

Jedco Supplier Manual

Management System Requirements

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Management System Policy

Jedco, Inc.

Jedco's goal is to deliver highly engineered components for the Aerospace Industry, meeting or exceeding customer quality and delivery expectations. We accomplish this goal while operating with integrity and accountability, supporting our employees, customers and community.

ENVIRONMENTAL SYSTEM POLICY

Jedco is committed to protecting the environment, including pollution prevention, and fulfilling our compliance obligations. To achieve this, our process is designed to continually monitor and improve the environmental management system.

The terms "Item(s)", "purchasing agreement", "Supplier", and "Buyer" as used herein, have the same meaning as the terms "Work", "Contract", "SUPPLIER", and "JEDCO", respectively.

*Questions regarding this Supplier Manual or the applicability of this Supplier Manual shall be addressed to Buyer's representative who administers the purchasing agreement. Questions regarding other specific requirements invoked by the purchasing agreement shall be addressed to the Buyer's representative unless otherwise specified/agreed upon. See http://www.jedinc.com/ for additional contacts information if necessary.

1. Quality Requirements:

- 1.1. Supplier shall meet the requirements in Table 1, as applicable, and the requirements of this Supplier Manual for the latest revision in effect as of the date of the purchasing agreement.
- 1.2. The supplier's QMS has the obligation to have zero defect objectives, to continually improve delivery, product quality, and quality management system. Supplier must have a documented continual improvement process.
- 1.3. Supplier is responsible to ensure persons working on their behalf are aware of their contribution to product or service conformity, product safety, and importance of ethical behavior.
- 1.4. The environment is a priority with Jedco and its customers; therefore, suppliers are encouraged to be certified to ISO 14001 or working towards certification. Depending on the final customer, it may be a requirement to do business.
- 1.5. Supplier shall demonstrate some compliance to the REACh (Registration, Evaluation, Authorization, and Restriction of Chemicals) regulation. For any information on REACh regulation consult the website ECHA (European Chemicals Agency established under REACh.
- 1.6. Supplier shall also meet all quality requirements identified in the purchasing agreement.
- 1.7. Suppliers are required to follow the <u>Jedco Supplier Code of Conduct</u> located the Jedco website at http://www.jedinc.com/. In addition, all suppliers are expected to have a similar Supplier and/or Company Code of Conduct that is flowed down to their sub-tiers.
- 1.8. Supplier shall notify Buyer of all changes to product, processes, subcontractor changes and facilities.
- 1.9. Special Process suppliers for Pratt Whitney must comply with the latest version of ASQR-01. The ASQR check sheet is ASQR-01.
- 1.10. Counterfeit Work Supplier and Suppliers sub-tiers, agrees and shall have provisions to ensure that Counterfeit Work is not delivered to Jedco Inc. "Counterfeit Work" means Work (parts delivered e.g. articles, components, goods, and assemblies) misrepresented as having been designed and /or produced under an approved system or other acceptable system or other acceptable methods. The term also includes approved Work that has reached a design life limit or has been damaged beyond possible repair, but is altered and misrepresented as acceptable.

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Authenticity of Work shall further be insured by Suppliers only purchasing products directly from Original Component Manufactures (OCM) / Original Equipment Manufacturers (OEM) or through OCM/OEM authorized distributor chain. Work shall not be acquired from independent distributors or brokers unless approved in advance.

If Supplier becomes aware or suspects that Counterfeit Work has been furnished, they shall notify Jedco immediately.

2. Jedco Manufacturing Guidelines:

- 2.1. Part count must always match the quantity called out on the Purchase Order. Always count parts before starting an operation and when completing an operation.
- 2.2. Make sure the revisions of the operation sketch or prints match the revision on the purchase order.
- 2.3. Check part to see if they exhibit excessive burrs, weld splatter, laser splatter, surface contamination, etc.
- 2.4. Before working on parts, verify there are no parts with visual defects (i.e.: tool marks, stains, burrs, dents). If defects are present, contact Jedco purchasing.

2.5. For Titanium parts:

- Pencil lead, pen ink, or graphite are not allowed to come in contact with titanium.
- Low melting point alloys such as lead, brass, gold, bismuth...shall not be allowed to come in contact with titanium parts.
- Clean white gloves or colored Nitrile gloves shall be worn when handling titanium parts after cleaning and before welding or heat treating.
- Parts may only be marked on using a RED "Marks-A-Lot" brand permanent marker.
- Do not mark on finished aluminum parts or assemblies with any type of marker.
- Do not use clear tape on parts.

3. Supplier Evaluation / Performance:

- 3.1. Suppliers are initially approved by Jedco Purchasing and Quality based on Self-Assessment score, 3rd Party certification or accreditation, Site-Survey, and customer source approvals, as appropriate.
- 3.2. Performance reviews are conducted periodically to assess performance in the areas of on-time delivery, and response time and effectiveness of any supplier corrective actions issued.
- 3.3. Re-Approval is performed every three years, or in concurrence with the supplier's 3rd party re-certification to assess the effects of any changes to the supplier's management system that would affect product.

4. Facility Access:

- 4.1. Supplier shall provide or obtain for Buyer, Buyer's customers and regulatory agency personnel, access to any and all facilities where work is being performed or is scheduled to be performed, in order to perform Item inspections, surveys or system surveillance as part of verification of conformance to the requirements of the purchasing agreement. Supplier's denial of any such access may result in inactivation of Supplier's approval.
- 4.2. Supplier shall provide, at no increase in price, cost or fee to Buyer, Buyer's customers or regulatory agencies, suitable facilities at Supplier and Supplier's Suppliers' manufacturing locations for Buyer, Buyer's customer and regulatory agency representatives to perform Item inspections, surveys or system surveillance.

5. Quality System Changes & Relocation:

5.1. Supplier shall notify Buyer, in writing, within 10 days of any (1) change in its quality system status resulting in the loss of 3rd party registrar's certification status; or (2) action taken by Supplier's customer, the Government, the Federal Aviation Agency ("FAA"), or the Civil Aviation Agency ("CAA"); or (3) change in Supplier's quality organization, process or procedures that affects conformity verification of any Item. Supplier shall also notify Buyer, in writing, at least 90 days in advance of any sale, relocation, or transfer of Supplier's manufacturing operations.

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Table 1 – Supplier System Requirements by Commodity

Commodity		Quality Management System₅					Special Processes
		AS9100 ₈	ISO 9001	AC7004	ISO 17025	AS9120	Nadcap _{9, 10}
DISTRIBUTOR 7	Chemistry ₁					х	
	Hardware 2					Х	
	Packaging						
	Raw Material 3					Х	
MANUFACTURER _{11, 12}	Chemistry 1, 4	Х	Х				
	Raw Material 3,4	Х	Х				
	Hardware 2, 4	Х	Х				
	Packaging ₄		Х				
	Grind 6	Х	Х				
	Hydroform 6	Х	Х				
	Laser Machining 6	Х	Х				
	CNC Machining 6	х	х				
	General Machining 6	х	х				
	Shear 6	х	х				
	Waterjet 6	х	х				
	Tooling 6	х	х				
	Braze	х	х	Х			Х
	Chemical Cleaning / Milling	х	х	Х			Х
	Coating	х	х	Х			Х
	EDM / ECM	х	х	Х			Х
	Laser Machining	х	х	Х			Х
	Heat Treat	х	х	Х			Х
	Nondestructive Testing	Х	х	х			Х
	Surface Enhancement	Х	х	х			Х
	Welding	х	Х	х			Х
SERVICE PROVIDER	Material Testing Labs		Х	х	х		Х
	Calibration Services		Х		Х		
	Measurement Inspection Services		х		х		

NOTES:

- 1 Chemicals, Paints, Adhesives, Lubricants, Radiographic Film, and Tapes
- 2 Nuts, Bolts, Threaded Inserts, Fasteners, etc.
- 3 Sheet, Bar, Forging, Castings, Rod, Plate
- 4 Build to Print or Make to Order
- 5 Supplier shall maintain an ISO, AS or Military Standard equivalent quality system acceptable to Buyer. Third party registration ISO/AS/EN Quality Management Systems ("QMS") from an ANSI-ASQ National Accreditation Board (www.anab.org) approved registrar is preferred.
- 6 Buyer Site-Survey may be used in lieu of Note 5.
- Buyer-approved Distributors must be compliant to AS9120. "Distributor" is defined as any Supplier that is buying Items from other Suppliers and selling them to Buyer without adding value to Items. Repackaging shall not be considered a value-added task for the purpose of this definition.
- 8 Commodities requiring an AS/EN9100 QMS must be compliant no later than 01 January 2010. Until that date, Supplier, at a minimum, shall meet the requirements of ISO 9001.
- 9 Special Process suppliers shall have Nadcap approval prior to processing product.
- Nadcap approval shall be required for the facility listed on the certification.
- 11 International Traffic in Arms Regulations (ITAR) requirements may apply. Identification for evaluation is required.
- 12 JF-106G Self-Assessment is required.

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6. Language:

6.1. Unless otherwise authorized by Buyer in writing, upon request by Buyer, Supplier shall provide all Supplier records, reports, specifications, drawings, inspection and test results and other documentation in English.

7. Contract Review Requirements:

7.1. Suppliers shall perform a complete review of the purchasing agreement, ensuring all requirements are understood and can be met, prior to acceptance, acknowledgement to Jedco, and processing of the hardware.

8. ITAR Requirements:

- 8.1. Jedco Inc. is committed to complying with all U.S. and host nation laws and regulations applicable to the exporting of ITAR-controlled products and technologies. Jedco Inc. also requires its suppliers to handle ITAR-controlled products and technologies in accordance with all applicable export laws and regulations. If you have any questions about ITAR, please contact your company's export compliance resource.
- 8.2. As an approved supplier of Jedco it is your responsibility to remain in compliance to the most current ITAR, NDA, and Supplier Manual revisions.

9. Reference Documents:

- 9.1. Buyer-unique documents (e.g., Operation Sketch Sheets, Work Instruction Sheets, Prints, etc.) submitted with the purchasing agreement.
- 9.2. Supplier must obtain and stay current with industry standards when processing parts and certify to the latest revision levels as of PO date.
- 9.3. Supplier may obtain copies of the following from the indicated sources:

Standard References	Source	
Aerospace Standards (AS/EN/ AMS documents) from the Society of Automotive Engineers	www.sae.org	
American Standard for Testing Materials	www.astm.com	
Military Standards	www.assistonline.com	
International Organization of Standardization	www.iso.org	

9.4. Drawings, Engineering Changes:

- The Supplier is expected to establish and maintain procedures to control all documents that define process requirements, including forms. These procedures must support:
 - Revision Control
 - o Review and approval prior to issue
 - Master list or equivalent procedures to identify the most recent revision levels
 - Availability at all using locations
- Suppliers who use software (i.e., CNC/DNC, CMM) directly for fabrication, inspection, test or operation of deliverable product maintain acceptable software control.

10. Records:

- 10.1. Upon Buyer's request, Supplier shall forward specific records to Buyer at no additional cost, price, or fee to Buyer. Upon Buyer's request, Supplier shall provide records of inspection tests of processed Items and process control tests to Buyer.
- 10.2. Quality records, forms and/or documents used to show objective evidence of conformity to purchasing agreement requirements shall be retained by the Supplier. Electronic image or microfilmed records are permissible, provided they may be controlled, retained and retrievable per the same requirements identified by the Supplier's procedure for hard copy records. Electronic records storage media must be capable of maintaining data integrity for the full retention period.

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- 10.3. Unless otherwise specified, Quality records shall be retained for the minimum retention periods below:
 - 4 years from time of manufacture for off-the-shelf or industry standard parts.
 - 10 years from time of manufacture for all parts other than off-the-shelf or industry standard parts.
 - 30 years from date of manufacture for manned space program hardware.
 - 40 years from date of manufacture for flight safety or critical / major rotor parts.

11. Prevention of Foreign Object Damage:

- 11.1. Supplier shall maintain a FOD prevention program.
- 11.2. Wherever and whenever FOD entrapment or objects can migrate, the FOD prevention program shall include a Supplier self-assessment of its internal FOD prevention practices.
- 11.3. Prior to closing inaccessible or obscured areas and compartments during assembly, Supplier shall inspect for foreign objects / materials, insuring tooling, jigs, fixtures, and test or handling equipment are maintained to prevent FOD.

12. Outsourcing:

12.1. Written Buyer approval is required prior to subcontracting any contracted characteristic that affects form, fit or function of the Item. Supplier is to flow down of the requirements of this document to subcontracting suppliers for both temporary and permanent transfers.

13. Calibration:

13.1. Supplier shall maintain a documented calibration system for the calibration and maintenance of tools, and inspection and test equipment. Supplier shall have and maintain a calibration system that is compliant to prevailing industry requirements in accordance with ISO17025, ISO10012-1, or ANSI Z540.

14. Tooling as a Media of Acceptance:

14.1. Supplier shall utilize mandatory/required tooling provided by Buyer and designated as production type tooling to be utilized for Item manufacture as Supplier's media of inspection and for Buyer source acceptance for those part features created by, or depicted by, such tooling, e.g., contours, hole locations, and profiles. Supplier shall periodically validate Supplier manufactured and/or owned tooling that is used as a media of acceptance to its control media.

15. Buyer-Furnished Tooling:

- 15.1. Supplier shall include in its documented quality system written procedures for the control, maintenance, and calibration of special tooling / inspection and test equipment, and other devices used in manufacturing processes that are kept at the Supplier's facility.
- 15.2. Supplier shall notify Buyer of tooling degradation or other condition that would affect processing of product.
- 15.3. Supplier shall not perform repairs of Buyer-Furnished Tooling without written consent of Buyer, per JSM-01.

16. Supplier-Owned Tooling:

16.1. Where Supplier manufactures and/or owns tooling for Buyer-Designed Items. Supplier is responsible for notifying Buyer, in writing, of any tooling changes that may affect product characteristics, per JSM-01.

17. Certified Materials and Product Traceability:

- 17.1. Supplier shall establish and maintain controls to prevent the use of non-certified materials when certified materials are required.
- 17.2. Supplier shall establish and maintain serialization and/or lot control for product sent or received.

18. Point of Product Acceptance:

- 18.1. The point of product acceptance is indicated on each PO issued.
- 18.2. Supplier shall ensure that all requirements of the purchasing agreement have been met.
 - Prior to shipment of Items designated "BUYER ACCEPT AT SOURCE", Supplier shall obtain final acceptance (signature/stamp), at Supplier's facility, of Supplier's shipping document by Buyer's

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- quality assurance representative or Supplier's quality assurance personnel, when Buyer has provided Supplier with prior written authorization to act on Buyer's behalf.
- Prior to shipment of Items designated "GOVT & BUYER ACCEPT AT SOURCE", Supplier shall
 obtain final acceptance (signature/stamp), at Supplier's facility, of Supplier's shipping document by
 Buyer's quality assurance representative or Supplier's quality assurance personnel, when Buyer has
 provided Supplier with prior written authorization to act on Buyer's behalf, as well as the assigned
 Government representative.
- Supplier shall notify Buyer's quality assurance representative normally servicing Supplier's facility, not
 more than five (5) days after receipt of the purchasing agreement, when PO calls for "BUYER
 ACCEPT AT SOURCE" or "GOVT & BUYER ACCEPT AT SOURCE". Supplier's notification shall
 include PO number, date of scheduled shipment and any special security clearance required to
 perform Buyer activities. If Supplier does not know Buyer's quality assurance representative assigned
 to this facility, Supplier may request this information from Buyer.
- Supplier shall notify Buyer's quality assurance representative, not less than 48 hours prior to Items being ready for shipment, when the purchasing agreement calls for "BUYER ACCEPT AT SOURCE" unless Supplier has received Buyer's prior written authorization to accept Items on behalf of Buyer.
- Supplier shall not claim entitlement to an increase in the PO price, cost, or fee based upon an assertion that "BUYER ACCEPT AT SOURCE" or "GOVT & BUYER ACCEPT AT SOURCE" imposes additional cost(s) or task(s) on Supplier.
- Supplier shall be required to customer source inspect product prior to shipment provided supplier's facility is serviced by customer quality assurance (i.e. Pratt & Whitney Aircraft, Honeywell, etc.).

19. Sampling:

19.1. Supplier shall inspect product characteristics at 100% sampling rate. If sampling plans are used, the sampling plans are in accordance with existing industry, military or Government standards, and have been prior approved in writing by Buyer.

20. Packaging:

20.1. Packaging requirements, when required, shall be identified on the purchase order or operation sketch. If no specific packaging is called out, packaging should follow good commercial practices.

21. Certificate of Conformance:

21.1. Supplier shall prepare a certificate of conformance ("CoC") asserting that the Items contained within this shipment are in total compliance with the requirements of the purchasing agreement. Supplier shall provide Items under the purchasing agreement that meet all applicable requirements. Supplier shall annotate in the delivery package any exceptions (e.g. variances, nonconforming material, Engineering Authorization, etc.). Supplier shall include a copy of the CoC with Supplier's product shipper.

22. Nonconforming Material or Product:

- 22.1. The Supplier will establish and maintain procedures to control all nonconforming products. These procedures must support the:
 - Identification of all nonconforming product
 - Prevention of inadvertent processing
 - Creation of the disposition process and authority
 - Re-inspection of repaired or reworked product
- 22.2. Supplier shall return all Buyer supplied materials that have not been consumed in the processing.
 - Nonconforming material, set-up pieces or offal shall be identified as such, segregated, and returned to Jedco.
 - All nonconforming Items shall be identified on the shipping documents and Buyer is to be notified of all nonconforming items.
- 22.3. Items tagged and delivered as nonconformances by Supplier do not preclude Supplier from responding to Buyer request for Corrective Action.

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23. Material Review Board Submittals:

23.1. Supplier shall not incorporate any nonconformances into any Item, process, procedure that affects a parameter controlled by Buyer drawing or specification or affects form, fit or function, interchangeability, service life or reliability unless and until Supplier has received prior written approval from Buyer to do so.

24. Corrective Action:

- 24.1. Supplier shall respond to all Buyer requests for corrective action. Supplier shall identify true root cause findings and corrective action(s) within 15 days of submittal to Supplier.
- 24.2. Supplier shall assess all Buyer-identified nonconformances, whether or not Item(s) was/were returned to Supplier, and take appropriate actions to ensure causes of nonconformance are corrected. Supplier shall notify Buyer of actions taken to prevent recurrence by completing Supplier Corrective Action Report ("SCAR"), form JF-106F in accordance with Jedco WIS-106H.
- 24.3. Negative observations/findings that are discovered during an onsite supplier audit, will have a SCAR issued.
- 24.4. Preventative Actions shall utilize mistake-proofing methodology wherever possible. Evaluation and reporting of mistake-proofing level employed shall be in accordance with the following criteria:
 - LEVEL 1 Method eliminates the mistake and the defect at the source.
 - LEVEL 2 Method detects the mistake and alerts operator to take action resulting in zero defects.
 - LEVEL 3 Method detects defect resulting from a mistake and stops further processing.
- 24.5. Buyer and Buyer's customers shall each have the right to refuse to accept any Supplier corrective actions.
 - Supplier shall ensure that corrective action plans for all discrepancies exist and/or have been implemented prior to delivery of future products / services.

25. Supplier Charge Back / Debit:

- 25.1. Costs incurred by Jedco due to poor product quality or non-conforming product may be charged back to the supplier.
- 25.2. Jedco has the option to debit the supplier for all non-conforming or rejected material received and the cost to ship the product back to the supplier, if required. Reference Jedco WIS-106D Supplier Chargeback procedure.
- 25.3. Special circumstances or unusual situations will be handled on a case-by-case basis through purchasing.

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