



QUALITY MANUAL

NORTHWEST MACHINE WORKS, INC.
2318 Grand Park Drive
Grand Junction, Colorado 81505

PHONE (970) 242-1356
FAX (970) 241-1825

Approved by:

Fred Soinski
President

Paul Checonsky
Quality Control Manager

Collectively the "Management"

Issue Date: June 01, 2005
Revision: January 02, 2020
Effective Date: January 02, 2020

Document Number: M01

0.1 TABLE OF CONTENTS

SEC.	TITLE OF SECTION	SECTION	APPLICABLE PROCEDURE
1.0	Scope		
2.0	Quality Policy	4.1.1	P02
3.0	Organization Chart	4.1.2	P02
4.0	Quality Management System Requirements	4.0	P02
4.1	Management Responsibility	4.1	P01
4.2	Quality Management System	4.2	P02
4.3	Contract Review	4.3	P03
4.4	Design Control	4.4	P04
4.5	Document and Data Control	4.5	P05
4.6	Purchasing	4.6	P06
4.7	Control of Customer Supplied Product	4.7	P07
4.8	Product Identification and Traceability	4.8	P08
4.9	Process Control	4.9	P09
4.10	Inspection and Testing	4.10	P10
4.11	Control of Inspection, Measuring, and Test Equipment	4.11	P11
4.12	Inspection and Test Status	4.12	P12
4.13	Control of Nonconforming Product	4.13	P13
4.14	Corrective Action	4.14	P14
4.15	Handling, Storage, Packaging, Preservation, and Delivery	4.15	P15
4.16	Control of Quality Records	4.16	P16
4.17	Training	4.17	P17
5.0	Quality Manual Changes		P05

1.0 SCOPE

This quality manual describes the quality management system of Northwest Machine Works, Inc. "Controlled" copies of this quality manual shall be electronic and one hard copy shall be located in the Quality Control office. All other copies of this quality manual are considered "Uncontrolled."

This manual shall be available to all employees, customers, and suppliers. This manual is produced and maintained by Management. Management has exclusive responsibility for the quality manual, its contents, and changes. Alterations are not permitted without prior approval of Management and must be applied through the document and data control system contained within this quality manual.

2.0 QUALITY POLICY (P02)

"Quality means continuous improvement in all areas to meet our customers' expectations."

Northwest Machine Works, Inc. takes great pride in the quality produced and passed on to the customer. Our objectives are to continually improve our processes and to provide quality products and services to meet or exceed our customers' requirements. Management shall be responsible for ensuring the quality policy is maintained, accessible, and understood by all employees.

3.0 ORGANIZATION CHART (P02)

See Appendix 1

4.0 QUALITY MANAGEMENT SYSTEM REQUIREMENTS (P02)

4.1 MANAGEMENT RESPONSIBILITY (P01)

Company Policy

Management is ultimately responsible for establishing, implementing, and maintaining the quality management system. Specific responsibilities include: formulating the quality policy and the organization, assigning authorities and responsibilities, appointing the management representative, periodically reviewing the quality management system, and making available the resources necessary to maintain the system.

Management Representative

The Quality Control Manager is the Management representative who has the authority and responsibility to ensure that the quality management system is maintained and implemented.

Organization

Interrelations of employees who manage, perform, and verify work-affecting quality are defined in the organization chart Appendix 1. The quality management processes are defined in Appendix 2. Each employee defined in the organization chart shall report directly to Management.

Management Review

Management shall review the quality management system periodically. The purpose of the review shall be to assess the effectiveness and continuing suitability of the system.

4.2 QUALITY MANAGEMENT SYSTEM (P02)

Northwest Machine Works, Inc.'s quality management system is documented in the quality manual, procedures, process flow charts, forms, and customer technical specifications and drawings. These documents collectively define a quality management system as a means of ensuring that products conform to specified requirements.

Management shall be responsible for ensuring the quality management system documents are readily available to all employees who are responsible for compliance with customer requirements. The quality management system documents shall also be readily available to customer and/or regulatory agency representatives.

4.3 CONTRACT REVIEW (P03)

The system for contract review shall be defined upon the applicable customer's specifications. Review shall be conducted before acceptance of a customer's contract, contract change, or other required change. The review shall be performed to ensure that customer requirements are adequately defined, are well understood, and to ensure that the company has the capacity and capability to meet the contract requirements.

4.4 DESIGN CONTROL (P04)

All designs shall be approved and documented by the Management team. All Northwest Machine Works, Inc. drawings, blueprints, sketches and drafts shall be controlled and follow travelers through the shop back to the Quality Control Department.

4.5 DOCUMENT AND DATA CONTROL (P05)

All quality management system documents shall be reviewed, approved, and implemented in a timely manner. Document and data changes are reviewed and authorized by the same authority that issued the original document. Documents and data (including electronic) shall be released only after approval.

Revised documents are distributed and obsolete documents are removed from use. A master file of all internally generated documents and document changes shall be maintained.

Customer furnished documents and data revisions shall be controlled per purchase order requirements. All standards and specifications that are not controlled per the customer's purchase order shall be maintained per the latest industry standard.

Records of document and data changes shall be maintained in accordance with the "Record Control" section of this quality manual. When required, document and data control changes shall be coordinated with the customer and/or regulatory authority.

4.6 PURCHASING (P06)

Purchasing documents shall clearly define the product ordered, including applicable specifications, latest revisions, and other relevant data. Products shall be verified upon receipt.

Northwest Machine Works, Inc. shall ensure, when required, that customer-approved sources are utilized.

Records of purchase orders, reviews, approvals, and corrective actions (if applicable) shall be maintained in accordance with the "Record Control" section of this quality manual.

4.7 CONTROL OF CUSTOMER SUPPLIED PRODUCT (P07)

Customer supplied products are reviewed and stored in the same manner as other purchased products unless specified by the customer. The customer shall be contacted in the event of loss, damage, deterioration, or unsuitability of the product.

Nonconforming product shall be handled in accordance with the "Control of Nonconforming Product" section of this quality manual.

4.8 PRODUCT IDENTIFICATION AND TRACEABILITY (P08)

Product identification and traceability shall be established by assigning a unique work order number, which shall correlate to the customer purchase order number.

Records shall be maintained in accordance with the "Record Control" section of this quality manual.

4.9 PROCESS CONTROL (P09)

Processing

A traveler shall be issued for planned processing. Employees performing complex or critical operations shall be provided with work instructions and workmanship criteria. The traveler will

maintain product identification and revision control, order quantity, and product acceptance during all phases of processing. Any special requirements shall be identified on the traveler.

4.10 INSPECTION AND TESTING (P10)

Inspection and testing are performed when product is received, at significant stages of processing, and prior to shipping. The objective of inspection and testing is to verify product conformance with specifications. Product is prevented from being processed or shipped until the required inspections are completed.

Receiving Inspection

Product is visually inspected to ensure that the product conforms to the purchase order and/or applicable drawing and specifications.

In-Process Inspection

In-process inspections (1st article) shall be performed per applicable drawings/specifications.

Final Inspection

Only those products that pass final inspection are admitted to the shipping area. All final inspections shall include verification of in-process inspections and tests completed.

4.11 CONTROL OF INSPECTION, MEASURING, AND TEST EQUIPMENT (P11)

When the required measurement accuracy is known the appropriate equipment shall be selected to perform the measurements. All inspection, measuring, and test equipment that can affect product quality, including personally owned equipment and customer supplied equipment, shall be calibrated with traceability to internationally or nationally recognized standards. Calibration certificates shall be maintained and the calibration status of measuring and test equipment shall be identified with calibration stickers.

Records of inspection, measuring and test equipment calibration shall be in accordance with the "Record Control" section of this quality manual.

4.12 INSPECTION AND TEST STATUS (P12)

The inspection and test status of product shall be identified by the traveler, which shall indicate the conformance or nonconformance of product regarding the inspection and test performed. Employees responsible for the release of acceptable product shall be defined. A 10% minimum piece inspection quota shall be used.

4.13 CONTROL OF NONCONFORMING PRODUCT (P13)

Nonconforming product shall be identified, segregated, documented, and dispositioned. When required, the customer shall be notified for disposition.

Nonconforming product shall be identified on the traveler. Product shall be segregated from conforming product and, if required by purchase order requirements, dispositioned in accordance with the customer's approval and rework instructions. Reworked product shall be re-inspected in accordance with documented instructions.

Customers shall be promptly notified when it is discovered that nonconforming product has already been delivered. Notification shall include the description of discrepancy, work order number, customer's purchase order number, delivered quantity, and delivery date.

Records of nonconforming product shall be retained in accordance with the "Record Control" section of this quality manual.

4.14 CORRECTIVE ACTION (P14)

Causes of nonconformities shall be investigated and corrective action initiated to prevent recurrence. Controls are applied to ensure implementation and effectiveness. As a minimum, corrective action shall address immediate correction of the discrepancy, root cause, corrective action, corrective action verification, and follow-up.

Records of corrective action shall be retained in accordance with the "Record Control" section of this quality manual.

4.15 HANDLING, STORAGE, PACKAGING, PRESERVATION, AND DELIVERY (P15)

Methods and means of handling that prevent product damage and/or deterioration are provided. Packaging is specified and controlled. Products are protected prior to and during delivery.

4.16 CONTROL OF QUALITY RECORDS (P16)

All quality records established in the process and implementation of the quality management system shall be identified and maintained. Records shall be maintained to demonstrate conformance to specified requirements and to identify the effective operation of the quality management system. Records shall be retained as specified by contract and made available to customer and regulatory agency representatives for examination.

4.17 TRAINING

Employees performing specific assigned tasks shall be qualified on the basis of appropriate education, training, and/or experience.

5.0 QUALITY MANUAL CHANGES

SEC.	DESCRIPTION OF CHANGE	NEW REV.	EFFECTIVE DATE
All	Updated for 2010	A	FEB 2010
All	Updated for 2011	A	FEB 2011
All	Updated for 2012	A	FEB 2012
All	Updated for 2103	A	FEB 2013
All	Updated for 2014	A	FEB 2014
All	Updated for 2015	B	FEB 2015
All	Updated for 2016	B	FEB 2016
All	Updated for 2017	B	FEB 2017
All	Updated logo, removed Operations Manager, simplified Section 4.2, simplified section 4.17, modified Appendix 1 to reflect removal of OM, new font	C	JAN 2018
All	Changed "Owner" to "Company President"	D	JAN 2020

Northwest Machine Works, Inc.
Organization Chart
Appendix 1



Northwest Machine Works, Inc.
Processes
Appendix 2

