

Effective Date: 10/11/2024

Q400: Material & Performance Testing, Reports and Certifications

Material test - The supplier shall provide for each shipment actual (defined as traceable to the finish product material) material test reports, certificates of analysis, or any other such documented objective evidence that demonstrate the materials used in the manufacture of the product conform to the properties and characteristics (chemical, mechanical, or physical properties, etc.) as stated in material's specifications cited in the product's design documentation. These required characteristics or properties may be described in those specifications as chemical composition, physical/mechanical properties, quality conformance tests, or certificates of analysis, etc. The Test Reports/Certifications shall list each of requirements as shown in the material specification(s) including tolerances for each characteristic, and the actual test or analysis results. The reports/certifications shall include and be traceable to the specific material lots incorporated in the product being delivered. The requirement applies to details or components of assemblies listed in the product's design description.

Typical (defined as sample data that represents an average of the material used) test reports may be provided upon written approval from Aerojet Rocketdyne buyer, approvals must accompany shipment.

Performance test - When performance tests are required (Pressure, leak, electrical, functional, acceptance, etc.) each shipment shall be accompanied by actual test results. Reported results must include test parameters, specification, traceability, and material(s) to product(s) delivered. In addition, reports shall bear signature and date of the responsible representative of the agency performing the test. The specifications must be listed, including the revision letter(s) or revision number(s) and amendments. When parts are serialized, serial numbers must appear on the report(s).

Deliverables:

Manufacturer or distributor shall ensure all requirements for the material specification or performance test are reviewed and verified against the actual specification, and any technical data is acceptable to the specified limits (Compare the information provided in the Material Test Reports with the actual specifications for the material. Check for any discrepancies or missing data).

Each shipment shall have objective evidence of a legible copy of applicable test reports and shall include information for:

1. **Identification:** Each Material Test Report must include a unique identification number, the material specification (including revision letter(s) or revision number(s)), and the heat, lot number or batch number. Performance Test reports for serialized hardware must include the serial numbers.
2. **Test Results:** All required chemical and mechanical test results should be reported in units consistent with the specification requirements. Results must be identifiable with test parameters, specifications, and material(s) to product(s) delivered. Any non-conformance identified during testing must be clearly stated, along with details of any corrective actions taken or concessions granted.
3. **Conformance Statement:** The report must state that the materials supplied have been tested in accordance with the relevant material specifications and standards (e.g., ASTM, ASME, ISO, etc). Material Test Report must include the certification statement signed by an authorized representative of the testing facility, attesting to the accuracy of the report and compliance with the specified requirements. The date when the report was generated and issued.

This document is an integral part of the contract (purchase order) in which referenced.
Applicable Revision: The revision in effect at the time the purchase order is placed.