



MTC ENGINEERING, LLC.

Quality Control Manual

Approved By:  Title: President/Sr. Engineer

Approved By:  Title: QA/Engineering Lead

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747 Carle Ave.

Lewis Center, Ohio 43035

Office: 614-657-8666

Fax: 614-540-7442

E-mail: mtcengllc@att.net

www.mtcengco.com

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TABLE OF CONTENT

| | | |
|-----------|---|----------|
| 1. | PURPOSE | 1 |
| 2. | SCOPE | 1 |
| 2.1 | QA Manual Distribution and Revisions..... | 1 |
| 3. | COMPANY ORGANIZATION AND TRAINING PROGRAM | 2 |
| 3.1 | Organizational Structure | 2 |
| 3.2 | Training of Personnel | 3 |
| 4. | QUALITY CONTROL FUNCTIONS AND PROCEDURES | 3 |
| 4.1 | Audit of Quality Control System and Support..... | 3 |
| 4.2 | Records – Quality Forms and Retention..... | 4 |
| 4.3 | Control of Purchased Material and Services..... | 5 |
| 4.4 | Inspection Procedures | 5 |
| 4.4.1 | Sampling Inspection..... | 5 |
| 4.4.2 | Receiving Inspection | 5 |
| 4.4.3 | In-Process Inspection / First Article Inspection | 6 |
| 4.4.4 | Final Inspection..... | 7 |
| 4.4.5 | Shipping Inspection | 7 |
| 4.5 | Control of Non-Conforming Materials and Corrective Action..... | 7 |
| 4.6 | Control Procedures..... | 9 |
| 4.6.1 | Control of Company-Owned and Personal Precision Measuring Tools | 9 |
| 4.6.2 | Company Owned Tools | 9 |
| 4.6.3 | Personally Owned Tools | 9 |
| 4.7 | Calibration Procedures | 10 |
| 4.7.1 | Standard Procedures | 10 |
| 4.7.2 | Limitations..... | 10 |
| 4.7.3 | Schedule of Calibration | 10 |
| 4.7.4 | Environmental Control | 11 |
| 4.7.5 | Identification | 11 |
| 4.7.6 | Control of Production Tools/Aids..... | 11 |
| 4.8 | Control Labels, Tags and Cards..... | 12 |
| 4.9 | Document Control..... | 12 |
| 4.10 | Configuration Management and Documentation Flow | 14 |
| 4.11 | Control of Production (Staging Area) | 15 |
| 4.12 | Stamp Control (Signing of documents) | 15 |
| 4.13 | Use of Statistical Methods..... | 15 |
| 4.14 | Subcontract and Supplier Control | 15 |

| | | |
|-------------|--|-----------|
| 4.15 | Customer Feedback and Continuous Improvement..... | 16 |
| | Appendices of Forms | 17 |
| 1. | Corrective Action Report (CAR) – QA 001 | 17 |
| 2. | Internal Audit Report (QA 002) | 17 |
| 3. | Quality Discrepancy Report (QDR) – QA 005 | 17 |
| 4. | Master Gauge and Serial Number Log (Calibration Schedule) – QA 007 * | 17 |
| 5. | Calibration Index Card – QA 008 * | 17 |
| 6. | First Article Inspection Report (FAR) – QA 009 | 17 |
| 7. | Quality Control Plan (QCP) – QA 010..... | 17 |
| 8. | Packing List (QA 011) [Shipment Release]..... | 17 |
| 9. | Final Acceptance – C of C (QA 012) [With Special C of Cs QA 012-1, -2, -3]..... | 17 |
| 10. | Contract Review (QA 013) | 17 |
| 11. | Final/In-process Inspection Report (015a & 015b) | 17 |
| 12. | Supplier Quality Management System – QA 016..... | 17 |
| 13. | Customer Survey Form – QA 017 | 17 |
| 14. | Zero Based Acceptance Plan – QA 111 | 17 |
| 15. | Shop Order Planning Sheet (SOP) – ME 001 | 17 |

1. Purpose

MTC Engineering strives for the highest standards of quality and reliability. MTC Engineering embraces the philosophy of Continuous Improvement.

This Quality Control Manual describes the procedures and practices utilized by the Quality Assurance Department of MTC Engineering (MTC) in the manufacture of or purchasing of all goods and services herein provided by said company to our customers.

2. Scope

This manual supplements the requirements stated on MTC Engineering purchase orders and applicable commercial and military standards and is a modified/tailored version of ISO 9001-2008 (Tailored and with exception to 7.4, Design Control) and with MIL-I-45208 and/or MIL-Q-9858 used as the base document. These requirements are necessary to ensure that material delivered to our customers will meet or exceed required quality levels. The requirements, as listed, are based on a defect prevention system, which will improve quality, lower costs and increase productivity.

QA/Engineering or designee will be responsible for assuring that all personnel inspecting components and/or assemblies are familiar with requirements of this manual and that proper coordination is established and maintained within all affected production and/or service/support departments.

2.1 QA Manual Distribution and Revisions

The QA/Engineering Lead or Designee will maintain a record of all controlled copies of MTC Engineering's Quality Control Manuals distributed as hard copies.

As this Quality Manual is an on-line based system, except where required per contract, manual distribution is not required.

The QA/Engineering Lead or Designee will annually review the Quality Control Manual in an effort to maintain conformance to current procedures; however, review can be requested at any time if necessary to meet or comply with new Quality System requirements or customer/government specific requirements. Recommendations for revisions or corrections will be directed to the attention of QA/Engineering or Designee for review, update (if required), approval and when required, re-distribution.

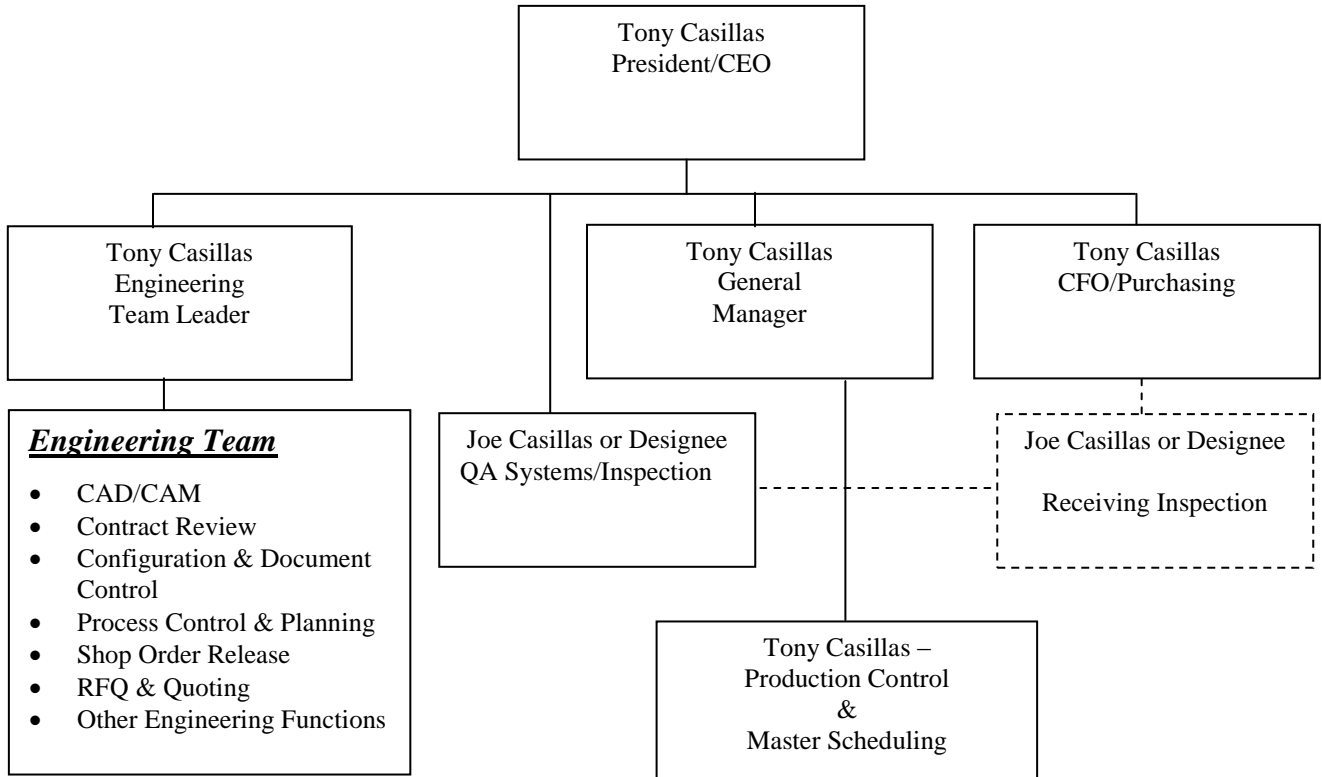
All government required changes (via contract specific) or suggested/recommended, shall be reviewed and approved by the MTC Engineering/QA representative and the appropriate government representative prior to release and/or re-distribution.

NOTE: Electronic copies the QA Manual are not considered "controlled copies" and are supplied for reference only.

3. Company Organization and Training Program

QA/Engineering or Designee shall have full authority to control all elements of MTC Engineering's Quality System. This includes requiring additional testing of suspect product; holding suspected product from being shipped including the disposition of defective components for scrap including (with Engineering support) requesting deviations from the customer and control thereof including the implementation of Irreversible Corrective Action as defined in 4.5.

3.1 Organizational Structure



3.2 Training of Personnel

The QA/Engineering Lead or Designee will be responsible for identifying special or specific training needs and preparing the training syllabus, including coordination of training material preparation, scheduling, and execution of the required training and upon successful completion of course material, a permanent record of the course completed will be added to the employee's on-line personnel record.

Each new employee will be familiarized with the quality requirements of MTC Engineering and the technical requirements of the task to which they are assigned.

Blueprint reading will be provided internally to employees on an as need bases.

When contracts are received for materials new to MTC Engineering's normal manufacturing experience, Engineering will review all requirements with Quality/Engineering, Purchasing and Manufacturing to establish, if necessary, training requirements and supporting programs to assure delivery of quality product or services. This training may consist of informal meetings to instruct personnel; release of special manufacturing or inspection instructions (Quality Control Plans – Form QA 010); conferences with suppliers and /or customer representatives and/or any combination thereof.

4. Quality Control Functions and Procedures

The following sections define the established MTC Engineering Quality Control Functions and Procedures used both internally and externally.

4.1 Audit of Quality Control System and Support

As required or at a minimum of once annually, the Quality Control/Engineering Lead or designee will audit one or more functions of the Quality Control System on a random basis. This audit will include, but is not limited to, a review of documentation; availability of required drawings and specifications, adequacy of inspection equipment and product impact; as well as review certification and general housekeeping. Any deficiencies within the system or support system/functions will have immediate action to correct the error and documented using Internal Audit Report form QA 002. Informal spot-check reviews can be performed at random on an on-going basis and are encouraged as an option to a full formal annual review/audit.

All minor changes that do not modify major system elements; system functionality; procedural practices and can be incorporated invisible to the on-line system, do not require formal documentation as the on-line system changes are annotated within the system software by the programmer.

The QA/Engineering Lead or designee will be responsible for the follow-up action and review. If customer product has been compromised, the Quality Control/Engineering Lead or designee will document the infraction on QA Form 001 to establish an audit trail for CAR.

Once Corrective Action has been completed, the Quality Control/Engineering Lead or designee will date and initial the CAR and file in applicable job or system folder for future reference.

4.2 Records – Quality Forms and Retention

The following Quality Control forms will be retained as documentary evidence of the various inspection and test functions noted in the MTC Engineering Quality Control Manual:

1. Corrective Action Report (CAR) – QA 001
2. Internal Audit Report – QA 002
3. Quality Discrepancy Report (QDR) – QA 005
4. Master Gauge and Serial Number Log (Calibration Schedule) – QA 007
5. Calibration Index Card – QA 008
6. First Article Inspection Report – QA 009
7. Quality Control Plan (QCP) – QA 010
8. Packing List (QA 011)
9. Final Acceptance – C of C (QA 012)
10. Contract Review (QA 013)
11. Final/In-process Inspection Report (Form 015a & 015b)
12. Supplier Quality Management System – QA 016
13. Customer Survey Questionnaire – QA 017
14. Zero Bases Acceptance Plan (QA 111)
15. Shop Order Planning Sheet (SOP) – ME 001 (*Referenced*)

Completed Shop Order Planning Sheets (SOP) form ME 001 together with supporting test reports and certifications will be filed in the master job folder by job/part number and retained for a period as required by customer/contract. NOTE: With limited production items, the part/assembly drawing can be used in place of ME 001 provided said drawing is so noted with applicable processing procedures/references; job reference number; Project Manager; Issue date; Qty to produce and includes a statement relative to limited usage.

In cases where the original drawing requires modification for manufacturing/QA planning purposes, the drawing will be released with clear markings to identify the drawing as “modified”.

Note: New forms or revisions to existing forms will be incorporated with instructions in the appropriate procedure.

In cases where a modified version of a standard form is used to meet contract/customer/engineering-unique requirements, it may be used without QA manual/forms re-distribution. In such cases, upon job completion/closeout, subject form will be filed in the master job folder as a permanent record including MIL-STD-831 special testing requirements.

4.3 Control of Purchased Material and Services

The CFO/Purchasing agent, Project Manager or Designee shall originate Purchase Orders (PO's) for production materials and shall verify that purchase orders are detailed with clearly defined quantities, part numbers, and material descriptions including specification and drawing change level as applicable. When ecommerce/electronic purchase ordering is used, a validation receipt will be saved in the job folder and can be in the form a confirmation email.

Where required by contract, all PO's will be reviewed by QA/Engineering Lead or Designee so that purchases are only from vendors who are approved by the respective customer and that proper certifications and/or test samples are requested.

QA/Engineering or designee shall maintain files of all applicable process specifications with subsequent revisions and shall be supplied to outside vendors as required.

Finished goods purchased from vendors/supplies will be processed as defined in section 4.4.2 and 4.5

4.4 Inspection Procedures

4.4.1 Sampling Inspection

Each production run will be inspected per a sampling plan which is based on C=0 or Zero Based Acceptance Plan (Form QA 111) as defined in ANSI Z1.4, ANSI Z1.9. Specifics, special or exceptions are so identified on a Quality Control Plan (QCP) form QA 010 and/or on the Final/In-process Inspection Report (Form QA 015a & 015b). Sampling plans with AQL's of 1.0% or higher may be specified by specific customer requirements as defined on the drawing or as noted in the customer contract. In such cases, the appropriate AQL will be defined on QA form QA 015a-b.

QA form 010 is to be used for "unique" or special process QA planning requirements.

As MTC Engineering is classified as a "Job Shop", SPC data collection is preformed only if requested by the customer and/or specified within a specific contract. Our normal manufacturing environment is to perform 100% product inspection unless quantity warrants use of a sampling plan.

The exception is within our calibration system, which is computerized and performs gage R & R's from the data input during calibration.

If SPC is required by contract, X-Bar & R, U, P, and nP charting techniques are applied as defined in standards ASQC B1, B2 and B3 and ANSI-Z1.1 through Z1.4. Note that these techniques are generally applied to long-term production runs.

4.4.2 Receiving Inspection

All production materials received (raw stock or processed items) will be processed/inspected and must meet requirements as specified on MTC Engineering's purchase orders, prints and/or specifications prior to distribution to stores or production. All material test reports and material certifications will be checked for conformance to PO/Specification requirements and maintained in the master job folder for future reference.

QA will inspect subcontracted machining and processing to the drawing and specification requirements and, if required, document appropriate data on the appropriate QA form dependent on acceptance or rejection and returned to the vendor (RTV) as noted in section 4.5 of this manual. Test reports, inspection data sheets and certifications will be filed in the Master Job Folder.

Rejected materials will be submitted for material review action on a Quality Discrepancy Report (QDR) Form QA 005 per Section 4.5 of this Quality Manual.

Accepted materials will be released to the shop with a Shop Order Planning Sheet (SOP) – ME 001 for production use or identified with a job number and placed in stock for future production release or as noted in Section 4.2.

Government supplied material or material requiring government source inspection prior to shop release, will be marked/tagged and segregated as to prevent use by production personnel.

4.4.3 In-Process Inspection / First Article Inspection

To ensure proper in-process quality control, Engineering will prepare a Shop Order Planning Sheet (SOP) – ME 001 or as noted in Section 4.2, during the contract review process for each job by assembly, subassembly or detail component part number. These sheets will identify applicable specifications, special instructions, outside processes and inspections. Inspection points will be specified for first-article and final acceptance. Engineering will maintain and revise all SOP's ensuring current and accurate information in agreement with engineering special instructions and purchase order information. All new and revised SOP's will be dated, then checked and approved by Engineering and maintained in the master job folder.

All rejected parts will be submitted for material review action on a Quality Discrepancy Report (QDR) form QA 005 and disposition based on individual requirements of MTC Engineering, the customer or as specified in section 4.5. In addition to a QDR, a Corrective Action Report (CAR) – QA 001 may be initiated and processed as required by MTC Engineering, QA and/or customer contract and/or section 4.5

First Article (Piece) Inspections (FAI) are required to be performed on a first on / first off basis or as required when modifications in manufacturing processes are made which could affect individual parts or assemblies.

The first article procedure will follow the format set forth on the First Article Inspection Report form QA 009 and will be maintained in conjunction with specific requirements on the SOP/drawing as noted in Section 4.2. Upon final FAI acceptance, all documentation will be archived in the appropriate master job folder.

QA form 015A-B may be used in lieu of QA form 009 if FAI is included with production run.

If a customer witness and/or acceptance is required, a QA representative or Project Manager will present the FAI and complete master job folder for review and acceptance of the FAI.

NOTE: First Article Inspection Report, QDR and CAR formats and procedures may vary depending on customer contract requirements and/or customer-supplied forms. The QA/Engineering Manager, Project Manager or designee will maintain on-going customer communication and feedback loop on all quality-contract related issues and concerns.

4.4.4 Final Inspection

All dimensional inspections will be performed prior to final processing and a visual inspection will be performed following any outside processing. Final inspection will include an audit of all requirements of the SOP/drawing, customer purchase order and specifications.

The parts and SOP/drawing will be signed to indicate final inspection acceptance. The quantity rejected, if any, will be noted on a QDR and issued as noted in section 4.5.

Accepted parts will be prepared for shipment in accordance with specific contract requirements.

Rejected parts will be submitted for material review action and disposition on the appropriate customer material review form, QDR, CAR or as specified in Section 4.5 of this QA Manual.

4.4.5 Shipping Inspection

Shipping inspection will consist of final identification of all production parts and/or assemblies, including application of part number in agreement with customers' purchase order and specifications; and inspection for special process stamps, including heat treat, zygo, magnetic inspection, etc. If required by contract, all necessary certifications/documentation will be completed and attached to the packing slip.

The packaging and shipping procedures will be as defined by the customers' purchase order and specification requirements at the shipping instruction point. When required, a Final Acceptance – C of C (QA 012) and Packing List (QA 011) will be prepared to close-out the master job folder and ship the completed item.

Government completed items may be sent to a government controlled packaging and shipping facility and if customer final acceptance is required for the packaging, the packing vendor will contact the appropriate customer representative for such approval to ship.

The customers' and MTC Engineering's copies of the packing slip and C of C will be signed by the inspector to indicate acceptance and if required, presented for source inspection or cleared for shipment.

Once the master job folder is complete and closed, the job folder is electronically archived in the Master Job Folder as a permanent record for future reference.

4.5 Control of Non-Conforming Materials and Corrective Action

Discrepant material will be presented to QA/Engineering for initial review and if the item cannot be made to print, a Quality Discrepancy Report (QDR) – QA 005 clearly stating the discrepancy will be initiated. The discrepant material will then be isolated from production and identified as one of three categories:

- Scrapped - which is destroyed and new items will be built;
- Reworked – if item can be made to print;
- Hold - Requires Material Review Board (MRB) action – items requiring engineering or customer approval to continue processing.

All government MRB material will be submitted to the customer for material review with a completed Quality Discrepancy Report (QDR) – QA 005 clearly stating the discrepancy. If required, an accompanying Corrective Action Report (CAR) – QA 001 will also be initiated and submitted for review and processing as per customer requirements and/or further noted in this section. Additionally, all government contracted items will be submitted to the contracting agent in the form of a Deviation-Waiver Request Form (DWR) DD1694, which can be used in place of MTC Engineering’s internal QDR form 005.

MRB Rejection review will be dispositioned as promptly as possible; however, in the event that immediate action is not practical, the defective material will be placed in a holding area until disposition has been made. When storage in a holding area is not practical due to an objects size, the QDR/DWR will be placed in such a manner on the material or container as to be clearly seen to preclude the possibility of unauthorized movement or use.

The internal MRB Team will consist of representatives from Quality, Manufacturing and Engineering and/or others as required by customer or contract specific requirements. This team will be responsible for:

- a. Disposition and release material for rework, which will result in meeting the engineering drawing or specification requirement. In this case, engineering will document the rework procedure on a rework issued SOP/drawing;
- b. The QA/Engineering Lead or Designee will maintain a record of all QDR/DWR’s by part number in the master job folder and will maintain follow-up information including C/A and final disposition.
- c. The QA/Engineering Lead or Designee will attach a copy of the QDR/DWR’s to a Corrective Action Report (CAR) form QA 001 for Corrective Action disposition and root cause analysis. A written reply will be requested for suppliers/production as promptly as possible but in no event later than one week after receipt. Failure to respond or reply without proper corrective action will be called to the attention of the President or QA/Engineering Lead or Designee.
- d. When rework is accomplished, the QA/Engineering Lead or Designee will verify that the items have been re-inspected and the disposition noted. All material which does not meet specification requirements and cannot be reworked will be presented to the customer by means of applicable customer supplied material review forms and procedures.
- e. If scraped, the QA/Engineering Lead or Designee will verify that the items have been marked and, if needed, physically mutilated to preclude the possibility of return to manufacturing.
- f. If item was purchased from a supplier, the item will be returned to vendor (RTV) (via purchasing/Project Manager) with instructions noted as to disposition.
- g. Request, as appropriate, a formal Material Review Board (MRB) to obtain a final disposition.

4.6 Control Procedures

This section is based on the guidelines set forth by MIL-STD-45662 with reference to ISO 10012 and ANSI/NCSL Z450-3 in association with the National Institute of Standards and Technology (NIST) and to the extent required to meet PO/Contract requirements..

The purpose of this section is to establish the requirements to ensure that all precision measuring tools used by inspection and accept production, both company and personal, are adequately checked and maintained to assure a satisfactory degree of accuracy. The requirements set forth in this section are considered the minimum necessary to ensure the accuracy of all instruments used as a media of product acceptance and to ensure precision tools are recalled for periodic inspection, calibration and identification as established per the Master Gauge and Serial Number Log (Calibration Schedule) QA form 007 and noted on the Calibration Index Card form QA 008 (see Section 4.7.3).

Note: In lieu of maintaining a physical Calibration Index Card or a typed/hand-written Master Gauge and Serial Number Log (Calibration Schedule), the system may be computerized and available for review upon request.

4.6.1 Control of Company-Owned and Personal Precision Measuring Tools

The QA/Engineering Lead or his designee shall establish a listing of employees by name and number and showing accountable precision tools. When employees' tools have been checked, the Calibration Log and Calibration Index Card form QA 008 shall be validated by application of a calibration seal to include calibration date, next calibration due date, log serial number and calibration by initials.

4.6.2 Company Owned Tools

1. All company-owned precision tools used in the inspection of manufactured or purchased products shall be stored in a central location and issued as required be the QA/Engineering Lead or his designee. The QA/Engineering Lead or his designee will also be responsible for the inspection of precision tools to assure that all such tools so stored and issued are kept in good condition to assure a high degree of accuracy. This will be accomplished by maintaining records to indicate condition and by insuring that all precision tools are inspected for accuracy at periods not exceeding one year or as adjusted based on R&R studies. All hand tools withdrawn from the QA department location shall be returned at the end of each shift (except as provided in paragraph 2).
2. When considered necessary that certain tools be retained without being returned daily to the controlled storage location, such tools shall be issued for permanent assignment to an individual and it shall be the assignees responsibility to make sure that all such tools are inspected for accuracy as required and are properly maintained. Such tools shall be issued to employees only as necessary.

4.6.3 Personally Owned Tools

1. It shall be the responsibility of the QA/Engineering Lead or his designee to maintain records on all personal precision tools, checking for accuracy at specific periods as defined per calibration master log/schedule.
2. New employees upon entering service with this company will immediately, before using, submit personal

precision tools to the QA/Engineering Lead or his designee for inspection of accuracy and assignment of serial numbers for calibration and addition to the Master Gauge and Serial Number Log or online calibration system.

4.7 Calibration Procedures

MTC Engineering shall have available for use by customer representative, tools and gauges when required for verification of accuracy and quality.

4.7.1 Standard Procedures

The QA/Engineering Lead or his designee shall establish and maintain a listing of employee by name and tools. When employees' tools have been checked, the calibration log/schedule will list and a label or tag will be attached to the tool or case. QA/Engineering Lead or his designee shall check instruments, tools or gauges using equipment, which has been calibrated to an equal or higher degree of accuracy, traceable to the National Institute of Standards and Technology.

Master-type gauges shall be calibrated to a higher degree of accuracy, traceable to the National Institute of Standards and Technology, by an accredited NIST lab source. Lab Calibration Certificates shall attest to the test date, condition and accuracy of media used.

Tools, gauges, etc., found to be acceptable should be recorded on a Calibration Index Card. Tools and gauges, etc., when found in need of adjustment shall be readjusted (if possible) and recorded on the record card with an acceptance date and a description of calibration or adjustment required, in order to evaluate calibration re-schedule and impact on quality.

Whenever a gauge or inspection device is found to be nonconforming and non-adjustable, the inspector will retire the tool from use.

Tools, gauges and inspection devices found needing adjustments and having a potential impact on product quality, will be evaluated for direct impact on finished products and if necessary, product produced using said device will be subject to re-inspection and processing per section 4.4 in this manual.

If items have been shipped, the QA/Engineering Lead or his designee will initiate a QDR/CAR and notify the customer via purchasing/Project Manager of the potential problem and customer feedback/disposition.

4.7.2 Limitations

Gauges or items not required to be used to their full capability shall indicate the applicable condition by label.

Production aids and templates shall be considered non-calibrated reference tools as noted per section 4.7.6.

4.7.3 Schedule of Calibration

As a baseline, micrometers, calipers and indicators are to be checked annually at a minimum and if required based

on usage, the calibration schedule can be adjusted based on R&R studies. Torque Wrenches are to be checked annually. All master-type gauges, i.e. hardness testers, surface plates, Master gauge block sets, etc. will be checked according to the schedule shown on the Master Gauge and Serial Number Log or as defined by the manufacturer.

4.7.4 Environmental Control

All standard and secondary standard gauges used as a media of product acceptance, shall be checked to a master gauge set in a temperature-atmosphere controlled to the degree required per MIL-STD-45662 referencing ISO 10012 and/or ANSI/NCSL Z450-3. Inspection equipment may be calibrated in house per QAP 10.0 through QAP 12.0 and WI-10.0 or sent to an accredited calibration lab for re-certification.

4.7.5 Identification

Each tool used for inspection of product shall be identified after completion of calibration by use of a calibration label or tag. The calibration date; next calibration due date; tool s/n id and calibrated by shall be shown on each label and/or tags. Production tooling and production aids will also include part number/NSN and, if required, customer unique marking. If the tool is part of a set or of a size that cannot accommodate the attachment of a label or tag, the set container can be labeled or an alternate means of identifying the tools calibration may be used as to not impair the tools usage but still indicate calibration status.

If quantity or sizes of tool are not practical for labeling, tagging or stamping, each container will be labeled or tagged.

4.7.6 Control of Production Tools/Aids

Production tools/aids, including customer tools, will be inspected prior to release to manufacturing to ensure the tools ability to produce quality product. Production aids, tools not used for acceptance/rejection may be accepted by means of complete dimensional check or a combination of dimensional check and first article production part inspection. Tools used as a media of inspection will be maintained and calibrated as standard inspection tools by the QA/Engineering Lead or his designee.

The QA/Engineering Lead or his designee will inventory the tool storage area annually and review the record cards for agreement with physical location of the tool. If required, a visual inspection and/or dimensional check will be accomplished to determine the condition of the tool. The Calibration Index Card QA form 008 will be dated with indication of status noted.

If the tool or aid has engineering changes or changes initiated by purchase order requirements, any necessary changes to tools will be made and the tool identified with change letter, rework date and re-calibration date by the QA/Engineering Lead or his designee.

Sample parts and production tools/aids put on engineering hold for incorporation of design changes or engineering change review by the QA/Engineering Lead or his designee, will be pulled from production and held

by engineering subject to release of a rework SOP. The rework SOP and/or controlling document initiating the hold will be attached to the item. Upon release, items will be tagged according to release information.

Customer Engineering Change Notice (ECN) tooling will be accomplished by the issuing of a rework SOP per guidelines set forth in Sections 4.4 and 4.5 of this manual.

Tools that do not meet all applicable drawing requirements or specifications will be tagged and held awaiting review and disposition by the QA/Engineering Lead or his designee or as defined in Sections 4.4 and 4.5 of this manual.

Tools that are found to be discrepant shall be rejected and placed in the bonded area until repaired or replaced.

All production tools designated as obsolete will be tagged or stamped and stored. Prior to re-use/re-activation, the tool will be first article inspected for compliance to the latest engineering change.

4.8 Control Labels, Tags and Cards

The QA/Engineering Lead may in lieu of maintaining a physical Calibration Index Card or a typed/hand-written Master Gauge and Serial Number Log (Calibration Master Schedule), may use a computerized system which is available for customer review upon request.

4.9 Document Control

Upon receipt of a new contract/PO and prior to release of new jobs to production, the QA/Engineering Lead or his designee will immediately complete a Contract Review form QA 013 to define all contract requirements including part configuration, process sequencing and specification requirements. A SOP is then created as noted in Section 4.2 and released to production.

If a new or revised print or specification is received and the shop order has been released, the QA/Engineering Lead or his designee will immediately review the document for incorporation on the Contract Review and SOP based on the customer's requirements and the actual status of the work-in-progress (WIP). A copy of the customer's transmittal document or the MTC Engineering change record will be permanently filed in the master job folder for that contract item and/or part number.

When a revision is received which results in a change that cannot be incorporated into the work in progress, the Project Manager/Engineering Lead or his designee shall place the job on hold, notify the customer using the customer's appropriate form of notification and request direction.

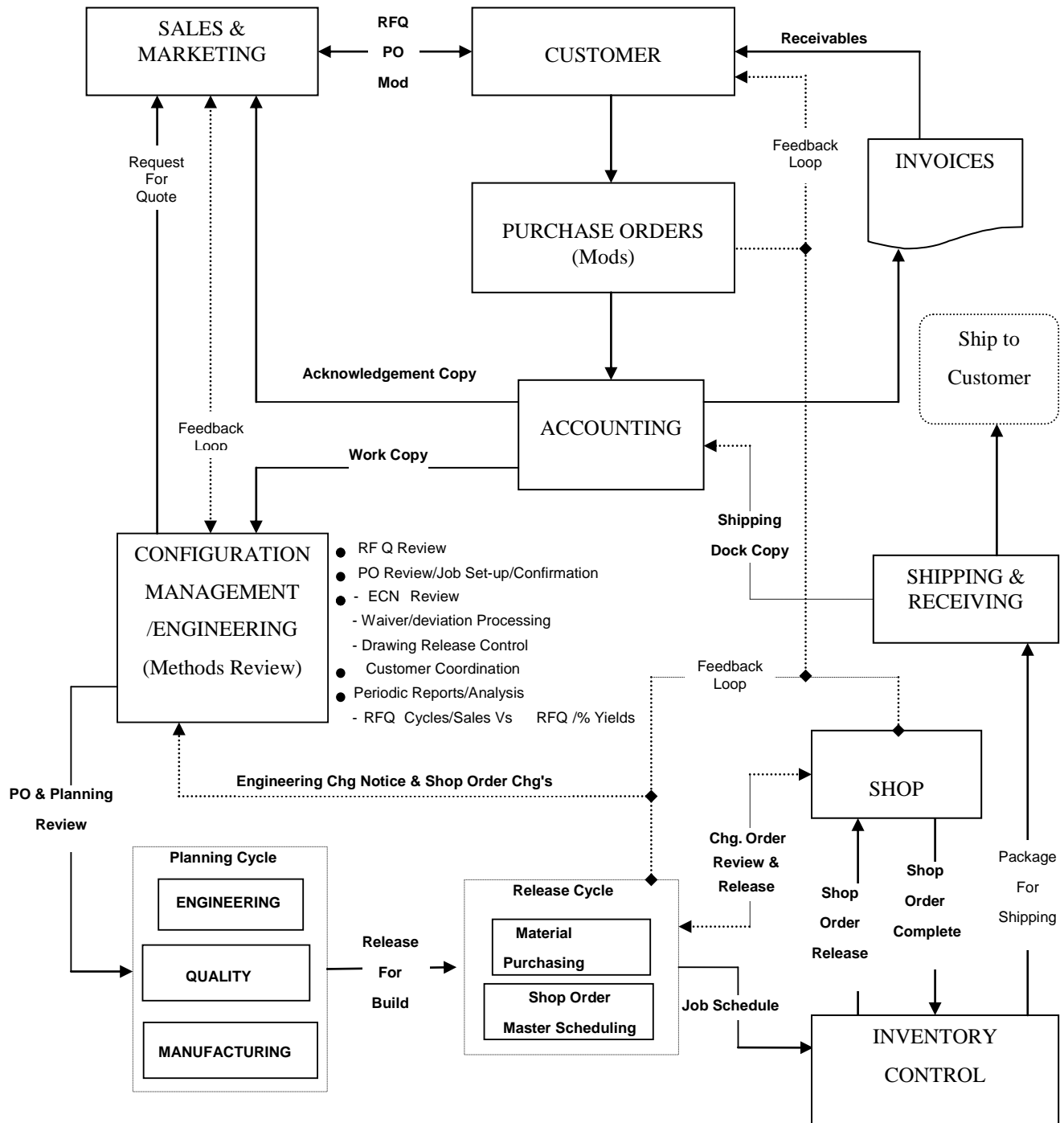
Production drawings will then be forwarded to the QA/Engineering Lead or his designee for the following action:

1. The face of each drawing will be red-lined or marked with the applicable drawing revisions and all ECN's outstanding will be entered and each copy numbered
2. The change record block will be marked on the drawing and the revision information entered.
3. The entire package will be filed by job/part number in the master job folder.
4. If tooling is affected, the tool design drawing will be revised to reflect the engineering change.
5. The QA/Engineering Lead or his designee issues the new revision print to production and removes the old

documentation for filing in the master job folder for archiving.

6. Drawing copies found loose in production area will be destroyed.
7. Upon receipt of drawing revisions they will be handled as noted in 1 thru 6 above, except that when received by QA/Engineering Lead or his designee, all obsolete prints and/or documents will be immediately recalled from production and filed, destroyed or returned to the customer as per customer requested action. One copy of all removed documents will be archived in the master job folder for future reference if needed.
8. Customer or other general specifications will be processed as noted above and kept current as the QA/Engineering Lead or his designee receives revisions.
9. If production or a vendor notice that a drawing or specification become illegible, they will return the old copies to the QA/Engineering Lead or his designee for replacement.
10. Upon final closeout of a PO/Contract, all documentation relative to a specific job/contract will be scanned and archived as a form of permanent record retention and filed by job number with reference to the Master Job Log.

4.10 Configuration Management and Documentation Flow



By: Tony Casillas
 C: \ Configuration Control

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4.11 Control of Production (Staging Area)

All production, raw material or finished parts, shall be stored in a designated staging area. Storage shall be accomplished in a manner to ensure proper preservation and identification with an inventory/job log maintained by Purchasing/Project Manager or a designee of all inventory items.

All material will be verified by the Project Manager and/or QA/Engineering Lead or his designee prior to being placed in work and the QA/Engineering Lead or his designee will be responsible for a periodic review of the area.

Job material will only be issued to production with an applicable SOP/drawing and reference documentation including part drawings as noted in Section 4.2.

NOTE: Inventory Control may be via an on-line business system.

4.12 Stamp Control (Signing of documents)

MTC Engineering does not use Inspection Stamps. Instead, individuals may sign or initial documents as required.

4.13 Use of Statistical Methods

In achieving its quality goals and objectives, the company shall use modern statistical methods in all phases of the quality loop when practical. The Quality and Production organizations within the company shall develop and utilize statistical techniques appropriate to control and verify the quality of their work as it relates to the quality of the end products manufactured by MTC Engineering. Contractually required sampling plans shall be in accordance with, and approved by the Government/customer representative.

4.14 Subcontract and Supplier Control

MTC Engineering shall evaluate and select suppliers based on their ability to supply products in accordance with MTC's requirements. Evaluation, reevaluation and selection criteria for suppliers shall be as defined in this QAM, QAPs and WIs and an annual Supplier Quality Management System Questionnaire (SQMS), QA Form QA016, shall be completed by subcontractors and supplies as specified by contract and/or customer defined requirements and/or sub-clauses.

The QA/Engineering Manager, Project Manager or Designee is responsible for the evaluation, reevaluation and selection criteria for suppliers as defined in the company SQAM and management shall maintain records of:

1. The assessment criteria of suppliers and subcontractors;
2. The evaluation and selection of suppliers and adding the selected supplier to the Approved Supplier List (ASL);
3. Specification of requirements for purchased documents and the verification of goods and services received;
4. And completion of periodic reevaluation of suppliers and the purchasing processes.

The results of evaluations and subsequent follow-up actions shall be recorded in the ASL and any required actions, shall be documented in the Quality Action Log as defined in WI-8.0.

The MTC Engineering's system for the control of purchased goods or subcontracted services shall ensure that those products and/or services purchased and received conforms to specified requirements and include provisions for the assessment of suppliers and subcontractors, which shall be maintained in the QMS on-line system.

4.15 Customer Feedback and Continuous Improvement

MTC Engineering shall supply an annual Customer Survey Questionnaire, QA Form QA017 to each customer to identify potential areas for continuous improvement and benchmark quality, delivery and overall customer satisfaction. The data collected from each responding customer shall be evaluated by senior management and processed as defined in QAP 22.0, Continuous Improvement. MTC's requirements for evaluation, reevaluation and the selection criteria for continuous improvement projects shall be as defined in this QAM and supporting QAPs and WIs

Appendices of Forms

1. **Corrective Action Report (CAR) – QA 001**
2. **Internal Audit Report (QA 002)**
3. **Quality Discrepancy Report (QDR) – QA 005**
4. **Master Gauge and Serial Number Log (Calibration Schedule) – QA 007 ***
5. **Calibration Index Card – QA 008 ***
6. **First Article Inspection Report (FAR) – QA 009**
7. **Quality Control Plan (QCP) – QA 010**
8. **Packing List (QA 011) [Shipment Release]**
9. **Final Acceptance – C of C (QA 012) [With Special C of Cs QA 012-1, -2, -3]**
10. **Contract Review (QA 013)**
11. **Final/In-process Inspection Report (015a & 015b)**
12. **Supplier Quality Management System – QA 016**
13. **Customer Survey Form – QA 017**
14. **Zero Based Acceptance Plan – QA 111**
15. **Shop Order Planning Sheet (SOP) – ME 001**

***NOTE: QA 007 and QA 008, if computerized, are available upon request as a Master Log/Master Calibration Schedule.**

Additionally, SOP form ME 001 may vary in form as defined in WI-1.0, Section 2.0.