Q.C. Copy

ARCHERS PRECISION INC.

QUALITY ASSURANCE
AND
QUALITY CONTROL PLAN

ARCHERS PRECISION INC.

1. INTRODUCTION

This document describes the quality assurance and quality control (QA/QC) plan employed at Archers Precision, Inc. (hereafter referred to as API), to assure compliance with customer requirements.

The plan provides API personnel and customers with a description of the company's policies and activities for maintaining an effective and economical QA/QC system.

Procedures for implementing the plan described herein are established as dictated by the complexity of the product design, manufacturing techniques employed, and customer requirements.

2. SCOPE

A. This QA/QC plan encompasses management, planning design, procurement, fabrication, inspection, testing, and all related quality requirements.

B. The QA/QC plan is designed to assure that equipment or services manufactured or performed at API or at supplier facilities are subject to adequate QA/QC controls to assure compliance with customer requirements. The plan provides for early detection of discrepancies and positive corrective action.

C. Written process, inspection, test, and operational procedures are prepared to supplement customer drawings and specifications to the extent necessary to ensure quality or compliance with customer requirements.

3. ORGANIZATION

A. API's QA/QC Organization includes a Quality Manager and employees designated to perform functional responsibilities under the Quality Manager's direction in Planning, Manufacturing, Inspection, Testing, and Document Control.

B. The Quality Manager reports directly to the General Manager and has the authority and organizational freedom to identify QA/QC problems, initiate solutions and verify the results.

C. The employees designated to perform QA/QC functions under the direction of the Quality Manger are responsible only to the Quality Manager and are independent of any conflicting management authority while performing the QA/QC functions.

4. RESPONSIBILITIES

API's QA/QC Plan, and in particular the Quality Manager, is responsible for:

A. Planning, developing, initiating, co-ordinating, implementing, and maintaining the most effective and efficient procedures for optimum quality assurance and control.

B. Supplier quality evaluation, verification and corrective action.

RESPONSIBILITIES CONTINUED…

C. Periodic inspection of all special and standard gauges, test equipment, and tooling used in manufacturing, testing, and inspection.

D. Assuring that QA/QC personnel are capable of rendering an unbiased decision to accept or reject any item reviewed, inspected or tested.

E. Review of QA/QC records, corrective actions and effectiveness.

F. Maintenance of QA/QC records.

G. Co-ordination with customers to resolve disposition of non-conforming items.

H. Periodic audits of QA/QC actions to verify compliance with customer requirements.

5. DOCUMENT CONTROL

A. The procedures established to control the issuance of all quality related documents are the responsibility of QA/QC.

B. Sales is responsible for forwarding the latest drawings, specifications and changes to procurement and manufacturing, and for verifying the latest documents with the customer or engineering.

C. All documentation for a specific job is located in job numbered files and is available for the QA/QC or customer review.

D. All procedures, planning and other documents are checked to verify compliance with the applicable issue or revision of the customers requirements.

6. PROCUREMENT

A. QA/QC will evaluate the suppliers' capability to meet the customer's quality requirements.

B. Purchasing is responsible for furnishing their supplier with current revisions of all required drawings, specifications and necessary customer requirements; including materials or process certification, physical and chemical analysis, functional or performance requirements, source inspections, etc.

C. Purchasing is responsible for determining that the supplier is aware of all quality requirements and supplier furnished quality documentation.

D. QA/QC will review procurement procedures to assure compliance and adequacy of quality requirements.

7. RECEIVING INSPECTION

A. All Parts and materials are received and inspected by Receiving Inspection.

B. Receiving Inspection will not accept parts or materials unless the proper documentation accompanies the parts or materials.

C. Receiving Inspection will document the results of all inspections and tests required by the customer.

RECEIVING INSPECTION CONTINUED

D. Rejected items are identified and are held segregated until disposition is made by API 's customer.
E. Suppliers will be notified of all Receiving Inspection rejections.
F. Corrective action to prevent recurrence of discrepancies is the responsibility of Purchasing and QA/QC.
G. A periodic review is made of suppliers capabilities by QA/QC to detect quality related problems.

8. MATERIAL IDENTIFICATION

A. Materials are identified by the applicable type or certification.
B. Copies of all certifications are filed in the job folder and are available for review by the customer.
C. Only Received Inspection accepted and identified materials are released for production.
D. Verification of suppliers certifications are accomplished when deemed necessary by QA/QC or customer requirements.
E. Unidentified material is segregated from the normal flow of production materials until conformance of material to all specifications is established.

9. MANUFACTURING INSPECTION

A. All manufacturing planning, CNC programs, fixtures, templates, etc., are independently checked prior to release to manufacturing. No production runs are made until first article inspection is completed and found acceptable.
B. All machine set-ups, tooling, fixtures, etc., are independently checked to assure that acceptable parts will be produced. In-process inspections are performed at adequate intervals to provide early detection of processes producing non-comforming parts.
C. Inspection records, as required, are filed in the job folder and are available for customer review.
D. Rejected items are clearly identified by a tag or other applicable means and moved to an area apart from the normal flow of in-process materials.
E. Corrective actions and follow-up actions to prevent the recurrence of non-conforming processes is the responsibility of QA/QC.
F. During the processing of material, a job traveler system is used to assure proper sequence and completion of production and inspection activities.

10. FINAL INSPECTION AND TESTING

A. Final inspection and testing is performed as required, by inspection and production personnel.
B. QA/QC performs surveillance of the inspection and testing in accordance with the specified procedures.
C. All records are filed in job folders and are available for customer review on request.

FINAL INSPECTION AND TESTING CONTINUED...

D. Corrective actions and follow-up actions to prevent recurrence of non-conforming components is the responsibility of QA/QC.

E. Final inspection and testing is performed 100 percent or on a sample basis, as applicable to the complexity of the items. Produced, the quantity and/or customer requirements. Inspection and testing will be performed in accordance with customer supplied procedures, when available.

F. Rejected items which are subjected to any repair or rework are resubmitted to final inspection and testing for verification of the adequacy of the repair or rework.

11. NON-COMFORMING ITEMS

A. All non-conforming supplies, parts or materials are placed in a segregated area. The items are clearly identified by job number, part number, reason for rejection, Inspector's name and date inspected.

B. Non-conforming items are not released for shipment to the customer without specific instructions from the customer to submit the non-conforming items.

12. EQUIPMENT CALIBRATION AND CONTROL

A. All special tools, fixtures, gauges, and measuring equipment are identified.

B. Each new, or reworked tool, fixture, gauge, and items of measuring equipment is inspected prior to issue for use.

13. HANDLING, STORAGE AND SHIPPING

A. No items will be shipped until all required inspections and tests have been completed in accordance with customer requirements.

B. All items are packaged in a manner that prevents damage or deterioration while in storage or transit.

C. Any required special packaging will be controlled and will be as specified by the customer.

D. Special procedures for handling, cleaning, packaging, storing and shipping will be written as required by the customer or the nature of the job.

14. QUALITY QA/QC RECORDS

A. All QA/QC records are maintained in the job file.

B. Quality Assurance records include those required by API and the customer and may include:

1. Inspection
2. Inspection and test reports
3. Material tests and certification

QUALITY QA/QC RECORDS

4. Quality Instructions and Procedures
5. Non-conforming reports
6. Quality Audits
7. Process Control Sheets

15. QUALITY AUDITS

Quality audits are periodically performed to verify compliance with all aspects of the QA/QC Plan and to determine the effectiveness of the Plan. The frequency is determined by the type of activity and part performance records. The results of the audits are utilized to determine corrective and follow-up action to be implemented by QA/QC.

Certificate Of Conformance

Purchase Order Number: _____

Part Number: _____

REV: _____

Quanity Shipped: _____

Date Shipped: _____

Reference Specification: _____

The undersigned hereby certifies that the above listed sheet metal parts have been manufactured, inspected and conform to specifications as stated on the purchase order, applicable drawings and supplied requirements.

Objective evidence of inspection and/or testing is on file and available for your review upon request.

Signature: _____

Title: _____

Notes: _____

12700 SW Hall Blvd. Tigard, OR 97223 (503) 968-9144 Email: Archersqa@gmail.com
www.archersprecision.com

IN-HOUSE REJECTION REPORT

Customer _____ P/N#_____ Rev_____

W/O #_____ Date_____ Inspector_____

Reason for Rejection:_____

Summary:_____

RETURN MATERIAL AUTHORIZATION

RMA#_____

Customer_____ Date_____

Contact_____

Item NO.	Part#	Description	Qty.	Cost Each	Total Cost

Reason For Return_____

Upon Arrival Deliver to:_____

Original PO#_____ Original Ship Date_____

Replacement PO#_____ Replacement Date_____

Comments_____

Approval_____ Date_____

ARCHERS

PRECISION SHEET METAL, INC.

10950 S.W. 5th Street, Suite 215 • Beaverton, Oregon 97005
Telephone (503) 643-6578 • Fax (503) 646-7044

DISCREPANT MATERIALS REPORT

W.O.#	P.O.#	DMR#	DATE
CUSTOMER/VENDOR	P/N		REV.
QUANTITY RECEIVED	QUANTITY INSPECTED	QUANTITY REJECTED	INSPECTOR

DISCREPANCY-

MRB DISPOSITION			OPERATOR/OPERATIONAL AREA
USE AS IS	REWORK	SCRAP	

QUALITY ASSURANCE MGR.	OPERATIONS MGR.	SALES MGR.

CORRECTIVE ACTION REQUIRED - Please return by:

REWORK COMPLIANCE INSPECTION	DATE	MRB ACCEPTANCE DATE	

White Copy - Inspection Dept. Yellow Copy - Master File Pink Copy - Customer/Vendor Copy