

# TRES

## QM-02

Technifab Requirements  
and Expectations for  
External Providers



Technifab

Revision 2

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1. REVISION CONTROL SHEET

Page or Paragraph	Description	Approval	Revision Date	Revision Level
Entire TRES Document	Release	JP/BC/DU	9/27/2013	ORG
Headers	Altered Revision Level to import document into Quality Management Software	JP/BC/DU	11/6/2014	1
Entire TRES Document	Updated to meet current business practices	DZ/JP/TG	11/16/2018	2

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### 3. PURPOSE

- 3.1. To outline the quality and procurement requirements for external providers (also referred to as suppliers) and their sub-tiers intending to provide goods or services to Technifab Inc.

### 4. SCOPE

- 4.1. This document serves as the general quality and procurement requirements for Technifab Inc. and their sub-tiers. External providers must maintain compliance with these requirements, in addition to any/all other contractual requirements.
- 4.2. This document is invoked by direct reference on the purchase order (when applicable) and available for download on the Technifab website at <http://www.Technifabinc.com/>
- 4.3. External providers shall flow down all applicable requirements of this document to their external providers.
- 4.4. No deviation from these requirements are permitted. Conflicts between provider capabilities, existing contractual agreements, etc. must be communicated to Technifab Inc.
- 4.5. In the event these requirements are emphasized or tightened by engineering or purchase order requirement, the later take precedence.

### 5. NORMATIVE REFERENCES

- 5.1. ISO 9001 - Quality Management Systems – Requirements
- 5.2. ISO 10007 – Quality Management – Guidelines for Configuration Management
- 5.3. SAE AS9100 - Quality Management Systems – Requirements for Aviation, Space and Defense Organizations
- 5.4. SAE AS9102 - Aerospace First Article Inspection Requirement
- 5.5. SAE AS9120 - Quality Management Systems – Requirements for Aviation, Space and Defense Distributors
- 5.6. D6-51991 - Quality Assurance Standard for Digital Product Definition at Boeing External Suppliers
- 5.7. MAA1-10009-1 – Quality Assurance Standard for Digital Product Definition at Spirit AeroSystems, Inc. Suppliers

## 6. QUALITY MANAGEMENT SYSTEM AND REQUIREMENTS

- 6.1. External providers shall maintain a Quality Management System (QMS) that complies with applicable requirements of SAE AS9100 (current revision) or its European equivalent ISO 9001 (current revision).
- 6.2. For external providers that have a certified Quality Management System, the following Quality Requirements are already applied through the certification.
- 6.3. Exceptions to AS9100/ISO9001 may be granted based upon the following:
  - 6.3.1. Criticality of product(s)
  - 6.3.2. Critical business need(s)
  - 6.3.3. Type of product(s) / service(s) provided
  - 6.3.4. Size of manufacturing facilities/number of employees
  - 6.3.5. Proprietary External Provider
  - 6.3.6. Customer Mandated Source (e.g. D1-4426)
  - 6.3.7. Other (e.g. tooling or small non-complex components)
- 6.4. External providers that do not have a Quality Management System that is certified to AS9100, ISO9001 or equivalent shall ensure the following requirements are documented in a Quality Manual:
  - 6.4.1. How the organization provides approval of products and services prior to delivery;
  - 6.4.2. How the organization provides approval of the various methods, processes and equipment used in the manufacturing of products and services;
  - 6.4.3. How the organization provides approval of the release of products and services prior to delivery;
  - 6.4.4. How the organization ensures the competence, including any required qualification of persons performing work on products or services;
  - 6.4.5. How the organization ensures the use of statistical techniques for product acceptance and the related instructions for acceptance of products and services are approved by Technifab prior to use;
  - 6.4.6. Please contact Supplier Management for assistance with capturing these requirements in a Quality Manual.
- 6.5. All external providers shall provide a copy of their Quality Manual and applicable certifications in English upon request.
- 6.6. It is recommended, external providers that provide special process services (i.e. anodizing), to be certified to the applicable Nadcap or equivalent and maintain their certification.

## 7. RIGHT OF ENTRY / SURVEILLANCE

- 7.1. All external providers accept the right of access by Technifab, our customers, and regulatory authorities to the applicable facilities and to the applicable documented information, at any level of the supply chain.
- 7.2. External providers will be subjected to periodic reviews, including but not limited to onsite visits, audits, quality assessments, surveys, etc. based on risk /performance indicators.
- 7.3. External providers that are not certified by a recognized certification body to AS9100 or ISO9001 may be subject to increased monitoring by Technifab Inc.

## 8. ITAR AND EAR COMPLIANCE

- 8.1. External providers shall ensure compliance to ITAR and EAR requirements when handling Technifab products and documentation so designated by Technifab.

## 9. DOCUMENTED INFORMATION / CONTROL OF RECORDS

- 9.1. All external providers shall have a process for managing documented information pertaining to products and services provided to Technifab.
- 9.2. Documented information shall be readily available for review by Technifab Inc., our customers, and regulatory authorities. Records should be legible, readily identifiable, and retrievable.
- 9.3. Documented information shall be retained as defined by contract requirements, purchase order requirements, or if not otherwise specified, for no less than the life of the program +10 years.
- 9.4. Methods shall be in place to prevent the tampering of or loss of records.

- 9.5. Records that are marked for disposal shall have written authorization from Technifab to dispose of prior to destruction.
- 9.6. Documents/records shall be destroyed in a manner that ensures the documented information cannot be used or distributed. Shredding documented information is the preferred method.
- 9.7. In the event of an external provider termination, operation stoppages, transfer of ownership, bankruptcy or other catastrophic events that lead to closure, all external providers shall ensure that documented information is maintained and accessible for Technifab and its customers.

## 10. CONTROL OF NONCONFORMING OUTPUTS

- 10.1. External providers shall ensure that outputs which do not conform to drawing, specifications, or other requirements are identified and controlled to prevent their unintended use or delivery.
- 10.2. Actions shall be taken to contain the nonconformity and its impact on other processes, products, or services, including but not limited to segregation, containment, return or suspension of products and services.
- 10.3. Dispositions of non-conforming outputs must be approved by Technifab Inc. prior to shipment.
- 10.4. External providers shall not disposition any product or service as use-as-is or repair. Rework authorization shall be granted by Technifab Inc. as appropriate within the requirements of Technifab's customer prescribed specifications.
- 10.5. In the event nonconforming product is delivered to Technifab Inc., external providers must provide notification within 24 hours of identification. Notification must include at a minimum, part number, purchase order number, lot/material traceability and quantities.
- 10.6. Documented information associated with nonconforming outputs shall be retained which outlines the nonconformity, actions taken, concessions obtained, and authority deciding/approving the action/remediation.
- 10.7. At the discretion of Technifab Inc., external providers may be subject to charges for recovery of those costs associated with the nonconformance, including but not limited to administrative costs, return/shipping costs, repair and/or rework charges, scrap costs, etc.

## 11. COUNTERFEIT DETECTION

- 11.1. External providers and their subtiers shall have a process/system by which to avoid, detect, and disposition counterfeit parts/materials.

## 12. CORRECTIVE ACTION

- 12.1. When a nonconformity occurs, external providers shall take necessary corrective action to control the nonconformity, correct the nonconformity, and ensure that the nonconformity is does not reoccur or occur elsewhere.
- 12.2. In the event of a nonconformity which impacts Technifab Inc., a Corrective Action may be requested.
- 12.3. When requested, Corrective Action responses shall be provided to Technifab Inc. no later than the date outlined on the Corrective Action request. Depending on risk/severity, the time allotted for Corrective Action completion may vary.
- 12.4. External provides shall flow down corrective action requirements to applicable subtiers when it is determined that the subtier is responsible for the nonconformity.
- 12.5. Technifab Inc. may place external providers on "HOLD" or remove approved status in the event of delinquent (overdue) corrective action responses and/or repeat nonconformities (ineffective corrective action).

## 13. CONTROL OF MONITORING AND MEASUREMENT EQUIPMENT

- 13.1. Measuring device(s) used to determine dimensional compliance shall be calibrated to assure its accuracy.
- 13.2. If the external provider is not capable of performing calibrations in accordance with applicable industry standard requirements, special provisions approved by Technifab shall be applied to ensure accuracy and suitability of the measurement devices used.
- 13.3. External providers shall contact Technifab to obtain approval in writing for special provisions and the scope of use for those designated measurement devices.

#### 14. FIRST ARTICLE INSPECTION (FAI)

- 14.1. First Article Inspections shall be performed / re-performed per AS9102 First Article Requirements and provided prior to, or with shipment, to Technifab Inc.
- 14.2. Technifab shall support external providers that are not certified to AS9100, ISO9001 or equivalent to ensure verification activities of the first production run are documented per AS9102 as appropriate.

#### 15. SOURCE INSPECTION

- 15.1. Purchase Orders may be subject to source inspection by a Technifab Inc. representative or designee prior to delivery.
- 15.2. Evidence of source inspection must be shown on shipping documentation where applicable.

#### 16. DIGITAL PRODUCT DEFINITION (DPD)

- 16.1. When customer authority datasets or derivatives are used for the manufacturing or acceptance of product, external providers shall conform to D6-51991 (Boeing) and MAA1-1009-1 (Spirit AeroSystems) respectively.
  - 16.1.1. External providers approved by Boeing and/or Spirit AeroSystems shall provide objective evidence of approval to Technifab Inc.
- 16.2. Technifab maintains the ability to utilize external providers that can meet all Technifab, Technifab customer, regulatory and statutory requirements without having a complete DPD system. In these cases, Technifab will manage all aspects of DPD requirements for these external providers.
  - 16.2.1. External providers who maintain AS9100, ISO9001 or equivalent will be evaluated to understand each external provider's capabilities and if a DPD system is required based on complexity of products and services provided.
  - 16.2.2. As prescribed by Technifab based on risk, external providers that do not have approval from the aforementioned Technifab customers and has the capability to develop a system that complies with Technifab customer requirements, shall flow-down the Technifab customer information to ensure compliance.
  - 16.2.3. Technifab shall assist external providers that wish to pursue DPD system approvals.

#### 17. CONFIGURATION MANAGEMENT

- 17.1. Products and service shall be manufactured/processed to the latest Engineering data provided (flowed down) by Technifab Inc., including all applicable drawings, specifications, and purchase order requirements
- 17.2. There shall be no changes to products and/or services without prior written approval from Technifab.

#### 18. PLANNING / PRODUCT REALIZATION

- 18.1. Prior to acceptance of work, external providers shall determine/assess their ability to meet all contractual and engineering requirements.

#### 19. PURCHASING & PRODUCT/SERVICE PROVISIONS

- 19.1. External providers shall maintain a list of approved suppliers.
- 19.2. External suppliers shall ensure compliance with all REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), RoHS (Restriction of Hazardous Substances Directive), and Conflict Mineral requirements as applicable.
- 19.3. External providers shall implement a process for the verification / validation of raw materials from approved suppliers, including but not limited to documentation/report verification, physical testing, etc.
- 19.4. External providers shall possess a means for documenting product/service conformity at planned intervals. Documentation shall provide objective evidence that the product/service conforms to specified requirements (manufacturing, service, and/or inspection requirements).

## 20. WORK TRANSFER

- 20.1. Prior written authorization from Technifab Inc. shall be requested and received prior to initiating a work transfer.
- 20.2. Upon approval, Technifab Inc. will provide detailed work transfer requirements/expectation, including requirements for tooling, proprietary data, inventory, etc.

## 21. RESOURCE MANAGEMENT

- 21.1. External providers shall have a process to identify and perform training for all applicable personnel. Records of training shall be retained.
- 21.2. External providers shall ensure that all personnel are aware of their contribution to product/service conformity, product safety, and the importance of ethical behavior.
  - 21.2.1. Product safety is the ability of a product/service to perform to its designated or intended purpose without causing unacceptable risk of harm to person or property.
  - 21.2.2. External Providers shall maintain a work environment that fosters fairness, respect and integrity and conducts themselves in a lawful, honest and ethical manner in all business practices. External providers shall flow down the importance of ethical behavior to their sub-tiers.
  - 21.2.3. External providers shall be aware and are required to disclose their efforts to eradicate slavery and human trafficking within their supply chains.

## 22. TRACEABILITY AND IDENTIFICATION

- 22.1. External providers shall maintain traceability of all products, materials, services through all stages of production, including subtler processing, where applicable. Products shall be traceable to the raw material or lot from which they were derived (made).
- 22.2. External providers must comply with part identification requirements as defined by applicable engineering drawings, specifications, purchase order requirements, etc.

## 23. ACCEPTANCE AUTHORITY MEDIA (AAM)

- 23.1. External providers shall have a process by which to control acceptance authority, including but not limited to the use of signatures, stamps, passwords

## 24. PRESERVATION OF PRODUCT

- 24.1. External providers shall ensure that products and/or services are preserved, protected, and packaged to protect against unintended damage

## 25. CERTIFICATE OF CONFORMANCE (COFC) AND QUALITY RECORDS

- 25.1. External provider shall provide a certificate of conformance (CofC) with each shipment
- 25.2. The CofC may be a separate document or incorporated into the shipments packaging records (packing list/sheet)
- 25.3. The CofC must state/certify that the parts adhere to all applicable requirements, including but not limited to contract requirements, purchase order requirements, and engineering requirements (drawings and/or specifications).
- 25.4. The CofC must be signed and dated. Electronic signatures are acceptable.
- 25.5. In addition to CofC documentation, Technifab Inc. may require the submittal of material test reports (MTRs), inspection records, raw material certifications, etc. with each shipment

## 26. PROPERTY BELONGING TO TECHNIFAB, TECHNIFAB CUSTOMERS OR EXTERNAL PROVIDERS

- 26.1. External providers shall exercise care with property belonging to Technifab, Technifab Customers, or other external providers during control and use.

- 26.1.1. Property can include materials, components, tools and equipment, premises, intellectual property and personal data.
- 26.2. Property belonging to Technifab Inc. and/or Technifab Customers shall be properly identified, protected/preserved, and safeguarded to the extent necessary to ensure conformity of the property and product/services provided.
- 26.3. When property belonging to Technifab Inc., Technifab's customer, or an external provider is lost, damaged, or otherwise found to be unsuitable for use, the organization shall report this to Technifab Inc. and retain documented information on the occurrence.
- 26.4. In the event of an external provider termination, operation stoppages, transfer of ownership, bankruptcy or other catastrophic events that lead to closure, all external providers shall ensure that tooling, fixtures, gages, etc. belonging to Technifab or Technifab's customers is maintained and accessible for Technifab and its customers.

## 27. PROPRIETARY INFORMATION AGREEMENT (PIA)

- 27.1. A Proprietary Information Agreement (PIA) shall be assigned to external providers who will be receiving Technifab proprietary documentation and/or engineering data.
- 27.2. When data is to be exchanged (e.g. models, drawings, specifications, etc.) Technifab shall designate the appropriate method.
- 27.3. External providers shall not send proprietary information, ITAR or EAR sensitive information via e-mail.