

ACCURA PRECISION INC.

Document Number: 971000-0000

Revision: C0

Originator: Thomas Le

Approvals

Department	Name	Approval Date
Administration	Peter Matkovic	7/8/99
Administration	Kate Matkovic	7/8/99
Manufacturing	Brock Kennedy	7/8/99
Quality	Damir Fific	7/8/99

Modification History

Rev	RCN #	Date	Originator	Comment
A0				
B0				
C0	none	7/7/99	Thomas Le	Update previous QA manuals to comply with ISO standard

ACCURA PRECISION INC. QUALITY MANUAL**TABLE OF CONTENTS**

1. Purpose
2. Scope
3. Accura Precision Inc. Quality System
 - 3.1 Management Responsibility
 - 3.2 Quality System
 - 3.3 Contract Review
 - 3.4 Document and Data Control
 - 3.5 Purchasing
 - 3.6 Purchaser Supplied Product
 - 3.7 Product Identification and Traceability
 - 3.8 Process Control
 - 3.9 Inspection and Testing
 - 3.10 Control of Inspection, Measuring, and Test Equipment
 - 3.11 Inspection and Test Status
 - 3.12 Control of Nonconforming Material
 - 3.13 Corrective and Preventive Action
 - 3.14 Handling, Storage, Packaging, Preservation and Delivery
 - 3.15 Control of Quality Records
 - 3.16 Internal Quality Assessments
 - 3.17 Training
 - 3.18 Statistical Techniques

1. PURPOSE:

This document is the definition of the quality management system for Accura Precision Inc. It defines Accura's policy and objectives for, and commitment to quality. Accura uses this system to ensure that products and services conform to specified customer and industry requirements.

2. SCOPE:

This manual is the highest level description of the Quality System. The general operating procedures and detailed work instructions that describe the daily operation of the quality system are documented and maintained as required.

Products manufactured and services provided by Accura Precision Inc. fall under the scope of this Quality Manual.

3. ACCURA PRECISION INC. QUALITY SYSTEM

3.1 MANAGEMENT RESPONSIBILITY

Management Responsibility Policy

It is the responsibility of Accura Precision Inc. management to deploy the Company Purpose, Mission, and Values throughout the organization for use as a tool to achieve customer satisfaction through continuous improvement.

Management Responsibility in Practice

Purpose

To provide quality service and creative solutions to our customer in the field of machining, tooling, volume manufacturing and prototype.

Mission

Be the supplier of choice by leading all competitors in customer satisfaction

Values

- Dedication to customer success.
- Innovation and learning
- Partnerships
- Teamwork

Organization At Accura, every employee is responsible for the quality of the products and services provided to our customers. Each employee has the responsibility and authority to:

- a) initiate action to prevent the occurrence of any non-conformities relating to product, process, and quality system;
- b) identify and record any problems relating to the product, process, and quality system;
- c) initiate, recommend, or provide solutions through designated channels;
- d) verify the implementation of solutions;
- e) control further processing, delivery, or installation of nonconforming product until the deficiency or unsatisfactory condition has been corrected.

Management Review: Accura 's management with executive responsibility reviews the quality system on a regular basis, at least annually, through Operations Reviews and a review of the Quality Manual. Records of these reviews are maintained for at least one year.

Management Responsibility References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.2 QUALITY SYSTEM

Quality System in Practice

The Quality Manual provides the highest level view of Accura's quality system. Supporting these policies are numerous departmentally-owned procedures.

The role of the Quality organization at Accura is to provide skills, knowledge, and facilitation to enable continuous improvement in processes, products, and services for highest customer satisfaction. The focus is on prevention and improvement, rather than policing and inspection.

3.3 CONTRACT REVIEW

Contract Review Policy

Accura views contract review as a key element in order to meet or exceed customers' expectations, ensuring continued customer satisfaction.

Contract Review in Practice

3.3.1 General: Accura has established and maintained documented procedures for contract review and the coordination of these activities.

3.3.2 Review: Before acceptance of a contract or order, Accura reviews it to ensure that requirements are adequately defined, documented and agreed to, to ensure that any differences are resolved, and to ensure that we have the capability to meet the contract or order requirements.

3.3.3 Amendment to Contract: Procedures are in place to identify how changes are made to an existing contract or order, and how those changes are disseminated and implemented throughout the appropriate functional organizations.

3.3.4 Records: Records of contract review are maintained.

Contract Review References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.4 DOCUMENT AND DATA CONTROL

Document and Data Control Policy

It is Accura's policy to maintain a distributed system of documentation and data control for those areas that directly affect the quality of products and/or services provided to our customers. Accura's product documentation is controlled by a formal Revision Change Notice (RCN) Procedure, while process documentation and data are either locally or centrally controlled depending on the level of use. Controlled documents and data are to be accurate, current, and readily available to the user. Lower levels of documentation can be referenced from higher level documents.

3.4.1 Document and Data Control in Practice

Document control throughout Accura is described in procedures relevant to each organization. These procedures include the following:

- A master list, or equivalent on-line mechanism, of all documents that fall within the scope of local procedures, and their current revision level. (This may be established by having current versions in soft copy and available to users.)
- A description of how document approval is established prior to its use.
- A description of how changes to documents are approved.
- A description of how documents are distributed to those who need them, and how inadvertent use of obsolete documents is prevented.
- A means of ensuring document access by everyone who needs them; i.e., all departments that are dependent on the content of controlled documents for carrying out their responsibilities.
- A provision for the control of both process and product documents, where applicable.
- A means for ensuring up-to-date revisions of standards, and codes are available.
- Inclusion or referencing of procedures for backup/disaster recovery.

3.4.2 Document and Data Approval and Issue: Releases of controlled product or process documentation are reviewed and approved by the appropriate personnel prior to implementation, and are available at locations where operations essential to the effective functioning of the quality system are performed. As appropriate, old revisions are obsoleted and/or removed. Master Files, Master Documentation Lists, and the on-line system are updated to reflect the current revision of both documents and data, as appropriate.

Down-revision, or other obsolete documentation that may be retained for special purposes, shall be assured against unintended use.

3.4.3 Document and Data Changes: Product and process documentation is controlled by revision levels, which are updated as required by change. Changes to both documents and data are reviewed and approved by the appropriate personnel prior to issue.

The nature of changes, where practicable, is identified in the document or the appropriate attachments.

Document and Data Control References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.5 PURCHASING

Purchasing Policy

Accura strives to select suppliers that provide the highest quality products and services.

Purchasing in Practice

3.5.1 General: There are tools and processes established which enable Accura to ensure the conformance of purchased products to specification.

3.5.2 Assessment of Sub-Contractors (Suppliers): Supplier selection methods are established to ensure that long-term supplier relations may be built. Suppliers are evaluated and selected based on their ability to meet product requirements. The type and extent of control exercised is based on the functional or organizational capability of the supplier or sub-contract vendor for the product or service being supplied. Key supplier ratings and other records of supplier performance are maintained.

3.5.3 Purchasing Data: Purchasing documents contain information necessary to ensure that suppliers provide product to Accura's customer specification. The buyer generating the purchase order has the responsibility to ensure that the purchase order is accurate and meets company needs.

3.5.4 Verification of Purchased Product: Where Accura elects to perform source inspection at its suppliers, such inspection shall be appropriately specified. In the case where Accura's customer elects to perform inspection, Accura maintains the responsibility and ownership of the quality and functionality of the product or component produced.

Purchasing References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.6 PURCHASER SUPPLIED PRODUCT

Purchaser Supplied Product Policy

Purchaser supplied product is subject to the same policies and practices as Accura purchased material.

Nonconforming or discrepant purchaser supplied product follows the same process flow as Accura purchased product.

3.7 PRODUCT IDENTIFICATION AND TRACEABILITY

Product Identification and Traceability Policy

Accura provides product identification and traceability. Product identification ensures that the correct process flow is followed. Product traceability is essential to a successful customer service and support program.

Product Identification and Traceability in Practice

Part, product, or component identification is achieved at Accura through the use of Customer name, part numbers, drawings, and specifications which are under change and revision control.

Additional product identification and traceability is obtained by using travellers or assembly and test records on Accura's manufacturing floor. Appropriate assembly and test records are maintained for each Accura's Manufacturing process. Traceability is provided through the use of identified lot with its unique traveller placed on major sub-assemblies or chassis.

Product Identification and Traceability References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.8 PROCESS CONTROL

Process Control Policy

A key element of Accura Precision commitment to producing high quality product is the use of process controls. Our practice is to define and document the process, then measure and improve it until superior performance is achieved.

Process Control in Practice

Work instructions and process checklists are provided to guide employees in appropriate process operations.

Manufacturing support processes are designed, implemented, and maintained to provide consistently high quality products and services.

Key business processes employ the use of statistical process control tools, as appropriate.

Records are maintained for qualified processes, equipment, and personnel, as appropriate.

Process Control References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.9 INSPECTION AND TESTING

Inspection and Testing Policy

Providing the highest quality products to customers is Accura's objective. It is Accura's policy to build quality into the process. Inspection and tests are performed where they add value and to identify opportunities for improvement. The intent is to assure that product conforms to requirements.

Inspection and Testing in Practice

4.10.2 Receiving Inspection and Testing: Incoming material is routed through the inspection area. This material is not available for production use until it has been inspected and approved. Records are maintained.

4.10.3 In-Process Inspection and Testing: Appropriate in-process inspection and testing is performed as required. Controls are in place to ensure product is tested and accepted at each stage before moving to the next stage.

Inspection and testing are performed at suppliers with direction from Accura. Material is identified to show successful completion of the specified test or verification/ inspection.

Safety testing is performed on products as required.

Nonconforming product is segregated or identified and moved, after appropriate analysis, into the Non-Conforming Material Review area for each production cell.

4.10.4 Final Inspection and Testing: Final testing / verification is performed to ensure that product function to specification.

4.10.5 Inspection and Test Records: Inspection, first article, and test records are maintained as required.

Inspection and Testing References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.10 CONTROL OF INSPECTION, MEASURING, AND TEST EQUIPMENT

Inspection, Measuring, and Test Equipment Policy

The use of properly calibrated and properly functioning inspection, measuring and test equipment is an essential part of ensuring that the product produced meets all required specifications.

Inspection, Measuring, and Test Equipment in Practice

Accura has a calibration program to assure that the performance of inspection, measuring, and test equipment used in applications affecting product quality conform to specification. Where national standards exist, equipment on the calibration program is calibrated to those standards. Quality records are maintained.

When, during calibration, a piece of equipment is found to have been operating outside of its specified limits, the results of all inspections and/or tests conducted with the equipment since its previous calibration must be assessed as to their validity, and the results of the assessment and any resulting action will be documented.

Inspection, Measuring, and Test Equipment References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.11 INSPECTION AND TEST STATUS

Inspection and Test Status Policy

Product is identified to clearly indicate the current test or inspection status as necessary. This practice is in place at our sub-contractors and within Accura.

Inspection and Test Status in Practice

The inspection and test status of Accura products is defined to ensure that only product which has passed the required inspections and/or tests is used. Inspection and test status is established by means of physical location, logs, tags, stamps, on-line records, or other means, as appropriate.

Inspection and Test Status References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.12 CONTROL OF NONCONFORMING MATERIAL

Control of Nonconforming Material Policy

Only materials meeting Accura's customer standards are to be used by Accura or delivered to customers. Nonconforming material is material that does not conform to Accura and /or customer specifications or drawings, does not perform per specification or in normal practice or is deemed unusable for any reason.

Control of Nonconforming Material in Practice

3.12.1 General: Accura has established and maintains procedures to ensure that product that does not conform to established specifications, does not perform as required, or is deemed unusable for any reason, is prevented from inadvertent use or installation. The procedures provide for identification, documentation, evaluation, segregation, and disposition of all nonconforming product and/or notification to the functions concerned.

3.12.2 Review and Disposition of Nonconforming Product: When nonconforming product is found, it is reviewed, evaluated, and dispositioned in accordance with the documented procedures, where the responsibility for the review and dispositioning of the product has been defined.

Control of Nonconforming Material References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.13 CORRECTIVE AND PREVENTIVE ACTION

Corrective and Preventive Action Policy

Accura's philosophy of continuous improvement is supported through the implementation of several corrective and preventive action processes.

Corrective and Preventive Action in Practice

Accura maintains procedures for implementing corrective and preventive action in many areas throughout the company. Any corrective or preventive action taken to eliminate the causes of actual or potential non-conformities shall be to a degree appropriate to the magnitude of problems and commensurate with the risks encountered.

Appropriate controls and measurements are in place to ensure effectiveness of corrective and preventive actions.

Corrective and Preventive Action References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.14 HANDLING, STORAGE, PACKAGING, PRESERVATION, AND DELIVERY

Material Control Policy

The handling, storage, packaging, preservation, and delivery of Accura's customer products and components are an integral part of Accura processes, assuring that our customers are delivered high-quality products.

Material Control in Practice

3.14.1 General: Procedures and practices have been established for the handling, storage, packaging, preservation, and delivery of material.

3.14.2 Handling: Material handling equipment and practices are in place to prevent damage or deterioration.

3.14.3 Storage: The Accura stockroom is a controlled area with limited access. Material is stored in such a manner as to prevent damage or deterioration. Accura's first-in-first-out (FIFO) policies govern how material is stored. The FIFO policy ensures that shelf life or deterioration of material is not an issue.

Qualified personnel properly transact material entering or leaving a stock location.

3.14.4 Packaging: Appropriate controls are in place to ensure packaging, packing, and marking processes ensure conformance to specified requirements. The controls are designed to ensure that products reach the customer in the same condition as when they left Accura.

3.14.5 Preservation: Material and product with shelf-life requirements shall be adequately controlled.

3.14.6 Delivery: Material and product will be delivered to customer site with proper Packing slip . Customer feedback will be resolved in a controlled manner and records will be maintained for at least one year.

Handling, Storage, Packaging, Preservation, and Delivery References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.15 CONTROL OF QUALITY RECORDS

Quality Records Policy

It is the policy of Accura to maintain appropriate records to demonstrate the achievement of quality and effectiveness of our overall Quality System.

Quality Records in Practice

Each functional group is responsible for maintenance of its internal quality record system. This includes methods for identification, collection, indexing, access, storage (hard copy or on-line), filing, retrieval, maintenance, and disposition. Electronic media may be used, as appropriate. Quality records are maintained for five years unless otherwise specified.

Quality records for the current fiscal year are to be readily accessible unless otherwise specified. Older records may be stored off-site. They should be maintained in a manner that ensures integrity and prevents loss or damage.

Control of Quality Records References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.16 INTERNAL QUALITY ASSESSMENTS

Internal Quality Assessment Policy

Accura Precision is committed to continuous improvement in business practices. Assessments are used to gauge whether “best practices” are in place, to determine if they are followed, and to ensure that they are effective. Corrective and preventive action is initiated where opportunities for improvement arise.

Internal Quality Assessment in Practice

The Quality Assurance Manager is responsible for the overall internal assessment process. This includes scheduling the assessments, ensuring that results are presented to management, ensuring corrective action is assigned and facilitated where “exceptions to best practices” are identified, and verifying that corrective action is implemented and effective. Records of internal assessment results are maintained.

Internal Assessment References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.17 TRAINING

Training Policy

Accura's high-growth, productive environment requires that we hire people with the necessary skills, experience, and education to perform functions that directly contribute to the quality of our products and services. We provide training, tools, and the assistance of fellow employees to improve individual skills. At Accura, training is a process, not an event.

Training References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.

3.18 STATISTICAL TECHNIQUES

Statistical Techniques Policy

At Accura what gets measured, gets improved. Accura's focus on prevention is supported by the intelligent application of statistical techniques. Information allows us to make decisions and set policy based on fact.

Statistical Techniques in Practice

Appropriate statistical techniques, including Statistical Process Control (SPC), are identified, established, and documented throughout Accura . Key business processes employ the use of SPC tools as appropriate. Trend charts, control charts, and Pareto charts are utilized to demonstrate process performance. Data are collected and analyzed. Corrective action is taken as appropriate.

Statistical Techniques References

Refer to the appropriate Master Documentation List or equivalent on-line mechanism.