

Universal Metal Products, Inc.

Supplier Quality/Purchasing Manual

1.0 SUPPLIER QUALITY MANAGEMENT SYSTEM DEVELOPMENT

Unless otherwise agreed to with/by Universal Metal Products and or its customer(s), the goal of the suppliers quality management system shall be to achieve conformance to ISO/TS 16949. Indicators of performance include:

- o Conformity with ISO 9001
- o Achievement of ISO 9001 certification
- o Compliance with ISO/TS 16949
- o Evidence of a process to achieve the above steps.

Note: The following requirements are specific to Universal Metal Products, Inc and are in addition to the above requirements. They are applicable to all suppliers (where production and/or service parts specified by the customer are manufactured) for every Universal Metal Products division.

1.1 ACCEPTANCE CRITERIA

The acceptance criteria for all characteristics are zero defects. Any non-conformance found will result in total lot rejection and is subject to be returned to the supplier. If Universal Metal Products determines that a supplier produced product out of specification and knowingly shipped product without proper written authorization, that supplier can be held responsible for any costs incurred by Universal Metal Products.

2.0 QUALITY SYSTEMS REQUIREMENTS

2.1 GENERAL

This standard defines the minimum supplier Quality Control practices acceptable to Universal Metal Products. All material supplied to Universal Metal Products shall be produced, controlled, inspected and tested utilizing statistical methods where applicable.

The supplier is responsible for performing or having performed all necessary inspection and tests required to substantiate product conformance to drawing, specification and contract requirements. The supplier inspection system shall be documented and such documents should be available for review by Universal Metal Products Purchasing, Engineering and Quality Control representatives prior to the initiation of production, and as required throughout the life of the contract. Any special instructions shown on drawings or specifications are to remain in effect unless official notice of termination is received from Universal Metal Products Purchasing in writing.

2.2 STATISTICAL PROCESS CONTROL

PROCESS POTENTIAL STUDIES

Supplier is expected to have a statistical program in use that employs process potential studies where applicable and/or practical.

ON-GOING STATISTICAL REQUIREMENTS

The supplier is expected to implement statistical process control for significant characteristics or processes, to assure the process remains at the initial levels of capability. The supplier is required to control their process. The minimum requirements for ongoing control are as follows (unless otherwise noted):

$$Cp/Cpk >1.33$$

The supplier is expected to maintain records demonstrating the performance levels for significant characteristics. Reports should be available upon request.

2.3 PURCHASED MATERIALS

The supplier is required to maintain a system of control of purchased materials to assure compliance with all Universal Metal Products drawing specification and requirements of this Standard, the Standard supplements, or the requirements of any alternative active purchase agreements. The supplier is required to withhold from use, all incoming materials pending verification of conformance to the requirements. Acceptable methods for verification of conformance are:

- Through Supplier Survey activities, in which supplier Manufacturing and Quality Control activities are surveyed in advance of production shipments and are audited periodically.
- By Receiving Inspection, in which material is inspected when received by either 100% inspection or by predetermined levels of sampling, utilizing where applicable, acceptable statistical techniques.
- Through monitoring activities, in which in process or finished goods are submitted at predetermined intervals for laboratory, functional, or other testing.
- Through verification by production process, in those circumstances where manufacturing or assembly cannot be completed if a deficiency exists.
- By Finished Goods Inspection, in which continuous inspection of the purchased part or material is performed, on the part in which it is used.
- By receipt of satisfactory inspection and test results (certification) from the sub-supplier.

Where certifications are used as a basis for acceptance of purchased materials, the supplier is required to periodically verify such certifications utilizing an independent laboratory. The supplier is encouraged to use independent laboratories that are accredited.

The supplier is responsible for assuring that all sub-suppliers have the facilities and control structure to satisfy the requirements.

It is the responsibility of the supplier to assure that sub-suppliers are fully informed of requirements and comply with the provisions outlined herein. The supplier is required to assure that the sub-supplier documents tests and checks, and will make such data available for supplier review as required.

2.4 SUB-CONTRACTOR CONTROL

The supplier has the responsibility for the conformance to specifications of any process being sub-contracted. The supplier may use any, or a combination of the following methods to insure control:

- * Receiving inspection performed on material returning from a sub-contractor.
- * Sub-contractor quality system survey
- * Certification

2.5 IN-PROCESS INSPECTION

The supplier is expected to establish the necessary in-process procedures to assure that the material continues to meet all physical, dimensional and visual requirements. All material produced during machine set-ups or tool changes is required to be 100% inspected until capability is demonstrated for the characteristics affected by the operation.

Parts and products must be checked for all characteristics deemed necessary by the supplier in order to maintain product integrity, or those that may affect further manufacturing operations.

2.6 FINAL INSPECTION

The supplier is expected to establish the necessary final (finished goods) inspection procedures to assure that material meets the blue print requirements.

2.6.1 DOCK AUDIT INSPECTION

The supplier should establish a Dock Audit procedure, whereas selected samples are to be taken from finished goods and checked in a similar manner as final inspection. Notwithstanding detection of non-conformance and subsequent corrective action, the primary purpose is to measure the effectiveness of the quality system.

2.7 REWORK AND SALVAGE PROCEDURES

The supplier is expected to establish the necessary instructions for salvage or reclamation procedures as required for the product type. Re-inspection must be performed on all repair/rework to assure conformance to specification prior to shipment. The supplier is required to notify Universal Metal Products Inc. prior to shipment of any material that has been reworked.

2.8 MATERIAL QUALITY IDENTIFICATION

The supplier is expected to establish a documented system for the control of all material. The inspection and test status of all material is to be identified. Documentation is to include a description of any applicable containment areas or device, such as identification tags. Parts or product removed from the normal process flow is required to be segregated and clearly marked as to quality status.

2.9 NON-CONFORMING MATERIAL

Non-conforming material is required to be clearly identified and isolated in segregated holding areas to prevent its inadvertent return to the normal process flow. The supplier is required to establish written instructions for the proper control, disposition, and method of identification of non-conforming material.

2.10 MATERIAL CONTROL

Where practical, a lot control system is required for suppliers supplying components to Universal Metal Products Inc. The purpose being to allow for traceability of product. The lot # is to be clearly marked and identified on each container of material shipped.

2.11 GAGE CONTROL

The supplier is responsible for the provision of necessary gauges and testing devices required to assure material compliance, unless otherwise negotiated.

Provision must be made for proper maintenance, inspection and control of gauges and test equipment to assure continued accuracy. Such devices must be calibrated at established frequencies against appropriate standards traceable to the NIST (National Institute of Standards and Technology). The supplier is required to document the calibration status and such documentation shall be made available for review by Universal Metal Products Quality Control upon request.

If production type tooling such as jigs, fixtures, templates and patterns are used as a media for quality control, such devices will be subjected to the same controls applicable to gauges or test devices.

2.11.1 GAUGE CAPABILITY

On-going gauge capability analysis should be performed for gauges used to measure significant or critical process or product characteristics. Demonstration of acceptable performance capabilities is required. Appropriate corrections should be made for gages that do not demonstrate capability.

2.12 CORRECTIVE ACTION

The supplier must take prompt and positive action to isolate and correct any condition that could result in the manufacture or shipment of material that is non-conforming. Additional inspection for the non-conformity must be implemented pending corrective action and must remain in effect until adequate capability is reestablished.

The supplier is expected to review all returned material to determine the cause of non-conformance and assure that timely and effective corrective action is implemented.

The supplier is responsible for the immediate notification to the appropriate Universal Metal Products Quality Control Department, if it is known that non-conforming material has been inadvertently shipped to Universal Metal Products.

Corrective Action Reports are required for non-conforming materials including shipment rejections and accumulated rejections.

Corrective action report is required within fifteen (15) working days. If necessary more time can be allowed for the final response by notifying the applicable division Quality Control Manager. The follow up/final report must include (in addition to items A, B, C, from the initial report) at minimum the following:

- A. Root cause analysis/identification
- B. Interim actions taken/containment
- C. Corrective actions taken or anticipated
- D. Verification of corrective action
- E. Proposed or implemented preventive actions

Alternative Corrective Action Report formats may be issued if the rejection is from one of Universal's customers.

2.13 DRAWING AND SPECIFICATION CONTROL

The supplier-documented quality control system is required to assure that the latest drawing specifications or other pertinent information is available at all key locations.

The system must provide for the removal of all obsolete drawings and specifications.

2.14 PROCESS CHANGE CONTROL & PROCEDURE

The supplier is required to have a documented method of controlling process change(s). Prior notification must be made to Universal Metal Products Purchasing

Department for any change in material or process and such changes must be approved by Universal Metal Products Engineering Department.

2.15 SAMPLING PLAN

Sampling plans are required to be statistically valid in accordance with paragraph 1.1 of this document.

3.0 DOCUMENTATION REQUIREMENTS

3.1 PROCEDURE

The supplier is expected to maintain written documentation covering all phases of the quality management program. These documents shall detail the areas of the inspection function, material quality identification, gauge control, corrective action, drawing and change control and documentation. The procedures must show responsibility and authority and revision status and be available for review by Universal Metal Products. The procedures should be should be readily available to personnel and in applicable areas.

3.2 RECORDS

The supplier is required to maintain adequate records of inspections and tests required by this Standard or any Standard supplements. The records shall contain as a minimum requirements, the following:

- Frequency of observations
- Nature of observations
- Number and type of deficiencies found
- Material disposition
- Inspector identification
- Corrective Action

3.3 RECORDS RETENTION

The supplier is required to retain records for all significant test and inspections for the duration of the production contract, plus a minimum of one (1) year thereafter.

4.0 ADVANCED PRODUCT QUALITY PLANNING

4.1 GENERAL

The supplier is expected to review and establish the criteria and methodology necessary to manufacture product that conforms to blueprint or material specification. This procedure should occur before actual production has begun.

4.2 QUALITY PLANNING DOCUMENTATION

The supplier is expected to maintain records of quality planning and such records shall be available for review. Quality planning documents can include Control Plans, Failure Mode and Effects Analysis, Gauge Designs, Equipment Lists, and identification of significant characteristics.

5.0 SAMPLE SUBMISSION PROCEDURES

5.1 GENERAL

The intent of this procedure is to provide clear and concise instruction pertaining to preparation and submission of initial samples.

5.2 PREPARATION OF PRODUCTION SAMPLES

Unless otherwise specified, the supplier is responsible for selecting a minimum of seven (7) samples from a quantity of three hundred (300) pieces minimum that were manufactured from production tooling, using production processes, and at the production site seeking approval. In the case of multiple cavities at least one part from each cavity must be sampled. Any special requirements will be detailed on the purchase order.

The supplier shall sequentially serialize each of the submitted samples to include section/cavity number, if applicable, and perform, or have performed, the necessary inspection to determine conformance with all drawings, specifications, requirements and all notes as documented on Universal Metal Products Engineering blueprints. Where certifications are used to indicate acceptance, actual test results must be shown - to include chemical, physical and metallurgical requirements.

The supplier must number each dimension, specification and all notes on the Engineering drawing in a manner that is sequential and in logical order, preferably left to right, and in a clockwise manner.

5.3 REQUIRED DOCUMENTATION

Unless otherwise specified, the supplier will provide all documentation required for a level 3 PPAP submission, per the AIAG PPAP Manual.

5.4 SAMPLE SUBMISSION

If discrepancies have been noted during preparation of the sample submission, the supplier must contact the Universal Metal Products Purchasing Department for further instructions. Do not ship a discrepant Sample Submission without documented approval from Universal Metal Products Purchasing.

5.5 EARLY PRODUCTION CONTAINMENT

Suppliers are to establish a containment plan during start-up and acceleration of production, so that any quality issues are quickly identified at the supplier's facility and not at Universal's facility. This procedure applies to all new and changed materials, processes, coatings, and components that require PPAP for start-up or acceleration.

Suppliers are to develop an early production containment plan, including, but not limited to:

- A separate inspection area whenever possible (may require checks within the process for components that are not available for check after assembly).
- Process to ensure that all non-conformances are contained within the facility and prompt containment and irreversible corrective actions are applied if non-conformances are discovered.
- Identification of the person responsible for the containment process.
- 100% check of specific features for pre-pilot and pilot material, as required.
- Use of green dots (signed by a designated senior management representative) on shipping labels to designate compliance.

6.0 SYSTEM SURVEY POLICY

Where practical Universal Metal Products will perform initial Quality System surveys of suppliers. Self-surveys may also be used.

7.0 Purchasing Overview

1. This section has been developed to assist you in becoming acquainted with Universal Metal Products and in understanding how the purchasing activities are conducted.
2. UMP will strive to maintain the highest level of personal and business ethics with integrity through forthright conduct in all transactions. Quotations and other information are treated in strict confidence
3. The maintenance of total quality compliance is critical to the success of our business. Purchasing commitments are made on the basis of not only high quality product and timely delivery, but also competitive pricing.
4. We encourage our suppliers to submit new ideas to improve productivity. We strive for long term partnerships with vendors who will work at improving quality and service to our customers, while reducing costs.
5. It is the policy of the corporation that negotiated or competitively quoted purchase orders be issued for all materials and services. Designated personnel in the Purchasing Department are the sole authority in making such commitments.
6. We recognize that UMP's success is dependent on the performance of our suppliers and we are committed to this principle.

7. We look forward to a long and mutually prosperous relationship with our suppliers.

7.1 MATERIAL POLICY

Universal Metal Products requires all suppliers to strive for 100% on-time delivery. Universal Metals will provide all the necessary planning and purchase commitments to assist our suppliers in achieving this goal.

A. Receipts:

1. UMP allows a 3-day window for suppliers of raw material and component parts. This is broken down into one working day before and one working day after the due date. Post Platers, Finishing, and Heat Treat suppliers will be allowed any early date and 1 day after the due date shown on PO/Release.
 2. Early shipment and over shipment are subject to return with the supplier incurring all freight and handling charges.
 3. For Steel and Component Parts, a 10% maximum over or under shipment will be allowed in completing orders. This 10% is for the entire order, not each release. It is assumed that no consistent pattern of over or under shipments will occur.
 4. Partial and late shipments not authorized by the buyer will be penalized with the supplier incurring freight charges. This includes airfreight in order to maintain delivery dates. This assumes UMP has ordered within the vendor's required lead-time.
 5. Suppliers are required to have the following three pieces of information on all packing slips and invoices:
 - a. Purchase Order Number and Release Number (where applicable)
 - b. Part Number and Description
 - c. Quantity shipped
- NOTE: Failure to have this information on packing slips and invoices will result in processing delays of payment and may cause rejections of shipment and/or penalty deductions.
6. Skid weights must not exceed 5,000# for the Cleveland division, 8,000# for Toledo (Hercules), and 7,000# for McAllen.

B. Pricing:

1. All price increases require a written 30-day minimum advanced notification with the current price, requested new price, and percent increased, by UMP part number. The 30 days will commence when UMP receives the above document. In all cases justification will be requested from the supplier. The 30 days will be

used to assure UMP that the supplier is still competitive in the market place and enable the final product to have the correct costs established in our files.

2. All pricing and supplier information will be held in strict confidence by UMP.

C. Freight Routing:

1. All LTL collect shipments are to be shipped in accordance with the information provided on the Purchase Order. Any increases in freight cost as a result of deviating from the assigned carrier will be the responsibility of the supplier.

7.2 HOW TO ASSURE PROMPT PAYMENT

1. Shipments should be made according to the required due date. We allow a three day window of one day prior to and one day after due date.

2. Total purchase order released should be sent in one shipment.

3. A packing list must accompany every shipment; a bill of lading alone is insufficient.

4. Deliveries are normally not acceptable past 3:30 p.m. on Monday through Friday.

5. Invoicing must follow shipment.

6. Invoices and packing lists must have the following information:
a. Purchase Order Number & Release No. (where applicable)
b. Part Number and Description
c. Quantity Shipped

7. All items on the packing slip and invoice must agree, including what was actually shipped.

8. If shipments reference several purchase orders, you must break the quantities out by purchase order number on all documents.

9. Invoicing must be from the same supplier that appears on the purchase order or payment will not be made. If this is not possible, you must notify Purchasing ahead of time.

10. Allow a reasonable amount of time before contacting our Accounts Payable Department concerning receipt of payment.

11. Answer requests for information from our Accounts Payable Department as soon as possible. Until the request is answered, payment of your invoice cannot be made.

12. Prices, quantities, and terms must agree with the purchase order or substantial delays in payment will occur due to invoicing process time.

Return this form to Dave Gibbs at E-mail dgibbs@ump-inc.com or fax to (419)287-3898.

We have received, understand, and will comply with the Quality/Purchasing standards now expected by Universal Metal Products, Inc.

Company: _____

Name: _____

Title: _____

Phone Number: _____

Email Address: _____

Signed: _____