes and ensuring their availability
* Management responsibilities and authorities
* Risks and opportunities as determined per section 7.1.
* Evaluate and implement changes to ensure processes achieve our intended results.
* Improve the processes and the QMS.

 Process Mapping (Turtle Diagrams) for Contracts, Purchasing, Operations, and Documented Information, QA defines the inputs/outputs and interactions of these processes. AIM-Turtles

 A) AIM-001 Contract Review Process

 B) AIM-002 Leadership Process Flow

 C) AIM-003 Purchasing Process Flow

 D) AIM-004 Receiving Inspection Process Flow

 E) AIM-005 Material Control Process Flow

 G) AIM-007 Production Process Flow

To the extent necessary, Contracts, Manufacturing, and Quality Assurance Departments maintain the documentation that supports the various areas of operations at AIM. This documentation is controlled and safeguarded against loss or deterioration for future use as needed. These documents are released and changed/improved through DCP-1001, Documented Control, maintained through QAP-1104, Quality Records and GAM-1001, General Administrative Procedures QAM-1001, Quality Assurance Manual, GMM-1001, General Manufacturing, Revision List of all procedures and forms used at AIM. QAP-1301, Internal Audits, are used to evaluate our Quality Management System for validation of the QMS conforming to the AS9100/ISO 9001 standards.

Our Quality Assurance Department maintains documented information – described in this Quality Assurance Manual – to support the operation of its processes. Procedures and records are maintained to ensure the processes are carried out as planned. Refer to section 8.5.

# 5. Leadership and Commitment

## 5.1 Our Management Leadership and Commitment

 Our President/Vice-President of Operations demonstrates leadership and commitment to the quality management system (QMS) by:

* + - * Being assigned specific accountability and taking responsibility for the effectiveness of QMS processes driven by our Functional Responsibilities and Authorities list.
			* Ensuring that the quality policy and objectives are established for the QMS and compatible with AIM’s context and strategic direction. (QAP-1101, Quality Policy and QAP-1102, Quality Objectives)
			* Ensuring the integration of QMS requirements into AIM’s business processes. (See AIM Turtle diagrams for high-level process flows)
			* Using the process approach and risk-based thinking (QAP-1411, Risk Management)
			* Ensuring that resources needed are available at practicable levels to meet commitments during Contract Review (CGP-1001) and Management Review (QAP-1302)
			* Communicating the importance of an effective QMS and conforming to QMS requirements (Quality Policy, Quality Objectives, and Audit results are posted throughout the facility)
			* Ensuring that the QMS achieves its intended results by QAP-1401 In-process Inspection, QAP-1402, Final Inspection, and QAP-1301, Internal Audit results.
			* Engaging, directing, and supporting the AIM staff to contribute to QMS effectiveness
			* Promoting improvement
			* Supporting AIM supervisors to demonstrate leadership as it applies to their areas of responsibility with annual training (HRP-1001) and competencies reviews.

 Where risk is an issue, it is managed as defined in QAP-1411, Risk Management.

Our President/Vice-President of Operations demonstrates leadership and commitment to customer focus by ensuring that:

* + - * Customer and applicable statutory and regulatory requirements are determined, understood, and consistently met.
			* Risks and opportunities that can affect conformity of AIM products and services and the ability to enhance our customer satisfaction are determined and addressed – before the breakdown of product integrity
			* Focus on enhancing customer satisfaction is maintained.
			* Product and service conformity and on-time delivery performance are measured, and appropriate action is taken if planned results are not, or will not be, achieved.

Contracts, working with the President and Vice President, demonstrate leadership and commitment concerning customer focus by ensuring that customer and applicable statutory and regulatory requirements are determined, understood, and consistently met through our Contract Documentation System, CGP-1001, the risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed by our QAP-1411, Risk Management procedure and an analysis of Customer Satisfaction, CGP-1003, for any trending data. Contracts are the main point of contact throughout the production cycle. Provision for customer complaints and concerns is routed through CGP-1003, Customer Satisfaction.

## 5.2 Quality Policy

Our President/Vice-President Operations has established, implemented, and maintains a quality policy that:

* + - * Is appropriate to the purpose and context of AIM and supports its strategic direction
			* Provides a framework for setting quality objectives
			* Includes our commitment to satisfy customer and internal QMS requirements
			* Includes a commitment to continual improvement of the QMS.

Quality objectives and Key Process measures are measurable and consistent with the AIM quality policy and are communicated to all levels of the AIM organization.

Communication is accomplished through crew meetings, daily supervision discussions, on-the-job training (OJT), new employee orientation, and internal audit interviews.

The Management Review process (section 10.3) provides the framework for establishing and reviewing the suitability of the quality policy and the relevance of quality objectives.

It is also available to all AIM customers and interested parties via request. An uncontrolled copy shall be provided to any customers by electronic mail, or, if requested, a paper copy shall be mailed.

Our Quality Policy Statement:

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AIM Incorporated

**Quality Policy Statement**

Our company is committed to manufacturing consistently quality products. All levels of our organization must strive for excellence and continual improvement in quality to maintain our competitive edge.

To accomplish this, our President/Vice-President of Operations, working with functional department management, will:

* Manufacture products per our customer’s expectations, specifications, and documented procedures.

Our Quality Policy is fully endorsed by our President/Vice-President Operations and functional department management to ensure that it is communicated, understood, implemented, and maintained at all levels of our organization.

Approved by AIM's Quality Council

To measure our progress in achieving the quality policy goals and objectives, AIM will continually utilize the following indicators as described in QAP-1102, Quality Objectives. This includes measurements such as the following when applicable:

* On-Time Delivery
* Defect Data (in-house and customer returns)
* Supplier Performance Data
* Production Run (internal) Qty Made & Scraped (Stored in Made to Manage Software)
* First Article Inspection (customer) acceptance data

In addition, we will seek and utilize relevant customer ratings that will measure the customer’s view of our efforts.

## 5.3 Management Roles, Responsibilities, and Authorities

 Our President/Vice-President Operations has assigned responsibilities and authorities for relevant Quality Management System (QMS) functions, which are communicated and understood within the company. AIM’s president, as the company's owner, has authorization for all business practices. All other authorizations are shown and assigned through the QMS Organizational Chart (Figure B), Competency Approval and Authorization Record (AC-1, HRP-1001, Training and Certification and the Functional Responsibilities Memo). QMS responsibilities and authorities are also identified throughout this Quality Assurance Manual, and a summary illustration is shown in Appendix B. AIM managers and supervisors are assigned QMS functions for:

* Ensuring that the QMS conforms to ISO 9001 and AS9100 requirements
* Ensuring that AIM manufacturing processes are delivering their intended outputs
* Reporting on QMS performance and opportunities for improvement (refer to section 11.1) to top management
* Ensuring the promotion of customer focus throughout the AIM staff
* Ensuring that QMS integrity is maintained when changes to the system are planned and implemented.

The Functional Responsibilities List identifies a specific member of AIM’s management, identified as the Quality Assurance representative, who shall have the responsibility and authority to oversee the above requirements. The Quality Assurance Manager shall have organizational freedom and unrestricted access to top management to resolve quality management issues.

# 6. Planning

## 6.1 Actions to Address Risks and Opportunities

Our Contracts/President/Vice-/Operations/Quality Assurance plans for conformance to the quality management system (QMS), considering the issues and requirements outlined in sections 4.1 and 4.2 of AS9100. Operations Management and Quality Assurance uses the operational planning process (sections 8.1, 8.2, and 8.5), the performance evaluation process (sections 9.1 and 9.3), and the corrective action process (section 10.2) to determine the risks and opportunities to

* Assure that the QMS achieves planned results
* Enhance desirable effects for AIM and our customers
* Prevent or reduce undesired impacts to AIM product or service quality
* Promote and achieve process improvement**s.**

Contacts/President/Vice-President Operations/Operations/Quality Assurance plans actions to address risks and opportunities, including:

* Integrate and implement risk response actions into QMS processes
* Evaluate the effectiveness of directed actions.

Actions taken to address risks and opportunities are evaluated for being proportionate to the potential impact on the conformity of AIM products and services, especially for critical items.

Critical items are those defined by AIM customer documentation (i.e. drawings, specifications, purchase orders, etc.) that significantly affect the contracted product production and use. Contacts/President/Vice-President Operations/Operations/Quality Assurance ensures that production techniques to meet technical requirements are managed for all customer-identified safety-critical, fracture-critical, mission-critical, and other vital characteristics. Variation of technical attributes that affect product form, fit, function, performance, service life, or customer usability/producibility is controlled via specific inspections and tests.

Contracts working with applicable Manufacturing management, Quality Assurance, and other functional department management personnel ensure that risks and opportunities are identified per QAP-1411, Risk Management, and CGP-1001, Contracts Review, and CGP-1002, Proposal Quotation Development. Contracts/Quotes are the initial review of any risks/opportunities and resource needs during the Contract Review process.

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

## 6.2 Planning to Achieve AIM Quality Objectives

Our President/Vice-President of Operations has established quality objectives at relevant functions, levels, and processes needed for the quality management system (QMS). AIM quality objectives are measurable and consistent with the AIM quality policy and are communicated to all levels of the AIM organization. This is accomplished through the documented quality system, periodic employee meetings, training, and internal audit interviews. See QAP-1102, Quality Planning & Objectives for additional information. Our Management Review process (section 9.3) provides the framework for establishing and reviewing the suitability of the quality policy and relevance of quality objectives to ensure they remain:

* Consistent with AIM’s quality policy (QAP-1101, Quality Policy)
* Measurable
* Accountable for applicable requirements
* Relevant to the conformity of AIM products and services
* An enhancement to AIM customer satisfaction
* Monitored, communicated, and updated as required.

When planning to achieve quality objectives, our President/Vice-President Operations determines:

* Directed actions/activities
* Required resources
* Assigned responsibilities
* Schedule estimates
* How results will be evaluated
* Records required to provide evidence of conformity

Quality Assurance maintains appropriate records of QMS quality objectives and establishes their identification, storage, protection, retrieval, retention, and disposition requirements. See QAP-1104, Quality Records, for additional information.

## 6.3 Planning Changes

Contracts/Operations/Quality Assurance determines the need for changes to the QMS, which are directed and implemented as planned (refer to section 4.4). Contracts/Operations/Quality Assurance management considers the changes’ purpose and potential consequences, maintaining the integrity of the QMS, availability of resources, and assigning responsibility and authority.

See DCP-1001, Document Control, for additional information.

# Support

## 7.1 Resources

Our President/Vice-President Operations has determined and provided the resources needed to establish, implement, maintain, and continually improve the quality management system (QMS). When determining and assigning resources, the management team considers capabilities/constraints for existing internal resources and what needs to be obtained from external providers (teaming partners or subcontractors). Top management reviews Internal Audits, Analysis of Data, Customer Complaints, RMAs, and Customer Satisfaction when considering hiring additional resources.

A record of this review is documented as part of our a) Management Review (QAP-1302) at least once per year (i.e., 2C – Outputs; Resource Needs section), and/or b) Support Resource memo documented, dated, and approved by Quality Assurance.

### People

Our President/Vice-President Operations has determined and provided the personnel required for effective QMS implementation and for relevant process controls. Personnel performing work affecting product quality are competent to perform assigned tasks – based on appropriate education, training, skills, and experience. Top management reviews Internal Audits, Analysis of Data, Customer Complaints, RMAs, and Customer Satisfaction when considering hiring additional employees.

A record of this review is documented as part of our a) Management Review (QAP-1302) at least once per year (i.e. 2C – Outputs; Resource Needs section), and/or b) Support Resource memo documented, dated, and approved by Quality Assurance.

### Infrastructure

Our President/Vice-President of Operations works with functional department management personnel to determine, provide, and maintain the infrastructure necessary for its processes and to achieve conformity of products and services. Top management reviews Internal Audits, Analysis of Data, Customer Complaints, RMAs, and Customer Satisfaction when considering additional infrastructure projects.

A record of this review is documented as part of our a) Management Review (QAP-1302) at least once per year (i.e., 2C – Outputs; Resource Needs section), and/or b) Support Resource memo documented, dated, and approved by Quality Assurance.

### Environment

Our President/Vice-President of Operations works with functional department management personnel to determine, provide, and maintain the environment necessary to operate its processes and to achieve conformity of products and services. Top management reviews Internal Audits, Analysis of Data, Customer Complaints, RMAs, and Customer Satisfaction when considering environmental changes.

A record of this review is documented as part of our a) Management Review (QAP-1302) at least once per year (i.e., 2C – Outputs; Resource Needs section), and/or b) Support Resource memo documented, dated, and approved by Quality Assurance.

### Monitoring and Measuring Resources

Our Operations and Quality Assurance management has determined the monitoring and measurement resources needed to ensure valid and reliable results when monitoring or measuring is used to verify the conformity of AIM products and services to requirements. The resources provided are suitable for the specific monitoring and measurement activities being undertaken and are maintained to ensure their continuing fitness for their purpose. When calibration is required, records are maintained**.**

Our Operations and Quality Assurance management determines the need for inspection and measuring gages to produce products and ensures they are controlled, calibrated, and maintained per QAP-1601, Calibration System, to provide evidence of product conformity based on the measurement data. Quality Assurance has established a gage control/calibration process to ensure monitoring and measurement are consistent and meet specified requirements. See QAP-1601, Calibration System, for additional information.

Calibrated AIM monitoring and measuring equipment are:

* Verified at specific intervals against measurement standards; verification results are recorded
* Checked at specified frequencies
* Identified with calibration status
* Safeguarded from adjustments that would invalidate measurement (if applicable)
* Protected from damage and deterioration
* Uniquely identified
* Recalled for calibration checks

Inspection, testing, and measuring equipment used by AIM personnel that needs to be maintained, controlled, and calibrated is identified by the Quality Assurance management and maintained per QAP-1601, Calibration System. The Calibration System keeps track of the equipment type, unique identification, location, calibration frequency, schedule, records of the calibrations, description of the process used, and acceptance criteria. Normal operating conditions are controlled in our facility, and test and storage areas are designated to protect and preserve inspection, measuring, and test equipment within suitable environmental conditions. A sticker showing the last calibration and the renewal date is placed on the equipment in an easily verifiable area to inform the user and prevent inadvertent adjustments from being made.

If equipment is out of calibration, the affected product is identified, assessed, and retested, if required, before shipping. If our shipped product is affected, the Quality Assurance management and Operations management assess the impact on the affected product and promptly notify the customer. Our customer or customer’s representative may request access to our calibration and production records.

### AIM Organizational Knowledge

Our Quality Assurance/Human Resources working with functional department management personnel has determined the knowledge and training necessary to operate its processes and to achieve conformity of products and services. Quality Assurance/Human Resources takes changing business needs and customer requirements into account, by considering the current knowledge base and determining how to acquire or access additional knowledge and required training updates. See HRP-1001, Training & Certification for additional information.

Quality Assurance/Human Resources maintains appropriate records of education, performance reviews, skills, and experience in personnel files and on-the-job training (OJT) lists per HRP-1001, Training & Certification.

Individual training lists and job descriptions provide a checklist of all specific tasks, education, training, and experience required. Formal and individual training records, OJT lists, and tests are maintained in training files per HRP-1001, Training & Certification and QAP-1104, Quality Records and FORM AC-1, Competency Approval and Authorization Record and FORM ETR-0001, Employee Training Record form and ETR-0002, Shop Floor Personnel.

## 7.2 Competence

Our Quality Assurance/Human Resources working with functional department management personnel has overall responsibility for:

* Determining the necessary competence for personnel performing work affecting product quality
* Providing training or taking other actions to satisfy these needs, if necessary
* Evaluating the effectiveness of the training actions taken
* Ensuring that AIM personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives

AIM personnel in supervisory positions:

* Determine the necessary competence of assigned AIM personnel doing work under their supervision that affects the performance and effectiveness of the quality management system (QMS)
* Ensure that assigned personnel are competent based on appropriate education, training, or experience.
* If applicable, recommend actions to the Operations management to acquire the necessary competence (e.g. internal mentoring, external training, hiring, or contracting for the needed expertise)
* Evaluate the effectiveness of the actions taken.
* Retain appropriate records as evidence of competence

## 7.3 Awareness

Our Quality Assurance/Human Resources and functional department management personnel ensure that persons doing work under our Company’s control are aware of:

* The AIM quality policy (QAP-1101, Quality Policy)
* Quality objectives that are relevant to their AIM functional processes (QAP-1102, Quality Planning, QAP-1102 Quality Objectives)
* Their contribution to the effectiveness of the quality management system (QMS)
* The benefits of improved performance
* The implications of not conforming with QMS requirements

## 7.4 Communication

 Our President/Vice-President of Operations, working with functional department management, has determined the internal and external communications relevant to the quality management system, including:

* on what it will communicate
* when to communicate
* with whom to communicate
* how to communicate
* who communicates.
* CGP-1003, Customer Satisfaction Survey

 Our quality manual and functional procedures defined the information to be communicated, systems/tools or other means for proper communication, and the frequency of communication. In addition, email, company meetings, management reviews, etc., enhance internal communication.

 The functional responsibilities memo defines whom to communicate to based on company function for primary and backup responsibility. This functional responsibilities list also determines who communicates. Email is the primary communication tool used to document communications.

 Communication meetings conducted at our company include our President/Vice President Operations staff meetings (as required), proposal development meetings (as required), company employee all-hands meetings (as required), etc. Meeting minutes are documented and traceable to the person who documented the information and date created as required by the President/Vice-President Operations. Functional department management personnel hold meetings or video/audio conferences to communicate the information.

## 7.5 Documented Information

Quality Assurance/Document Control ensures our quality management system (QMS) includes:

* Documented information required by ISO 9001/AS9100
* Defining control of records as required by ISO9001/AS9100
* Procedures, forms, and records determined by AIM as necessary for QMS effectiveness

Quality Assurance/Document Control ensures the AIM process for creating and updating documented information ensures:

* Identification and description (e.g., title or reference number)
* Consistent format (e.g., language, software version, graphics)
* Media (e.g., paper, electronic)
* Review and approval for suitability and adequacy

See DCP-1001, Document Control, for additional information.

Quality Assurance/Document Control ensures documented information required by the AIM QMS and ISO 9001/AS9100 is controlled to ensure it is available and suitable for use, where and when it is needed, and to ensure it is adequately protected (e.g., from loss of confidentiality, improper use, or loss of integrity). See DCP-1001, Document Control, for additional information.

Quality Assurance/Document Control ensures the AIM process for control of documented information includes the following:

* Distribution, access, retrieval, and use
* Storage and preservation, including preservation of legibility.
* Control of changes (revision level match to the router at its creation)
	+ Previous revisions are kept per possible customer requests for an older revision.
* Retention (seven years, unless otherwise specified)
* Disposition
* Documented information (quality records and data) retained as evidence of conformity is protected from unintended alterations.

Documented information of external origin (e.g., customer drawings, material specifications, industry standards, etc.) is also controlled for AIM planning and operation of the QMS.

See QAP-1104, Quality Records, and DCP-1001, Document Control, for additional information.

# Operations

## 8.1 Operational Planning and Control

Refer to AIM Machining Process Flow, for an illustration of AIM’s general planning and control processes.

Operations management and Quality Assurance plans, implements, and control production processes – outlined in Section 4.4 required to meet our internal and customer production commitments. Production Planning is implemented as described in Section 8 by defining:

* AIM internal and customer requirements
* Criteria for our processes and acceptance of our products and services, including customer-identified critical items
* Documented SPC when required by customer.
* Required resources (including external providers)
* Process controls per acceptance criteria and verification key and critical characteristics
* Required documentation and records
* Process verification
* Product and service conformity

Operations management and Quality Assurance ensure production planning results in documentation and process controls are deemed effective for all our production areas.

Operations management and Quality Assurance ensure the planning process includes controlling planned changes, considering the potential risks of unintended changes, and planning the necessary risk responses. Outsourced processes are controlled as described in Section 8.4.

Contract personnel is the primary department for determining the requirements for Production and Service Provision through the use of CGP-1002, Proposal Quotation Development, and CGP-1001 Contract Review. Quality Assurance and Production leads the effort in establishing any additional process, key characteristics, controls, or acceptance criteria used during production including Final-Insp, In-Process Inspection, and Test. This review also identifies the allocation of resources or reallocation of resources needed to meet customer requirements. Implementation of Production Control is driven by GMP-0003 Product Router which identifies the steps needed to complete the production and to demonstrate conformity to product production and acceptance or rejection by QAP-1105 Non-Conforming Material system procedure.

The output of this planning is suitable for our Company’s operations.

Manufacturing management and Quality Assurance working with Documented Information ensure planned changes are controlled and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary. See DCP-1001, Document Control for additional information.

The Purchasing/Contracts ensure that outsourced processes are controlled (see 8.4) per AIM-7.4, Purchasing System.

Quality Assurance is responsible for Operational Risk, AIM assesses risk through QAP-1411, Risk Management risk assessment detailing areas of risk throughout the company and details our Risk Mitigation. Our risk management position is updated and reviewed annually for accuracy and is reviewed in the management review. When necessary or required by the customer a more detailed risk analysis may be performed for submission or if areas of risk become evident during planning stages.

Production Planning GMP-0019 implements projects through a controlled process to ensure conformity to customer requirements and any changes derived from customer communication and planning. This is done to validate and ensure that the most recent requirements and plans are used in Production. DCP-1001 Document Control releases and controls these Data packages that are used to produce AIM products.

Product Safety is planned and implemented to control our production to safeguard the product throughout its life cycle. We have assessed the hazards and risks through QAP-1411, Risk management that affect our production and have many critical items requiring special handling. The handling of these items detailed in GMP-0006, Preservation of product, GMP-0017, Product Identification & Traceability and QAP-1701, Customer Property and QAP-1601, Calibration.

Product safety is an ever-evolving process, Corrective action may trigger changes to our QMS and as Product Safety issues arise from Corrective actions are written to address these issues. When changes are made to procedures or forms the corrective actions document the retraining of employees.

Prevention of Counterfeit Parts can be identified at any step of production from receiving inspection to shipping inspection. The receiving and production personnel are trained to QAP-1801, Prevention of Counterfeit Parts to mitigate the risk of counterfeit parts being integrated into products. AIM’s Receiving department is our 1st line of counterfeit parts identification. AIM also buys material directly from authorized distributors and receives a Certificate of Conformance to further validate the supply chain of the products and lot traceability. These providers are approved by the PGP-1001, Purchasing System based on validation of an ISO certification or Supplier Surveys.

Refer to GMP-0019, Production Planning for additional planning information.

**8.2 Requirements for Products and Services**

Customer communication

Contracts and/or Quality Assurance personnel handle Communication with customers relating to products and services, providing information relating to products and services, Order changes, Complaints, Customer property, Customer feedback and contingency actions when necessary.

Contracts and Business Development ensure channels for communication with its customers include, but are not limited to:

* Sales/marketing and technical information about AIM products and services
* Price quotations/negotiations
* Acceptance of contracts/purchase orders
* Managing change orders
* Obtaining and monitoring customer feedback, including customer complaints
* Control of customer property
* Notifying customers of specific risk response actions when applicable

CGP-1001, Contracts Review defines the communication with the client, QAP-1201, Corrective Action(s) System is responsible for records of continual improvement/Correction of client orders and QAP-1701, Customer Property tracks items provided to AIM on the client’s behalf and Customer Complaint Concerns (CGP-1003) and Customer RMA (QAP-1403) identifies issues about customer feedback and customer focus.

Determining the requirements for products and services

 AIM determines the requirements for the products and services based upon customer orders and requirements, Contracts with support as required from Quality Assurance/Manufacturing develop the plans for the production of these items at our facility understanding statutory and regulatory requirements, any special requirements or additional measure to be achieved. On-Time delivery goals are set per the Production schedule. CGP-1001, Contracts Review, CGP-1002, Proposal Quotation Development, define the steps to determine the requirements and identify any additional risks or opportunities.

 Contracts and Business Development determines and defines the technical and quality requirements for our customer’s products and services, including but not limited to:

* Applicable statutory and regulatory requirements
* AIM internal requirements considered necessary
* Technical performance claims
* Identified quality and workmanship standards
* CGP-1002 Proposal/Quotation Development

Review of the requirements for products and services

Contracts or President ensures that it can meet the requirements for products and services to be offered to customers. Contracts or President conducts a review before committing to supply products and services to a customer, to include requirements specified by the customer, including the requirements for delivery and post-delivery activities, requirements not stated by the customer, but necessary for the specified or intended use, when known, requirements specified by our Company, statutory and regulatory requirements applicable to the products and services and contract or order requirements differing from those previously expressed.

Contracts requirements review always includes a capability analysis by our responsible management; to ensure that we have the ability, resources, and capacity to fully meet the requirements for the products and services offered to our customers. The capability analysis is conducted before AIM contractual commitments are approved and records are maintained. Each review includes, but is not limited to:

* Customer/contractual requirements, including delivery schedules and post-delivery (warranty or field service) activities
* Technical requirements not stated by the customer but necessary for intended use and performance (when known)
* AIM internal requirements
* Applicable statutory and regulatory requirements
* Other specified contract/purchase order terms and conditions
* CGP-1002 Proposal/Quotation Development

Contracts personnel ensures that contract or order requirements differing from those previously defined are resolved per CGP-1001. Contracts Review and any deviations from the contract are defined and approved by the customer and AIM.

Contracts retain documented the review of these requirements through approval signature on the contract or on any subsequent changes made to the contract.

Changes to requirements for products and services

 Contracts ensure that relevant documented information is amended, and that relevant persons (i.e., Manufacturing, Purchasing, Quality Assurance, etc.) are made aware of the changed requirements, when the requirements for products and services are changed. These changes are approved by Contracts (CGP-1001) and released for production through DCP-1001 Document Control and GMP-0003, Production Lot Traveler.

Contracts requirements review always includes a capability analysis by our responsible management; to ensure that we have the ability, resources, and capacity to fully meet the requirements for the products and services offered to our customers. The capability analysis is conducted before AIM contractual commitments are approved and records are maintained. Each review includes, but is not limited to:

* Customer/contractual requirements, including delivery schedules and post-delivery (warranty or field service) activities
* Technical requirements not stated by the customer but necessary for intended use and performance (when known)
* AIM internal requirements
* Applicable statutory and regulatory requirements
* Other specified contract/purchase order terms and conditions
* CGP-1002 Proposal/Quotation Development

Our Contracts Department ensures that contract/purchase order changes (requirements differing from those previously accepted by AIM) are resolved. Customer requirements are defined and confirmed before acceptance, when modified, or when our customer does not provide sufficient technical detail.

Contracts Department maintains records to indicate the results of requirements review and any new/changed requirements for contracted products and services. Change reviews result in ensuring that relevant AIM documentation is amended and that the affected AIM staff (i.e., Operations Management, Quality Assurance, Purchasing, etc.) is notified when product and/or service requirements are changed.

**8.3 Design and Development of Products and Services**

AIM Currently does not design any products, hardware, or software. AIM does design its internal procedures and forms which are controlled by DCP-1001, Document Control.

**8.4 Control of externally provided Processes, Products and Services**

General

Purchasing/Quality Assurance/Receiving Inspection ensures that externally provided processes, products, and services conform to requirements per PGP-1001, Purchasing System, and QAP-1503, Receiving Inspection.

Purchasing determines the controls to be applied to subcontracted processes, procured parts/components/materials/consumables, and outside services:

* Intended to incorporate, integrate, or include AIM’s products and services.
* Provided directly (drop-shipped) to the customer(s) on behalf of AIM.
* Evaluated as necessary to mitigate cost or schedule risks.

Purchasing working with Quality Assurance determines and applies criteria for the evaluation, selection, performance monitoring, and re-evaluation of suppliers and subcontractors based on their ability to provide products or services per AIM customer and internal requirements.

Purchasing working with Contracts/Quality Assurance determines the controls to be applied to externally provided processes, products, and services when products and services from external providers are intended for incorporation into our Company’s own products and services, products and services are provided directly to the customer(s) by external providers on behalf of our Company and if a process, or part of a process, is provided by an external provider because of a decision by our Company.

PGP-1001, Purchasing System is the control for our externally provided process. Control is driven by 4 factors:

1) Physical receipt of the product and the ability to refuse or after inspection using

QAP-1105, Control of Nonconforming Product as a basis for the return of the items affected.

2) Tracking of On-Time delivery performance

3) Initial approval of Vendor through PGP-2001, Supplier Evaluation approval/disapproval. PGP-2002, Supplier Control

4) Supplier Corrective actions written to Vendors through QAP-1201, Corrective

 actions

Purchasing working with Quality Assurance determines and applies criteria for the evaluation, selection, monitoring of performance, and re-evaluation of external providers, based on their ability to provide processes or products and services per requirements per PGP-1001, Purchasing. Purchasing/Quality Assurance retains documented information of these activities and any necessary actions arising from the evaluations per PGP-2001, Supplier Evaluation approval/disapproval.

Type and Extent of Control

Purchasing, Quality Assurance and Receiving Inspection ensure that externally provided processes, products and services do not adversely affect our Company's ability to consistently deliver conforming products and services to its customers. When Subcontracting is used as a means of formal Purchasing products or services, our Contracts Department support his activity.

 Purchasing/Contracts and Quality Assurance ensure that externally provided processes remain within the control of its quality management system, define both the controls that it intends to apply to an external provider and those it intends to apply to the resulting output. take into consideration the potential impact of the externally provided processes, products, and services on our Company’s ability to consistently meet customer and applicable statutory and regulatory requirements and the effectiveness of the controls applied by the external provider

If additional verifications or other activities are necessary to ensure that the externally provided processes, products, and services meet requirements, Contracts Planning and Quality Assurance along with Purchasing and Rec. Insp. will identify key characteristics of the product and arrange validation or test either provided from an external source or internally.

Control is driven by 4 factors for externally provided processes:

1) Physical receipt of the product and the ability to refuse or after inspection using

QAP-1105 Control of Nonconforming Product as a basis for return of the items affected.

2) Tracking of On-Time delivery performance

3) Initial approval of Vendor through PGP-2001, Supplier Evaluation Approval/disapproval.

4) Supplier Corrective actions written to Vendors through QAP-1201, Corrective

 Actions.

Information for External Providers

Purchasing/Contracts ensure the adequacy of requirements before their communication to the external provider per PGP-1001, Purchasing System. When subcontracting is used as a means of formal purchasing products or services, our Contracts Department supports this activity.

Purchasing/Contracts personnel communicate to external providers their requirements for the processes, products, and services to be provided, and the approval of through flow down of requirements and other detailed information listed on the purchase order.

PGP-1001, Purchasing System, QAP-1503, Receiving Inspection and QAP-1410 Analysis of Data control (On-Time Delivery data) drive this control and information.

**8.5 Production and Service Provision**

Control of production and service provision

 Manufacturing and Quality Assurance implement Production and Service provisions under controlled conditions as defined by the following Production and Service processes:

|  |  |
| --- | --- |
| **Standard Operating Procedure** |   |
| CGP-0001 | Contract Review Process Flow |
| CGP-0002 | Leadership Process Flow |
| CGP-0003 | Purchasing Process Flow |
| CGP-0004 | Receiving Process Flow |
| CGP-0005 | Material Control Process Flow |
| CGP-0006 | Production Process Flow |
| CGP-0007 | Management Review Process Flow |

 Controlled conditions include the availability of documented information that defines the characteristics of the products to be produced, the services, or the activities to be performed and the results to be achieved.

 AIM uses suitable monitoring and measuring resources for 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.

 AIM has established a suitable infrastructure and environment for the operation of processes and has appointed competent persons trained in their area to carry out the production of products or services. GMP-0003, Product Router defines the output and validates the processes used to carry out the production. Our Corrective actions system defines the changes or improvements to the production flow. Product validation is defined in QAP-1415, 1st article inspection as needed and tracked through FORM QTR 1, Quality Tracking (FAI & Customer Approval, 1st Article Inspection Log.

AIM uses all the processes listed in section 8.5 to meet customer requirements and overall control of production is driven by GMP-0003, Production Lot Traveler (Router) to define process steps through the product production process.

Identification and traceability

Manufacturing personnel (i.e., receiving inspection, assembly, and test/inspection) and Quality Assurance use suitable means to identify outputs when it is necessary to ensure the conformity of products and services per GMP-0017, Product Identification & Traceability.

Manufacturing personnel (i.e., receiving inspection, assembly, and test/inspection) and Quality Assurance identify the status of outputs for monitoring and measurement requirements throughout production and service provision per QAP-1410, Analysis of Data and QAP-1105, Nonconforming Material System.

Manufacturing personnel (i.e., receiving inspection, assembly, and test/inspection) and Quality Assurance control the unique identification of the outputs when traceability is a requirement, and retain the documented information necessary to enable traceability per GMP-0017, Product Identification & Traceability.

Property belonging to Customers or External Providers

Manufacturing personnel (i.e. receiving inspection, assembly, and test/inspection) and Quality Assurance personnel exercise care with property belonging to customers or external providers while it is under our Company's control or being used by our Company to identify, verify, protect, and safeguard customers’ or external providers’ property provided for use or incorporation into the products and services, per QAP-1701, Customer Property and AIM’s ERP system.

When the property of a customer or external provider is lost, damaged, or otherwise found to be unsuitable for use, the Quality Assurance or Contracts report this to the customer or external provider and retain documented information on what has occurred per QAP-1105, Nonconforming Material System and QAP-1701, Customer Property.

Preservation

Manufacturing personnel (i.e. receiving inspection, assembly, and test/inspection) and Quality Assurance personnel preserve the outputs during production and service provision, to the extent necessary to ensure conformity to requirements per GMP-3001, Packaging and Shipping, GMP-0006, Preservation of Product, GMP-0010, Stockroom Material Control and GMP-0007, Limited Shelf Life Material Control, QAP-1901, Foreign Object Elimination, Ultrasonic Cleaning System is used for product cleaning.

Post-delivery activities

Contracts/Manufacturing Management/Quality Assurance ensures our Company meets requirements for post-delivery activities associated with the products and services.

In determining the extent of post-delivery activities that are required, Contracts/Quality Assurance considers statutory and regulatory requirements, the potential undesired consequences associated with its products and services, the nature, use, and intended lifetime of its products and services, customer requirements, and customer feedback.

CGP-1001, Contracts Review identifies any post-delivery activities that are contractual. Quality Assurance is responsible for the collection of Customer satisfaction information (CGP-1003, Customer Satisfaction Survey).

Control of changes

Manufacturing, Contracts, Quality Assurance, and Documented Information review and control changes for production or service provision, to the extent necessary to ensure continuing conformity with requirements per DCP-1001, Documented Information.

Manufacturing, Quality Assurance, and/or Documented Information retain documented information describing the results of the review of changes, the person(s) authorizing the change, and any necessary actions arising from the review per DCP-1001, Documented Information.

**8.6 Release of Products and Services**

Our Manufacturing Department working with Quality Assurance has implemented planned arrangements, at appropriate stages, to verify that the product and service requirements have been met per GMP-0003, Production Lot Traveler (Router). Quality Assurance and Manufacturing Departments ensure inspection and test activities are conducted per GTP-1101, Test Hydro Pressure, QAP-1106, Test and Inspection codes.

The release of products and services to the customer do not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by a relevant authority and, as applicable, by the customer per GTP-1101, Test Hydro Pressure, QAP-1106, Inspection and Test Codes authorized by GMP-0003, Production Lot Traveler (Router) to approve a product for shipping.

Our Manufacturing and Quality Assurance Departments retain documented information on the release of products and services per QAP-1104, Quality Records, GMP-0003, Production Lot Traveler (Router) which includes evidence of conformity (final inspection or test) and traceability to the persons and the date it was authorized for release.

**8.7 Control of Nonconforming Outputs**

Our Operations/Quality Assurance/Receiving Inspection/Inspection personnel are responsible for ensuring that manufactured products that do not conform to their technical requirements are identified and controlled to prevent their unintended use or delivery.

The MRB is comprised of applicable management personnel for the product/service functions that are impacted by the nonconforming outputs. The MRB reviews the impacts/risks and dispositions of the nonconforming outputs in one or more of the following ways:

* Correcting the outputs and correcting the process that generated the nonconforming outputs.
* Ensuring that requirements are re-verified after corrections are made.
* Identification, segregation, and containment of nonconforming products.
* Return to supplier or suspension of procurement.
* Informing the customer and obtaining authorization for acceptance under concession.

Quality Assurance or Manufacturing (i.e. Receiving Inspection and Test/Inspection) takes appropriate action based on the nature of the nonconformity and its effect on the conformity of products and services per QAP-1105, Nonconforming Material System. This also applies to nonconforming products and services detected after the delivery of products, during or after the provision of services. QAP-1403 Customer RMA controls details for returned products that do not pass clients receiving inspection.

Quality Assurance or Manufacturing (i.e. Receiving Inspection and Test/Inspection) deals with nonconforming outputs by correction on the spot, segregation, containment, return, or suspension of the provision of products and services, informing the customer for obtaining authorization for acceptance under concession. (FORM 14-1105 Customer Deviation Request)

Conformity to production and service requirements is verified by Quality Assurance or Manufacturing (i.e., receiving inspection and Test/Inspection) when nonconforming outputs are corrected per QAP-1105, Nonconforming Material System, QAP-1503, Receiving Inspection, FORM 1069, Nonconforming material form or red tag. Inspection and Testing details the origination of the non-conforming material.

### Nonconforming Product and MRB Documentation

Quality Assurance maintains nonconforming product and MRB disposition records that:

* Describes the nonconforming output defect(s)
* Describes the MRB directions given, and actions taken (including re-verification)
* Describes any concessions accepted by the customer.
* Identifies the authority directing the action(s) for correcting the nonconforming output.

Refer to QAP-1105, Nonconforming Material System for additional information.

# Performance Evaluation

## Monitoring, Measuring, Analysis, and Evaluation

Refer to sections 8.1 and 8.5. Our Quality Assurance and Operations management has identified products and process outputs to be monitored and measured:

* Specific technical requirements
* Inspection, test, and verification methods
* When and where to monitor and measure
* Data analysis and evaluation

Quality Assurance and Operations management uses appropriate data to assist our management team in evaluating the performance and effectiveness of our quality management system (QMS). Refer to section 9.3 Management Review. Quality Assurance and Operations management maintain appropriate records of monitoring and measurement data.

###  Customer Satisfaction

Our Contracts/Quality Assurance and other staff with direct customer interface monitor our customers’ perceptions of the degree to which their needs and expectations have been fulfilled.

Contracts/Quality Assurance has determined and implemented effective arrangements for communicating with customers concerning:

* Product and company information
* Feedback from First Article items produced for new product runs.
* Inquiries, contracts, or order handling, including amendments.
* Customer feedback, including customer complaints.

See CGP-1003, Customer Satisfaction Survey, and QAP-1201, Corrective Action(s) System for additional information.

### Analysis and Evaluation

Our Quality Assurance department analyzes and evaluates appropriate data and information arising from monitoring and measurement. See QAP-1410, Analysis of Data, for additional information. The results of our analyses are used to evaluate:

* conformity of products and services.
* the degree of customer satisfaction.
* the performance and effectiveness of the quality management system.
* if planning has been implemented effectively.
* the effectiveness of actions taken to address risks and opportunities.
* the performance of external providers.
* the need for improvements to the quality management system.

Quality Assurance retains appropriate documented information as evidence of the results of the Analysis of Data report documented at least once per calendar year and approved/dated by Quality Assurance. This information is reviewed also during the Management Review process per QAP-1302, Management Review.

## 9.2 Internal Audits

Quality Assurance management plans and conducts internal audits at intervals to provide information on the quality management system (QMS). The internal audits are intended to evaluate conformance to our internal requirements and ISO 9001 requirements, and to provide our President/Vice-President Operations with insights if the QMS is being effectively implemented and maintained. Refer to QAP-1301, Internal Audits for additional information.

Quality Assurance has established and implemented our internal audit process to meet and maintain requirements: frequency, methods, responsibilities, planning and reporting (considering the importance of the functions being audited), changes affecting the QMS, and the results of previous audits. The process also includes:

* Defining the audit criteria and scope for each audit
* Selecting auditors and conducting audits to ensure objectivity and the impartiality.
* Reporting results of internal audits to our President/Vice-President Operations
* As required, following up on directed corrections and corrective actions.
* Maintaining records as evidence of the audit process and the audit results

Refer to QAP-1301, Internal Audits for additional information.

## 9.3 Management Review

Our President/Vice-President of Operations reviews our quality management system (QMS) at planned intervals, to ensure continuing suitability, adequacy, effectiveness, and alignment with our strategic direction, quality objectives, and business goals.

Our Management Review process is led by our President/Vice-President of Operations and is attended by Quality Assurance and Operations/Production Operations management and others as deemed necessary by the President/Vice-President of Operations. Our Management Reviews are conducted once per calendar year minimum. Records of the Management Review are documented, approved, and distributed by Quality Assurance.

Refer to QAP-1302, Management Review for additional information.

### Management Review Inputs

Our Management Reviews are planned and conducted to provide insights into our QMS performance and to provide relevant data for management decision-making. Our Management Review process takes into consideration the status of directed actions from previous management reviews, and external and internal changes relevant to AIM quality, QMS performance, and effectiveness. Management Review assessments include, but are not limited to:

* Trend analyses:
	+ Customer satisfaction and feedback
	+ Performance of and feedback from suppliers/subcontractors
	+ Extent to which quality objectives have been met.
	+ Process and business function performance
	+ Conformity of products and services
	+ Nonconformities and corrective actions
	+ Monitoring and measurement results
* Internal audit results (and if applicable, external audit results)
* Adequacy of resources
* Effectiveness of actions taken to address risks and opportunities.
* Opportunities for improvement

### Management Review Outputs

The outputs of our Management Review include decisions and actions related to:

* Opportunities for improvement
* Changes needed to the quality management system.
* Resource needs

Quality Assurance maintains records of the results of management reviews.

Refer to QAP-1302, Management Review for additional information.

# Improvement

## 10.1 General

Our President/Vice-President of Operations working with Quality Assurance and functional department management personnel determines and selects opportunities for improvement and implements actions to meet customer requirements and enhance customer satisfaction. This process includes but is not limited to:

* Improving machining products and services to meet requirements and address changing market needs and expectations.
* Correcting, preventing, or reducing undesired process outputs
* Improving the performance and effectiveness of the quality management system (QMS)

Our process improvements can be realized through defect correction, permanent corrective actions, and continual improvement; and potentially by incorporating technology change, innovation, and re-organization.

Refer to QAP-1103, Continual Improvement, and QAP-1201, Corrective Action(s) System for additional information.

## 10.2 Nonconformity and Corrective Action

When a nonconformity occurs, including any arising from external complaints, our Quality Assurance department responds:

* React to the nonconformity:
	+ Take action to control and correct it.
	+ Deal with the consequences
* Evaluate action(s) to eliminate the cause(s) of the nonconformity, to prevent recurrence, by:
	+ Review and technical analysis
	+ Determining the root cause(s)
	+ Determining if similar defects exist or could potentially occur.
* Directing and implementing action(s) needed.
* Reviewing the effectiveness of any corrective action(s) taken
* Providing updated inputs to risks and opportunities determined during planning.
* Making changes to the quality management system (QMS), if necessary
* Ensuring corrective actions are appropriate and adequately address the impact of the defects.
* Any subcontracted work shall be inspected to ensure the nonconforming product is not delivered to customers.

Refer to QAP-1105, Nonconforming Material System for additional information and FORM-1069, Defect Report.

Our Quality Assurance department retains corrective action records as evidence of:

* The nature of defects and subsequent management actions directed and taken.
* Results of corrective action(s).

Refer to QAP-1201, Corrective Action(s) System for additional information.

## 10.3 Continual Improvement

President/Vice-President of Operations working with Quality Assurance and functional department management personnel strives to continually improve the suitability, adequacy, and effectiveness of our quality management system (QMS), by using results from analysis and evaluation and management review outputs, to determine if there are needs or opportunities to address as part of continual improvement.

Refer to QAP-1103, Continual Improvement for additional information.

# APPENDIX A - **AIM Machining Process Flow**



# APPENDIX B - QMS Organizational Chart

President (\*)

Quality Assurance (\*)

Production Operations (\*)

Business Operations

1. Receiving Insp.
2. Test
3. Final Insp.
4. First Article Insp.
5. Receiving
6. Stockroom
7. Programming
8. Fabrication Operators:
* CNC Machining/Lathe
* Welding
* Finishing
1. Assembly Operators
2. Packaging & Shipping
3. Shipping Inspection
4. Maintenance

Quality Council (\*)

Inspection

(QC)

1. Document Control
2. Quality Assurance:
* Internal Audits
* Corrective Action(s) System
* Customer Complaints
* Calibration
* Training; QMS
* Quality Records
* Customer Property
* Supplier Evaluation

(\*) Indicates a member of the Quality Council led by our President/Vice-President Operations.

Vice-President

Operations (\*)

1. Contracts
2. Program Management
3. Purchasing
4. Finance/Accounting
5. Human Resources
6. Security
7. Risk Management
8. IT Support