

METRIC MANUFACTURING CO.



Metric Manufacturing Supplier Manual

This Manual applies to all suppliers of Metric Manufacturing Co. Compliance to all requirements within this manual, as well as the general terms and conditions, are imperative in a long-term partnership with Metric Manufacturing Co.

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1. Metric Policy

Metric Manufacturing Co. (MMC) targets to fulfill and surpass the wishes and expectations of our customers. We all work to achieve a high level of customer satisfaction. The quality of our goods and services is a result of systematic (production) planning and not testing or sorting. Failure prevention is more important than failure detection.

Prime targets of our Quality Activities:

- Zero defects
- Continual advancement of quality awareness
- Function and performance of our products at the highest level
- Continual improvement of our products, processes and services

Prime targets of Materials Management and Logistics Activities:

- Internal and external customer satisfaction at the highest level
- Efficient procurement
- 100% on time delivery
- Continual improvement in materials management and logistics

2. Quality Systems

You are required to have ISO or TS 16949:2009 certification. Additional MMC customer specific requirements may be needed with specific product (i.e. CQI 9)

MMC expects all suppliers to adhere to these requirements by informing Metric Mfg of any changes in their certification status.

It is the responsibility of the supplier to implement this Supplier manual into their internal Quality system and management review activities.

Registration to ISO 17025 or A2LA certification is mandatory for all calibration and metallurgical activities unless you are TS 16949:2009 registered. TS 16949:2009 registered companies must verify the external source for compliance by completing a site verification or must include the calibration/lab activities in your scope of registration.

These standards represent the minimum level of certification and MMC encourages all suppliers to pursue further registration. MMC minimum requirements may change in the future.

This manual will not duplicate the procedures dictated by your registrar although MMC expects suppliers to maintain and adhere to these standards as dictated by our customers. These standards can be found in the AIAG PPAP, APQP, SPC, MSA and FMEA manuals, along the General Motors, Ford and Chrysler specific requirements

3. Pre-Production Requirements

MMC requires that all subcontractors participate in APQP activity. The required APQP activities are listed in the AIAG APQP manual. MMC and the Supplier will be working together in the APQP process and open communication is encouraged.

Quoting for Tooling, Gauging, Calibration and direct supplies will be dealt with directly by the buyer.

MMC uses the term PPAP and the process of PPAP as the default activity for documenting the APQP process. Modifications to the standard elements within a PPAP submission will occur based on the part, PFMEA severity of the part, type of change or specific MMC customer requirements.

MMC will specify the required level of PPAP. The default level for Secondary and Component Suppliers is level 3.

The PPAP levels are defined in the AIAG PPAP. The purpose of the PPAP is to demonstrate that all requirements are understood and the supplier is 'production ready'. The development and completion of the APQP process, which results in a PPAP, is mandatory for all new parts at a supplier unless waived in writing by MMC.

MMC will require statistical information on any key dimensions and may require SPC on specific dimensions during both the development and production phases.

If at any stage you need / would like to change the process, you must inform MMC, the customer. This is in accordance with the AIAG PPAP manual. In the event of any change the PPAP needs to be updated.

Note: An unauthorized process change, not communicated via Non-Conforming/Process Deviation form or PPAP update when required by table I.3.1 of the AIAG PPAP manual that results in the shipment of non-conforming product to MMC or their customers, will result in the implementation of Controlled Shipping level 2 and designation as "restricted from new business."

4. Contract Review

The Terms and Conditions cover MMC expectations of the business relationship between MMC and the supplier. These Terms and Conditions can be found on Metric Mfg's website, www.metricmfg.com.

The key to contract review is to ensure that all requests by MMC match the product / process quoted by the Supplier. It is the Suppliers responsibility to contact MMC immediately if they do not match.

MMC reserves the right to charge back the supplier if they have failed to satisfy MMC requirements as defined by the drawing and/or purchase order.

In order to facilitate proper payments, please ensure the following: All invoices should be submitted to MMC within three days of product being shipped to MMC and only contain one part number per invoice (Tooling and gauging suppliers can have multiple part numbers on a single invoice).

Every invoice should contain the following:

- The MMC purchase order number
- The Quantity ordered by MMC
- The Quantity delivered by the supplier
- The unit price
- Total Dollar amount

5. Non Conforming Product

It is the intention of MMC to work with the Supplier to identify and correct any non-conforming product to ensure it does not reach the customer. All non-conforming product should be identified as soon as it is found and MMC informed immediately.

Material to be returned to MMC after disposition by MMC's quality department must have an RMA (Returned Material Authorization) number and this number must be clearly noted on the shipper and the package/skid being returned. An RMA number may be obtained by contacting MMC's Quality Department.

Do not process the parts without written authorization.

If the supplier is doing work for MMC and requires a deviation from the approved process, or you intend to use a different process to the PPAP process, or if you have difficulty maintaining the current print requirements, then MMC must be informed and written approval gained by contacting Metric's Quality Department.

All changes to a process shall have MMC authorization.

If you are asked to do non-standard work for MMC you must have a PO in place to ensure payment for any excess costs.

6. Scrap

MMC reserves the right to chargeback the supplier for excess scrap due to supplier processing of MMC product. MMC will charge the supplier the cost of processing the parts up until that point.

When processing Metric product you must report all scrap (regardless of scrap pieces or location) on the packing slip. The following items must be on the packing slip:

- 1) Metric Part number
- 2) Lot number
- 3) Who is responsible for the scrap? (Metric or Supplier) If there is more than one at-fault party, then the quantity for each must be identified

Normal processing scrap should be disposed of at the supplier. These scrap numbers must be recorded and returned to MMC. Extreme cases of Scrap (over 2%) must be approved for scrapping at the supplier by the MMC quality department. MMC will determine acceptable scrap levels and reserves the right to charge the supplier for the cost of the parts scrapped.

7. Shipping and Receiving

All products must be properly identified at all stages throughout the process flow. If the supplier receives any unidentified or improperly identified product they should contact the MMC Quality Department.

Receipt of product at a supplier location with inaccurate piece counts recorded on the packing slip is considered non-conforming. It is the responsibility of the supplier to contact the MMC shipping department that sent/received the product and resolve the discrepancy before the product is processed.

Suppliers must have the most current print of the parts they are processing. The revision level of the most recent print can be found on either the PO or the Packing Slip.

If a supplier ships directly to MMC customer or if a supplier is requested to ship product to another external step in the process, all appropriate documentation should be sent with the parts to the customer or second supplier and the supplier packing slip must be faxed or e-mailed to MMC.

The quantity of the parts listed on the packing slip must be accurate. MMC understands that container weight variation can lead to inaccuracy but MMC reserves the right to charge for missing parts.

Every packing slip must contain the following information;

- MMC Purchase Order Number
- MMC Part Number

- Quantity
- Note: All supplier packing slips must be numbered.
- **Quantity to be invoiced:** This is the total of good parts plus any parts processed and scrapped with Metric as the at-fault party. The supplier should not invoice for scrap discovered prior to processing (unless it is part of a contracted sort) or for scrap caused by the supplier. Suppliers who are contracted to perform sort operations should invoice for the number of defects found plus the number of good parts.

These 6 requirements apply to 3 categories of product 1) good pieces, 2) rejected pieces (All rejected product may be requested to be returned to MMC) or 3) scrap pieces.

- Note: if there are no rejected pieces or scrap pieces you must indicate this on the packing slip with a value of “0”, assumptions will not be made.

MMC requires all suppliers to retain all output documentation agreed upon during the APQP process. Some of this information may be requested by MMC on a regular basis.

When special characteristics are identified, the default Ppk levels is 1.67 for the initial approvals and 1.33 Cpk long term. All non-special characteristics must maintain a 1.00 Cpk long term.

If the Supplier is shipping the parts direct to MMC customer, you may be asked to certify the product. This will involve certifying the parts to a MMC provided control plan and shipping the parts directly. This will either be covered at the APQP stage or will be approved by MMC Purchasing, Quality Dept., Engineering and the Supplier.

A PPAP representing the direct ship, final inspection and packaging should be produced to satisfy MMC customer’s requirements. MMC will provide these requirements.

All excess freight caused by supplier error should be recorded and reported to MMC and kept as an efficiency measurable. The excess freight report should be made to the purchasing person at Metric Manufacturing. This report must contain the Date / Metric Part # / Ship from & to location / Reason for Expedite and Total Cost.

When shipping product to MMC or directly to our customer, special care of containers may be needed to assure the delivery of quality product. These instructions will be noted as part of the APQP process, Purchase Order or the MMC Supplied work instructions.

These notations may dictate that Stickers be placed on the containers stating “Do Not Double Stack”, or “Do not Top Load” or “This side up – Do not tip”. Placing the stickers on the containers does not create a contractual obligation with the freight carrier unless the notation is also written on the bills of lading.

Thus it is imperative that all suppliers note any special instructions on the “Bill Of Lading” when shipping product.

8. Packaging

Supplier supplied packaging is expected to be in good condition and properly protect the parts from any shipping and handling damage and from any environmental conditions (i.e. rust, dirt, moisture or oils). Metric will approve of the proposed packaging in writing.

For Metric supplied dunnage, it is expected that the supplier will use due care in storage, handling and loading/unloading the product. The supplier will have an opportunity to approve any Metric supplied dunnage. The dunnage is expected to be kept clean, dry and in good condition. Any damaged packaging should be clearly marked and returned to Metric.

9. Concern Management

MMC will notify the supplier when a concern is opened by either e-mail or phone.

MMC will determine an initial response date and a concern due date. These dates measure whether the supplier is responding in a diligent fashion.

In answering concerns, the supplier shall use the 8D methodology. This requires the supplier to identify all potential root causes of the problem. The corrective actions must be comprehensive, and the verification actions ensure the problem does not happen again.

MMC may recover costs associated with concerns. A minimum of \$100 per occurrence may be levied against the supplier to cover administration costs associated with the rejection. Suppliers will be notified via e-mail of any cost recoveries and will have five (5) days to respond by contacting the Buyer. Failure to contact the Buyer within five (5) days will constitute acceptance of the cost recovery, and the amount to be paid will be debited from a future payment.

10. Controlled Shipping

The two purposes of Controlled Shipping is to protect your customer from defects as you develop corrective action and verify the effectiveness of that corrective action.

There are two levels of controlled shipping;

Level 1 Controlled Shipping: the supplier will implement a problem solving process as well as an inspection process carried out by the suppliers employees at the suppliers location. This should isolate MMC from receiving bad parts.

Level 2 Controlled Shipping: all activities from Level 1 shipping will be included and also an impartial third party will complete an added inspection process. The third party is to be approved by MMC and paid by the supplier. Depending on the circumstances this may be completed at separate location, from the supplier's facility.

Both levels of controlled shipping can be implemented either by the supplier voluntarily or by MMC, in either situation MMC and the supplier must be a partner in the implementation.

MMC will determine the timing, level and exit criteria of the controlled shipping dependant on the severity of the problem. At the discretion of MMC a Containment Assessment will be used to verify the activity.

Controlled Shipping will only be used when MMC's management feel the current controls at the supplier are not sufficient to insulate MMC from the receipt of nonconforming material.

11. Continuous Improvement

MMC expects each supplier to be involved in continuous improvement activities. These should be self-driven and both identify improvement opportunities and use different improvement techniques to produce tangible results.

12. Measuring Supplier Performance

Each supplier will be rated Approved, Disqualified, Probationary or Customer directed.

To achieve an Approved status a supplier must fulfill some extra requirements; the supplier must have maintained an acceptable quality record for a minimum of 6 months and they must be prepared to undergo a MMC assessment at their facility.

A brief explanation of the supplier rating:

- 1) 6-month rolling indicates the current month plus the 6 previous months, thus it could include almost 7 months.**
- 2) The Quantity rejected used in the supplier PPM rating is taken from "official" concerns only.**

MMC SQA/Purchasing group will conduct a management review of poorly performing suppliers along with reacting to significant quality concerns when and if they occur during the course of each year.

The items considered by SQA to create the final list are PPM, severity of concerns, type of concerns, annual turnover, new business potential, pending cost recoveries, overall rating, and interaction with the MMC management team.