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Supplier Quality System Requirements Manual

**Micron Metalworks Inc.
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Micron Metalworks Supplier Quality System Requirements

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Revision Sheet

All changes to this manual are to be recorded on this revision sheet

Revision	Date	Section(s)	Remarks
01	5/06		New Release
02	7/06		Revised page 14
A	6/18		Revised page 2 & 6
B	9/18		Added Page 3

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The quality department personnel that, direct, perform and verify work shall ensure that your company understands the requirements for:

- a. The processes, products, and services provided including the identification of relevant technical data
- b. The need for approval of:
 1. Products and services
 2. Methods, processes, and equipment
 3. The release of products and services
- c. Competence, including any required qualifications of the persons performing the work
- d. Interactions within your organization
- e. Control and monitoring of your performance
- f. Verification and validation activities that Micron, or its customer, intends to perform at your facility.
- g. Design and development controls, if applicable
- h. Special requirements, critical items, or key characteristics
- i. Test, inspection, or verification
- j. The use of statistical techniques for product acceptance and related instructions for acceptance.
- k. The need to
 - Implement a quality management system
 - Use designated or approved external providers, including process sources
 - Notify Micron of nonconforming processes, products, or services and obtain approval for their disposition
 - Flow down to your external providers applicable requirements, including our customer's requirements
 - Retain documented information, including retention periods and disposition requirements
- l. The right of access by Micron, Micron's customer, and regulatory authorities to the applicable areas of your facility and to applicable documented information, to any area of your supply chain.
- m. Ensure that your employees are aware of:
 - Their contribution to product and service conformity
 - Their contribution to product safety
 - The importance of ethical behavior

All Tier 1 supplier's will have in place the appropriate quality assurance and traceability processes necessary to meet Micron and Micron customer requirements.

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Documentation Control

The supplier shall have documented procedures for control of all process and product documentation.

- A). The system shall ensure that only the latest approved blueprints and specifications are used. Any deviation from approved blueprints or specifications must have prior written approval by Micron Metalworks.

Specifications:

- Request for quotes
- Blueprints
- Purchase orders
- Spec sheets
- Defective material reports
- Advanced deviation requests

- B). The supplier shall ensure that all obsolete blueprints and specifications are controlled and removed from use.

Right of Access

Micron MetalWorks and our customers shall have access to our suppliers manufacturing and processing facilities and access to our suppliers quality and production management personal to review and discuss issues pertaining to the quality and performance of Micron's work at our supplier's facility.

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Suppliers shall have a documented system to ensure that purchased materials, products or services conform to Micron's specifications and purchase order requirements.

- A). The system shall ensure that all material and product conform to documented quality procedures, procedures include but not limited to:
- Method of inspection
 - Sample size (ANSI/ASQZ1.4 LEVEL II C=0)
 - Acceptance criteria
 - Statistical data (optional).
- B). Suppliers shall maintain receiving Inspection documentation and records, these records must include but not limited to:
- Statistical process control data (optional).
 - Lot size
 - Purchase order / lot number
 - Any non-conformities
 - Any corrective action
 - AQL (ANSI/ASQZ1.4 LEVEL II C=0)

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The personnel conducting in-process inspection shall have available to them, documented inspection instructions or test procedures.

- A). Blueprint or specification revision level.
- B). Test or inspection procedure.
- C). Method of testing or inspection.
- D). Frequency of testing or inspection.
- E). Statistical process control data requirements.
- F). Acceptance criteria.

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5 *Final Inspection*

The primary objective of final inspection is to maintain a quality level of outgoing material that is consistent with Micron's requirements.

No product should ship until all documented final inspection procedures are completed and the product meets all of Micron's requirements.

Suppliers shall have documented procedures for final inspection on all Micron products. Instructions and procedures shall include the following minimum information:

- A). Identification of Key Characteristics.
- B). Test or inspection procedure.
- C). Method of testing or inspection.
- D). Lot size, AQL. (ANSI/ASQZ1.4 LEVEL II C=0)
- E). Statistical process control data requirements from manufacturing process as required.
- F). Acceptance criteria.

All inspection records, statistical process control data, and test data must be available for review by Micron.

One defect equals rejection of the entire lot. If a rejection is found the entire lot, one hundred percent, must be inspected for the characteristic found not meeting the requirements.

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Material Status Procedure

Suppliers shall have Micron's product identified at all stages of manufacturing. The quality status must be identified and the product marked.

Product that is designated as non-conforming must be segregated and stored in such a way that the product will not inadvertently be shipped to Micron as good. Disposition will be recorded and clearly marked on the product or container.

Lot Control

Supplier shall have in-place a lot control system to ensure that multiple lots are not mixed. This system must ensure that product and process traceability is not jeopardized during all aspects of product flow. Each lot shall be handled separately or controlled in such a way as to be distinguishable from one lot to another.

Counterfeit Material Policy

Suppliers that provide raw materials and hardware shall have a counterfeit materials policy in place to insure no counterfeit or suspected counterfeit parts are delivered to Micron.

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Gage Control

All gages, test and measuring equipment must be calibrated for accuracy.

Suppliers shall have documented calibration procedures for all gages, test and measuring equipment - whether owned by the supplier or provided by Micron. The standards used to calibrate gages, test and measuring equipment must be traceable to NIST.

It is the supplier responsibility to confirm the accuracy of all gages, test and measuring equipment, assign gage numbers, and to prepare a gage control record. The gage control record will establish calibration procedures, tolerances and frequencies to be used during calibration of its assigned tool. In addition to the requirements of the gage control record, it will be the

responsibility of each person using a tool or gage to verify that the gage or tool is in good condition and has been calibrated.

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Non-Conforming Material Control

Any product or materials in which one or more characteristics do not conform to the blueprint, purchase order or other applicable specification will be considered non-conforming.

The supplier shall have established procedures to ensure product identified as non-conforming is prevented from inadvertent use on Micron products. The procedures must include the following minimum criteria:

- A). Identification of non-conforming product.
- B). Disposition of non-conforming product.
- C). Documented deviation request.

- D). Segregation and storage in a separate area or controlled.
- E). Documentation of action / disposition by a material review board, including corrective action.

Micron Metalworks, Inc. Returned Product Requirements:

In the event that Micron Inc. returns product for evaluation, rework or replacement the supplier must reference Micron's Inc. NCMR # (Non-conforming Material Report) on the packing list. When returning the reworked product the supplier must ensure that that product is packaged separately from other deliveries.

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Corrective Action

Suppliers shall have documented procedures to ensure that effective, positive and permanent corrective action will be taken when non-conformities arise. The use of a team approach is encouraged. Procedures should include, but are not limited to:

- A). Identifying the problem / root cause.
- B). Implementing effective and permanent corrective action.
- C). Documenting all findings and data for future problem solving needs.
- D). Perform CAR validation.

If non-conformity is found at Micron on any product a corrective action request may be generated and sent to the supplier for action. The supplier may use Micron's format or their own.

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Contract Review

Suppliers shall have procedure(s) to ensure all contracts or orders are reviewed prior to acceptance. These procedures must include but are not limited to:

- A). A review of the contract or order for adequately defined requirements and related documentation.
- B). A procedure for processing verbal orders.
- C). A review of their capabilities to meet the requirements outlined in the contract or order.
- D). A process that ensures that any agreed-upon change in the contract or order is processed properly.

Any deviation from the contract or order requirements must be outlined in writing and approved by Micron.

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Handling, Storage, Packaging, and Delivery

Handling

The supplier shall have procedures to ensure that proper handling methods are in place to ensure no Micron product is damaged.

Storage

The supplier shall have procedure in place to ensure that designated storage areas / stock rooms are used to prevent damage to any Micron product. Proper storage techniques are used to prevent product deterioration prior to delivery.

Systems shall be in place outlining appropriate methods for entering product into stock and for releasing product from stock.

The supplier shall have procedures in place to periodically assess product in stock in order to detect possible deterioration or damage.

Packaging

The supplier shall ensure proper packaging and packing methods are used. These methods must ensure that products shipped to Micron are received in good condition, free of defects from handling, and shipping process. The supplier must provide product that is properly marked and identified.

Delivery

The supplier shall ensure that proper delivery methods are used. These methods must prevent Micron products from being damaged during delivery. The supplier is responsible for the quality of the product through the delivery stage.

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Process, Finish, and Hardware Certification Requirements

In the event that Micron requires Process, Finish, or Hardware certification it will be noted on the purchase order. The minimum information required is listed below. The supplier must maintain for a minimum of 5 years chemical and physical characteristic for raw material. This information must be made available to Micron for review.

- Printed name of the person authorized by your company to certify the process or material
- A signature, printed name and title of a company officer or authorized designee of operations, engineering or quality management will be required on all C of C's. If stamps are used we require that a signature accompany the stamp.
- Date
- Micron's purchase order number
- Part number or material callout
- Micron's job number (if noted on the purchase order)
- Your company name, address and phone information
- Quantity
- A description of the material, specification, or process to be certifying.
- A general statement noting that the information listed on the cert meets all applicable specifications.

Material Certification

In the event that Micron requires raw Material Certification it will be noted on the purchase order. The supplier must provide Micron with a certification listing the chemical and physical characteristics for the raw material.

The supplier shall mark or otherwise identify raw material with applicable, batch, or heat lot numbers. This identification must be legible on all products and match the certification documentation accompanying the order.

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First Article Inspection Requirements

In the event that Micron requires first article inspection it will be noted on the purchase order. The supplier will submit, with delivery of product, first article report. The supplier may use Microns MMFM, QA 007a or their own. You may request a copy of MMFM, QA 007a by contacting Micron purchasing or quality department.

The minimum information required on the form is listed below.

- Part number
- Product revision level
- Purchase order number
- Date
- Inspector
- Dimension measured or verified
- Dimension Tolerance
- High and Low reading
- Approved By and Title

All print/specification features must be listed including all notes, material, and finish requirements. "Pass", "Accepted", "Okay" notations are only allowed on visually inspected feature where no measurement can be taken.

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