

- (c) External Suppliers shall annually submit the latest version of a completed and accurate conflict minerals reporting template (CMRT) issued by the Conflict Free Sourcing Initiative (CFSI). The CMRT Report shall be completed in English and submitted in Excel format.
- (d) External Suppliers shall utilize source smelters that are validated as conflict free smelters (CFS) by a 3rd Party Organizations (e CFSI, LBMA, RJC).
- (e) External Suppliers shall notify TTM Technologies at least 90 days prior to any changes in source smelters and shall confirm such changes in a revised CMRT.

2.10 Counterfeit Parts Policy: TTM only accepts raw materials that are accompanied by the lot specific material Certificate of Conformance from the Original Material Manufacturer. Counterfeit parts prevention is governed by the requirements and guidelines of the Industry Standard SAE AS5553, SAE AS6496 and SAE AS6174.

- (a) Please access the TTM Supplier Website
http://www.ttmtech.com/support/supplier_req.aspx
- (b) Click on: Supplier Counterfeit Parts Requirements
- (c) TTM Technologies is a registered member of GIDEP (Government Industry Data Exchange Program), which is monitored across all TTM sites for any quality issues, inclusive of any known counterfeit parts issues identified through the industry.
- (d) The TTM GIDEP Representatives will notify Purchasing and Quality if a GIDEP Alert has been released. If an Alert is received, TTM Management will notify the appropriate external parties, as detailed in SAE Counterfeit Parts Standards.
- (e) TTM also monitors Suppliers and Incoming Material and takes appropriate action when suspect or confirmed fraudulent/counterfeit parts are detected.

3.0 Supplier Status & Maintenance

3.1 Quality Records Retention: Supplier will retain quality records for products, equipment or services provided to TTM for a minimum of 7 years, after the requirements of the procurement action have been fulfilled – or as stated on the Purchase Order.

- (a) At the end of the retention period, Supplier will destroy all documents and other materials (including electronically stored data) that contains any Confidential Information, and shall certify such destruction in writing to TTM, including a list of the materials destroyed, if requested.

3.2 Records Format & Availability: Copies of quality records or documents may be saved in electronic or paper format, but shall be available to TTM, TTM customers, or Regulatory Authorities within 48 hours of request.

3.3 Self-Evaluations: Suppliers may periodically be asked to complete a self-evaluation form (i.e. Supplier Self-Assessment Survey). Exceptions to this requirement are those Suppliers that are

managed through performance meetings. The performance meetings may be held on a month, semi-annual or annual basis.

3.4 Scorecards: Supplier may be measured periodically with Scorecards. The selection of these Suppliers is determined by Purchasing and/or Quality. The purpose of the Scorecards is for TTM to be readily able to review the Supplier's Performance. Scorecards can have a significant influence on Procurement decisions that do not have 'Performance Metric' meetings, as described in section 3.3 of this procedure.

- (a) **Performance Categories:** TTM Supplier Scorecards are broken into 4 categories / subgroups:

Quality

- DPPM Review
- Corrective Actions

Cost

- Cost competitiveness, payment terms

Delivery

- On Time Delivery, Product Lead Time, Timeliness of Order Acknowledgement
- Availability of replenishment programs, such as Consignment agreement, Vendor Managed Inventory, etc.

Technology

- Technology Development
- Technical Support & Responsiveness

- (b) **Scoring:** Each of these categories is scored on a weighted scale. The weighting of each category and criteria for scoring is detailed in TTM Documentation.

- (c) **Performance Targets and Thresholds:** Targets and thresholds will be determined and set by Purchasing on a Supplier by Supplier basis, as deemed necessary.

3.5 On-site Audits & Right of Access: As detailed in Section 1.0, TTM, TTM Customers, and Regulatory Authorities shall be granted the right of access to all Suppliers and Sub-tier Supplier facilities and records involved in fulfilling TTM Purchase Orders. The Sub-tier Suppliers shall be informed by the Supplier of these conditions. A record of these Notifications shall be documented and retained (e.g. Purchase Orders, Contracts, and Condition of Purchase).

TTM will inform Suppliers of On-Site Audits in advance. If the Audit is performed due to nonconforming product, the Supplier will segregate and keep such product for the inspection of the coming auditor(s). Upon Audit completion, conforming product may be shipped according to customary methods in accordance with the current TTM Purchase Orders.

3.6 3rd Party Auditors: TTM may determine that a qualified 3rd Party Auditor(s) is required due to business conditions or staffing availability. The Auditor(s) will be acting on behalf of TTM. They will require the same access granted to TTMs' employees (e.g. SQA Services).

3.7 Supplier Monitoring: All Suppliers are reviewed on an ongoing basis. Quality discrepancies may result in issuance of a Supplier Corrective Action Request (SCAR), which will be recorded in the Supplier's File. Ongoing Approval Status of Suppliers constitutes the record of Suppliers' conformance to TTM requirements.

4.0 Supplier Quality Concerns

4.1 Supplier Notification to TTM of Discrepant Materials: When a Supplier becomes aware that they have shipped nonconforming materials or will miss a delivery due to nonconforming material, TTM shall be notified within 24 hours.

4.2 Quality Control Measures: Dependent upon the risk to TTM, product quality, and the availability of replacement Suppliers / Subcontractors, TTM will determine the level of response required for non-conforming product. Below are examples of control mechanisms TTM may utilize:

- (a) **Supplier Corrective Action Request (SCAR):** A formally issued complaint regarding the Supplier's Quality.
- (b) **Rejection of Material:** TTM Quality or Engineering Representatives may reject incoming materials or services that do not meet the specifications provided to the Suppliers.

3rd Party Inspectors may also reject Supplier Products or Services based on quality that doesn't meet the specifications provided to the Suppliers.
- (c) **Outgoing Inspection Levels:** May be increased. For example, if a Supplier is having a high rate of nonconforming escapes and they are using a 4% AQL Sampling Level, TTM may request they move to a 1% AQL Sampling Level, thus increasing the number of samples inspected per each lot of material.
- (d) **3rd Party Inspections:** May be required. At TTM's discretion, quality verification may be required by a qualified 3rd Party or by TTM's Quality or Engineering Team. 3rd Party Inspections will be at the expense of the Supplier. If TTM performs the additional inspection services, the Supplier may be invoiced for these services.
- (e) **Corrective Action:** When a Corrective Action request is issued; the Supplier is expected, at a minimum, to comply with the following actions:

- Contain the defective material and report status to the TTM Supplier Quality Representative within 48 hours from the Date of Notification.
 - Provide a Corrective Action Plan and expected completion date within 2 weeks from the Date of Notification – or as stated in the CA request (refer to Appendix 2).
 - Complete the Action Plan and Verify Effectiveness, and then inform the TTM Supplier Representative when completed.
 - Supplier is required to use a team oriented approach to discover the root cause of the problem and develop a solution.
- (f) **Performance Improvement Plan (PIP):** Supplier may be required to develop a Performance Improvement Plan (refer to Appendix 1). A PIP includes:
- Identify and Rank Risks / Weaknesses in their Process
 - Choose Target Areas for Improvement
 - Develop Improvement Plans
 - Set Goals / Ownership / Timelines
 - Develop Measurement & Control Plans
 - Verify Effectiveness
- (g) **Supplier Waiver Request:** Suppliers may request a waiver from TTM for nonconforming materials. The waiver request shall be approved by TTM Site Quality Leader, or delegate before any nonconforming material is shipped to TTM. If approved, instructions for identifying the nonconforming product and shipping instructions will be detailed on a Supplier Waiver Request for Nonconforming Product Form.
- (h) **Rework & Repair:** When rework and/or repair is required in order to meet the product and/or material specifications – it is ONLY permitted after the Supplier has submitted a Rework Plan and the Plan is approved by TTM.

4.3 Supplier Chargeback Process: The following steps are an outline of steps TTM may take to recover costs incurred due to nonconforming materials from our Suppliers. It is solely at TTM discretion whether or not we will pursue these actions. Alternative charge-back steps will be taken if prearrangements are made with TTM.

- (a) Nonconforming Supplier parts are identified through TTM receiving inspection, on-line rejects, customer returns, alerts or Supplier recalls.


- (b) Suppliers will be notified of nonconforming products through the SCAR process or request for failure analysis.
- (c) An account is initiated by accounting to collect all costs incurred by TTM, as a result of the nonconforming product.

Costs incurred may include, but are not limited to, the following items:

- Rework by TTM's Costs
 - Return for Rework Costs
 - Replacement of Material Costs
 - Recall of Material Costs
 - Customers' Charges for Removal/Return/Replacement
 - Delivery Penalties from TTM's Customer
 - Travel Expense
 - Source Inspection Costs as a Result of Nonconformance
 - Containment Costs
 - Additional Inspection Costs at TTM
- (d) A letter is sent to the Supplier summarizing the costs incurred and TTM's intent to recover such costs.
 - (e) A detailed report of the costs is available for review and verification by the Supplier.
 - (f) For minor issues the charge will be a \$250.00 flat rate to cover administrative costs
 - (g) The Supplier has 5 working days to respond to questions or review.
 - (h)

Note: The preferred method of cost recovery is to debit the Suppliers account, unless an alternative agreement is reached through review with the Supplier. The charge back will be initiated after 10 working days or completion of the review process.

4.4 Supplier Responsibility: It is the Supplier's Responsibility to provide parts / processes that conform to all specifications and reliability requirements and to accept liability for all escapes caused by their quality discrepancies.

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4.5 TTM Responsibility: It is TTM’s Responsibility to notify the Supplier of all nonconforming Materials in a timely manner and to provide an accurate and fair system to collect data for all applicable costs incurred. TTM will hold the defective Materials for Supplier review.