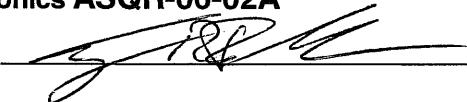


Approved By  Date 3/3/2009

Aerospace Supplier Quality Requirements

1.0 Purpose

This specification defines the requirements for Mech-Tronics' aerospace suppliers.

2.0 Scope

Applies to the suppliers of material, parts and services used in Mech-Tronics' aerospace products.

3.0 Requirements

- Q1) Supplier must provide verification of the product including objective evidence of the product quality (e.g. certificate of compliance, test reports, statistical records, process control). All certifications related to Special Processes (e.g. Plating, Anodizing, Heat Treat) must state the specification and the revision of the specification to which the parts were processed.
- Q2) Personnel performing work on product for Mech-Tronics must be qualified for the type of work being performed. (e.g. welder certification)
- Q3) Quality management system requirements:
Supplier is to maintain an effective quality system to ensure product and process integrity that is based on ISO 9001 as supplemented by AS 9100.
- Q4) Nonconforming Material:
Nonconforming material will not be accepted by Mech-Tronics unless approved in advance in writing by the Quality Manager. Requests for authorization to ship nonconforming material should be addressed in writing Mech-Tronics' Quality Manager with a full explanation of the nonconformance.
- Q5) Supplier must notify Mech-Tronics in writing of any changes in product and/or process definition which could impact the form, fit or function and, where required, obtain Mech-Tronics approval.
- Q6) Suppliers are required to notify Mech-Tronics of any significant organizational or facility changes such as company name, location or senior management.
- Q7) Mech-Tronics, Mech-Tronics' customer and regulatory authorities are afforded the right of entry to all facilities involved in the order to determine and verify the quality of our products and to all applicable quality records.
- Q8) Supplier must flow down to the sub-tier suppliers the applicable requirements in this document and the purchasing documents, including key characteristics where required.
- Q9) Suppliers are required to maintain control of quality records for a minimum of 4 years unless otherwise specified on the purchase order. Examples of quality records are (but not limited to) Routers, Material Certifications, Purchase Orders.
- Q10) When indicated on a drawing the supplier will monitor key characteristics KEY using statistical process control (SPC). Key characteristics must be demonstrated to be in statistical control with a process capability (Cpk) > 1.33.
- Q11) Measuring and Test Equipment:
The supplier shall provide and maintain measuring and test equipment (M&TE) necessary to assure conformance to purchase order requirements. All M&TE shall be calibrated for accuracy at established intervals against standards that have a known valid relationship to the National Institute of Standards and Technology (NIST). If production tooling, jigs or fixtures are used as a media of inspection, this equipment shall also be verified for accuracy at established intervals.
- Q12) Suppliers must certify compliance with DFARS Clause 252.225-7014, Preference for Domestic Specialty Metals, and Alternate 1, with each shipment. Suppliers are required to flow this clause down to all levels of the supply chain. Evidence of compliance must be kept on file per Requirement Q9 and submitted to Mech-Tronics upon request.
- Q13) Most technical data is export controlled. Export of this information in any form is restricted. Suppliers shall not disclose this information in any form to a foreign person entity, or export it from the United States without US Government authority and the express written authorization of Mech-Tronics or our customer. It may be necessary for you to return all copies of the technical data provided or certify in writing that the data has been destroyed. You shall flow down the substance of this notice to all lower tier suppliers where export controlled technical data is involved.

- Q14) A First Article Inspection Report (FAIR), in compliance with AS9102 requirements, is required on one (1) part randomly selected from a production lot for each part number. The FAIR must accompany the part with the shipment. The part which the FAIR was performed on must be tagged as "First Article". The documentation shall include the drawing with numbered (ballooned) characteristics corresponding to the itemized FAIR report.

FULL FAIR:

A Full FAIR will be required for all incoming parts that meet all of the following criteria:

- 1) The part is a Mech-Tronics designed part or a Mech-Tronics Customer designed part.
- 2) The part is NOT a MIL-SPEC part or a catalog item (e.g. AS, MS or NAS items).
- 3) The part is the first production lot to be produced for Mech-Tronics by the Supplier or a period of 24 months has elapsed since the previous delivery of the part to Mech-Tronics.

"DELTA" FAIR:

A "Delta" FAIR (a limited scope FAIR of a part which had already previously passed a Full FAIR) will be required when one (1) of the following criteria is met:

- 1) A design or process change has been made that affects the form, fit or function of the part upon which the previous FAIR was performed.
- 2) The drawing revision level, manufacturing process or tooling has changed.
- 3) A change in the manufacturing location.

- Q15) Parts received from Mech-Tronics tagged with a FAIR tag must be kept identified throughout the manufacturing process and returned to Mech-Tronics with the tag attached.