



Supplier Handbook, Rev B, released 9-28-2020

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Approved By: Quality Manager

Signature: *M. Sargent*

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1 Introduction

The purpose of this Supplier Handbook is to communicate Trelleborg Sealing Solutions Albany, Inc. (TSS Albany)'s requirements and procedures to our supply base in order to eliminate delays in delivery, continually improve our supplier quality ensuring our end customer satisfaction, and removal of non-value-added activities all in order to improve efficiency for both our supply base and for TSS Albany. Communication between our supply base and TSS Albany is vital to our mutual success. All suppliers are intended to supply products and services as requested, but additional information is typically needed from suppliers who do not provide items that are commercially available off the shelf.

Latest released Supplier Handbook is available via the TSS Albany external website, <https://www.tss.trelleborg.com/en/products-and-solutions/advanced-composites/quality-and-people>

2 Business Practices

2.1 TSS Albany Supply Chain Vision

Provide Supply Chain excellence to support the business needs in alignment with TSS Albany strategy and maintain an ethical approach within the total supply chain solution to create value through technology, quality, delivery and cost.

2.2 TSS Albany Quality Policy

TSS Albany is committed to the continuous improvement of engineered composite structures, automation, and the quality management system to consistently meet our customers' needs.

2.3 TSS Albany Ethics

Our goal is to seek the most qualified partners to work with and to fully utilize their abilities, without regard to their race, color, national origin, age, disability, sex, sexual orientation or religion. Where this is contrary to local practice we want to be among the leaders in the business community in this direction.

No employee shall take or offer bribes in any form whatsoever. Bribes include anything given or promised to induce a person to do something illegal, wrong or against his or her wishes. In addition, TSS Albany personnel should make every reasonable effort to work with channel partners who also do not engage in this activity. Expenditures of reasonable amounts for meals, entertainment of customers and suppliers that are lawful, ordinary and customary business expenses are expected. Violation of the company bribery policy is considered gross misconduct.

TSS Albany respects the confidentiality of information given to us by our customers and suppliers

- We will abide by the terms of nondisclosure agreements.
- We will not share information presented to us as confidential or proprietary with any third party without permission and appropriate flow down of confidentiality.

TSS Albany is committed to protecting our natural environment. We are supportive of strong laws to assure this protection and will fully abide by both the letter and the spirit of all applicable environmental laws at all locations.

We will abide by all applicable laws governing fair competition at each location.

A conflict of interest is any circumstances that could compromise, or cast doubt, on your ability to act objectively regarding TSS Albany's interests or any situation that benefits the individual to the detriment of the company. Any personal or financial interest or business relationship (other than publicly traded) with an TSS Albany customer or supplier or competitor is a conflict of interest. As an ethical organization, TSS Albany seeks to avoid conflicts of interest. In the aforementioned working relationships, each employee is expected to maintain a high standard of ethical conduct and integrity. This means in business matters with dual responsibility to the public and TSS Albany interest, each individual employee is a responsible custodian of TSS Albany's reputation.

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2.4 TSS Albany Safety

TSS Albany's goal is zero accidents, zero injuries. We are committed to broad involvement in our health and safety programs and expect continuous, measurable improvement. We also expect the same commitment from our suppliers.

If an TSS Albany employee performs and a supplier visit for any reason, they are expected to be provided the proper Personal Protective Equipment (PPE) to be able to remain safe and healthy.

2.5 ITAR & Export Compliance

TSS Albany expects full compliance with the laws and regulations of the United States of America or any other country or any agency thereof, including but not limited to, the Export Administration Regulations of the U.S. Department of Commerce, the International Traffic in Arms Regulations of the U.S. Department of State, and the National Industrial Security Program Operating Manual (DoD 5220.22-M). Information furnished within these regulations shall not be disclosed to any party without the proper clearance and need to know.

2.6 Supplier Quality Management

TSS Albany requires Aerospace and Defense Suppliers to be certified to AS9100 or equivalent based on the type of products or services that are provided. Other suppliers are encouraged to have a certified quality management system such as ISO 9000.

2.7 Performance Expectations

TSS Albany strives for a goal of zero defects and 100% on time delivery. Any issue that arises from a supplier facility which may jeopardize either of these goals should be communicated immediately to TSS Albany through the appropriate Supply Chain contact, both verbally and in written correspondence. A defect is defined as a non-conformance to the TSS Albany print, material specification, or purchase order / contract requirement. TSS Albany expects the suppliers' top management to share its commitment of meeting customer quality & delivery expectations through continuous improvement. The suppliers which demonstrate a commitment to innovation and deliver results which meet or exceed our performance expectations will have the opportunity to grow with TSS Albany as we expand in the global marketplace.

2.8 E-Business Capability

At a minimum, suppliers shall have e-mail, internet access with internet browser, and document scanning capabilities for which to conduct business with TSS Albany. Digital photo capabilities are highly recommended in order to facilitate rapid response to some issues.

2.9 Supply Chain Communications

The TSS Albany Purchaser is the designated point of contact for communications with suppliers for standard ordering activities. The Director of Quality should be included on any irregular communication such as nonconformance, specification development, or reasons for delays. The Purchaser should always be copied on any communication between a supplier representative and any other TSS Albany functional department (e.g. Engineering, Quality, Planning, Customer Service, etc.). Suppliers should have a dedicated primary point of contact with at least one back up contact in the case of being out of the office or during emergencies.

The following are types of day to day communications with the suppliers and the expected response times:

- Request for Quote (RFQ) – Response expected within 3 business days for all suppliers unless otherwise agreed upon with purchaser.
- Acknowledgement of purchase orders – Response expected within 1 business day indicating concurrence with costs, requirements, and delivery dates.

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- Expedite requests – Response expected within 4 hours.
- OOR (Open order reports) – Response expected within 2 business day verifying the delivery status for all orders scheduled for the next 4 weeks.
- Supplier Surveys, proof of insurance, NDA's, and evidence of quality certifications – Completion & return expected within 1 week.
- Corrective action requests – Response expected within 1 business day with containment activities, 15 calendar days for the completed corrective action response plan unless otherwise specified by TSS Albany. TSS Albany reserves the right to conduct an on-site verification audit of the corrective action effectiveness.

Additionally, in the case that a supplier finds an issue or has a concern with a supplied material, the supplier needs to contact their TSS Albany Purchaser and Director of Quality as soon as possible to drive the resolution of the issue and not wait until the delivery date. Open communications from both TSS Albany & the supply base is critical to our mutual success.

2.10 Supplier Audits & Visits

TSS Albany Supply Chain shall be allowed to visit and/or audit the quality of work, services performed, and material produced for TSS Albany at the supplier's office, manufacturing facilities, and warehouses. TSS Albany Supply Chain may also visit or audit the sub-tier supplier offices, manufacturing facilities, and warehouses in accompaniment of a Tier 1 supplier representative. Audits and visits may also include representatives of other TSS Albany departments, representatives of our customers, or government personnel. Audits would be conducted in respect to the products and/or materials being procured under purchase order or supplier contracts, and a review of delivery, quality programs, and stock levels of both dedicated and standard inventory items.

2.11 Terms & Conditions

Purchase order terms and conditions can be located on the TSS Albany internet web site as noted below:

<http://www.automateddynamics.com/wp-content/uploads/2013/07/Terms-Conditions-of-Purchase-rev-C-5-5-2011.pdf>

3 SOURCING

3.1 Supplier Approval

TSS Albany requires the following documentation (as applicable) in place prior to adding a supplier that does not provide COTS items to the Approved Supplier List:

- Signed NDA (Non-Disclosure Agreement) if exchanging technical or proprietary information
- Completed Supplier Qualification Assessment (which will be supplied by TSS Albany)
- Any quality system certifications for the facility supplying a product or service for TSS Albany such as ISO9001, ISO13485, ISO14001, AS9100, ISO/TS16949, ISO17025, etc. or proof of a documented quality system.
- Insurance document including EMR rating
- Directorate of Defense Trade Controls (DDTC) registration document as applicable

During the approval process or conditional acceptance period, TSS Albany Supply Chain may require an on-site audit of the manufacturing facility in order to fully approve the supplier or move them out of the conditional category. Once a supplier is approved, the above documentation will need to be maintained and resubmitted on a set timeline in order for the supplier to continue to be used on the Approved Supplier List.

3.2 Supplier Classification

TSS Albany's evaluated and approved suppliers are subdivided into 5 classifications based on historical quality & delivery performance as well as strategic value of their products/processes.

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- a. *Temporary* – The supplier is expected to have minimal use for a short period of time and the items being purchased are not critical to the quality of the products TSS Albany supplies to its customers. These suppliers will become inactive at the year end. These suppliers typically do not have a full quality evaluation. If they are used more than once, they are to be classified in one of the other categories.
- b. *Conditional* – The supplier has indicated the existence of a quality system adequate to assure compliance with TSS Albany purchase order terms and conditions and other requirements for products or services. The “conditional” status is in effect for a three to six month trial period to allow for a performance evaluation.
- c. *Qualified* – Approval has been given based on information provided through the Supplier Qualification Assessment. A new supplier may be initiated into the system as “Qualified” if ISO (or other applicable program) certifications exist and copy of a valid certificate is provided or if low risk. A qualified supplier must maintain an 80% on-time delivery and product conformity rating as measured through the evaluation methods described below. Companies that supply COTS items (such as distributors) that do not have a completed survey or ISO certificate may be considered qualified after review of their performance and they maintain a consistent on-time delivery and product conformity of 95%.
- d. *Preferred* – Supplier is in full agreement and acceptance of the TSS Albany specifications and purchase order requirements. Supplier consistently exhibits high performance in the areas of cost, quality, and on-time delivery (95% minimum). The supplier has demonstrated stability in materials and processes provided and can demonstrate an action plan for continuous improvement process initiatives, leading to higher reliability, improved design and reduction of the total cost of ownership.
- e. *Partner* – The supplier is of strategic importance to TSS Albany, (i.e. unique proven technology, supplier of customer and/or TSS Albany specification approved material). Analysis of historical data related to quality, on-time delivery, technical support and cost reduction initiatives indicate a high probability of alignment with goals between the supplier and TSS Albany. Information exchange is constructive with the potential for both resource sharing and end-user collaboration efforts resulting in a mutually beneficial business to business relationship based on trust and commitment and that enhances the capabilities of both parties.

3.3 Supplier Metrics

Production suppliers are monitored based on metrics of Quality, Delivery & Cost. The performance rating is based on Quality and Delivery information obtained at the time of receipt and acceptance at the facility, and will be assessed percentage points based on the following:

- **Quality:** a ‘usage decision’ (Accept or Reject) is made based on product meeting its specification and PO requirements at inspection. Product that does not meet the specifications are considered nonconforming. Quality scores are determined by the number of # of acceptable line items (products or services that meet the requirements of the PO) divide by the total number of line items. The supplier’s QMS and receipt of the acknowledgement of the handbook may affect this score as well.
- **Delivery:** A product is considered “on-time” if the product arrives on or prior to the expected delivery date stated on the PO. During the delivery rate evaluation a percentage of on-time deliveries is calculated by determining the # of on-time deliveries (Line Items that are completed by the requested delivery date) divide by the total number Line Items.

The supplier performance evaluation program calculates the supplier ratings by averaging the values for Delivery and Quality for each PO receipt. These scores are totaled and then divided by the number of line item receipts. The quality, delivery, and overall rating scores are reviewed twice annually by the Director of Quality. Copies of these evaluations are provided to the appropriate supplier contact in writing, twice annually, at the time of evaluation.

Suppliers who fall below their assessed classification level requirements for any annual period (two six-month reporting periods) will be issued a request for corrective action. The supplier must respond with a written action plan designed to return them to previous classification.

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3.4 Build to Print Suppliers

In addition to the supplier approval requirements, suppliers who fabricate items according to a drawing or a specification, "Build to Print" will require an inspection report as detailed by the purchase order or print requirements. The purchase order or print may also require a copy of the material certification for the raw material. The supplier must maintain documentation including the inspection reports and material certification in line with ISO9001 requirements.

4 DELIVERY

4.1 Packaging, Labeling, and Shipping Requirements

All products shipped to TSS Albany by a supplier or outside processor must be packaged & transported in a means which will protect it against transit and storage damage, deterioration, contamination, as well as against any other condition that would render the product unfit for its intended purpose. The packaging shall be designed to protect the product taking into account the product weight, size, geometry, physical and chemical properties in order to eliminate the potential of being unfit for intended usage. Additional packaging requirements may be required per the purchase order or engineering drawing.

A supplier label shall be applied to each package shipped to an TSS Albany facility with all label information legible and readable. Each package should be segregated by both part number and batch/lot code, not mixing multiple batch/lots or part numbers in the same package. Each label must contain the following information:

- TSS Albany part number & revision level
- TSS Albany purchase order/contract number
- Quantity & unit of measure
- Part Description
- Batch/lot number & date
- Supplier name & manufacturing address
- Packing List requirements as required per the purchase order

Packages drop shipped to locations other than TSS Albany facilities will need to follow instructions as given by the TSS Albany purchase order.

TSS Albany prefers items to be shipped via UPS, but other methods are feasible if needed. TSS Albany expects the shipper to apply insurance to the shipment that covers the value of the product being shipped (not just the value of the work that was performed). For suppliers performing work on a product supplied to them, they are to contact the purchaser to determine the value of the product being shipped.

4.2 TSS Albany Incoming Receiving Requirements

In addition to the packaging and labeling requirements noted in the section 4.1, the following requirements must also be fulfilled in order to receive and invoice any product shipped to TSS Albany.

- All quantities on packing list paperwork and the physical counts must match each other.
- Any product drop shipped from a third party must include the TSS Albany purchase order in the packing list, not the purchase order between the supplier and the third party.
- All turnkey/custom finished products must include an inspection report which fulfills the requirements of section 5.1 of this Handbook.
- All products which have undergone special processes (plating, heat treat, etc.) or which have otherwise been requested in the PO shall include a certificate of compliance (C of C) in the packing list.
- All purchased resins, compounds, & chemicals shall include a material specification sheet in the packing list.
- All MRO (Maintenance, Repair, & Operations) contracts must be signed by a company officer.

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- All VMI (Vendor Managed Inventory) contractor quotes & purchase orders must be routed through Supply Chain for approval.

5 QUALITY

5.1 Supplier Inspection Requirements

Part inspection requirements may be detailed on the purchase order, the engineering print, or the material specifications. All inspection measurements shall be conducted using the appropriate equipment which have been calibrated in accordance with a recognized standard (such as ISO10012 or ANSI/NCSL Z540.3). Part inspection reports shall include all requirements specified on the TSS Albany print, purchase order, and/or contract including the items mentioned below.

All measurement devices must be calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to NIST.

On a periodic basis TSS Albany may conduct a product configuration audit (PCA) in order to confirm a certificate of compliance. This may include either internal or third party analysis for verification of material composition.

5.1.1 Inspection Reports

Inspection reports are required for all products that are “built to print” and should be specified on the purchase order or referenced specification when applicable.

The inspection report is to include the following items:

- a. PO Number,
- b. Part Number with revision level and/or Serial Number,
- c. Quantity of the parts inspected,
- d. Type of Inspection (e.g. First Article, In-Process, Final),
- e. Date of Inspection
- f. Print dimension (or other specified criteria)
- g. Measurement taken or tolerance deviation (if there are multiple parts then a range of measurement can be noted)
- h. Method of inspection (such as CMM, gage, indicator, visual, etc.) appropriate to the type of attribute being inspected
- i. Unique ID of the measurement devices used for inspection
- j. Results of inspection (pass / fail or accept / reject) including any deviation from requirements
- k. Person who inspected the product and authorized its compliance

If a requirement is not met, the Purchaser listed on the PO is to be notified in a timely manner to determine a resolution of the item. Often the resolution will result in acceptance (use as is) of the part with a Nonconformance Report, Acceptance with Concessions, Repair, Rework, rejection (Scrap) or refabricating of the product.

Records of Inspection are to be maintained in order to provide traceability and be readily accessible if requested. An example form is available at the end of this document or upon request. This is not the form that a supplier must use as long as the required data is displayed in a legible and organized manner.

5.2 First Article Inspection Requirements

A First Article Inspection Report (FAIR) may be required to be submitted to TSS Albany for a variety of circumstances during the life of a part. These circumstances may include, but are not limited to, the following: new Part Number Add (PNA), Engineering Change Notification (ECN), change of supplier, quality issues, supplier process change or sub tier process change, TSS Albany customer request, long time duration between builds, deviation/waiver, industry specific requirements (i.e. Aerospace or Automotive). TSS Albany requirements for first article inspection reports will be

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communicated to the supplier in the purchase order or contract. When requested, the FAIR must be included in the packing list accompanying the parts.

For parts supplied to the aerospace and defense industry a part is considered 'locked in' by the first article inspection and must adhere to 'Copy Exact' guidelines as noted in section 5.9. Any change in process, including sub tier processes, will require prior notification and approval by TSS Albany Supply Chain.

5.3 Testing Specimens

The supplier must be able to provide test specimens for design approval, inspection/verification, investigation, or auditing with the same configuration as the product provided unless otherwise specified and agreed upon.

5.4 Product Traceability & Identification Marking

The supplier must maintain product traceability throughout all steps of the manufacturing process including all sub-tier processing. All TSS Albany suppliers must have a batch/lot identification system that distinguishes one batch/lot of material from another and which must include traceability to the raw material lots.

The supplier shall ensure that all supplied product have part identification legibly marked per requirements and method specified by the TSS Albany purchase order and engineering print. If a question or any doubts exist on the application of these requirements, please contact your TSS Albany Supply Chain contact for clarification.

5.5 Part Cleanliness

All supplied parts, including those returned from outside processing, shall be free of corrosion, tarnish, or any other surface contamination that is detrimental to the item's appearance or functional performance. Any part not meeting this requirement shall be subject to return to the supplier.

5.6 Non-Conforming Material

Non-conforming materials produced by suppliers are required to be identified and segregated from conforming material. If TSS Albany considers the non-conformance to be critical, Supply Chain will give notice to the supplier to stop the processing of product until the unacceptable condition has been resolved to the satisfaction of TSS Albany. Products identified as non-conforming are segregated and identified by a Non-conformance Report and/or a red rejection tag. The disposition of the non-conforming product is documented on the Non-conformance Report. The NCR will be used to communicate information between TSS Albany and the supplier.

5.7 Corrective & Preventive Actions

Where requested and or found necessary Corrective Action Requests (CAR) and Preventive Action Requests (PAR) are used as a mechanism to ensure that the documented condition of the non-conformance has been investigated, that the causes have been identified, and that the defined corrective action will prevent reoccurrence. In addition, a CAR/PAR will be issued where a follow-up evaluation is needed on Non-conformance Reports (NCR) and Returned Goods Authorization (RGA).

A CAR request will be issued to the responsible supplier upon the TSS Albany disposition of the non-conforming material or condition. The supplier receiving the corrective action will complete the following by the due dates assigned:

- Implement immediate containment actions which would include increased detection measures to identify and keep further defective material from reaching TSS Albany. This would also include identifying the scope of the suspect material by batch/lots, and then segregating all suspect inventory including work in progress (WIP) and raw material.
- Identify and define the Root Cause using such techniques as 5 Why, Fishbone Diagram, and/or Pareto analysis in order to verify you are not treating only a symptom of the issue. The following questions will need to be answered:

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How was the defect created in the manufacturing process? Why was the defect not detected during inspection process? Where is the earliest point in the process could the problem have been detected but was not? Are there potentially multiple root causes interacting?

- Based on root cause define the best solution to implement in order to eliminate the issue at the source. Take into consideration potential undesirable side effects of your corrective action. Define what metrics can be used to verify if it is successful. Will the corrective action affect 'Copy Exact' rules as identified in Section 5.9?
- As part of the verification of the corrective action effectiveness a new first article inspection report (FAIR) may be required. All supplier documentation of the manufacturing and/or inspection processes (e.g. routers, work instructions, inspection plans, maintenance plans, etc) will need to be updated including training records to officially communicate the change.
- Verify if the corrective action can be standardized across similar products and document lessons learned so that future product will not have the same issue.

The timeliness of the CAR process, and actions to take when timely and/or effective actions are not achieved, is as follows:

'Closure' of the CAR is dependent upon when objective evidence is available to support an adequate evaluation of effectiveness and will vary in length. The action(s) to be completed by time frame is determined by the responsible persons.

The action plan for each CAR is reviewed for effectiveness by the TSS Albany Site Review Committee. CAR's that are deemed not effective will be returned to the responsible party for additional action plans to implement lasting and effective solutions.

5.8 Supplier Change Notification

If there is a change to the suppliers manufacturing location, utilized equipment, design, raw material composition or properties, sub-tier supplier or processing provider, then TSS Albany's Supply Chain needs to be informed of the details in writing with the maximum amount of time possible before such change is implemented. The details and justification for the change are to be documented and then submitted to your TSS Albany Purchaser for internal routing and approval.

5.9 Copy Exact Requirements

TSS Albany supplies customers that require adherence to 'Copy Exact' guidelines. Copy Exact is a disciplined approach for design and process change management throughout the supply chain and ensures true interchangeability of components and spare parts. This includes:

- Physical Interchangeability (form and fit) – Equivalent parts capable of being installed, removed or replaced without sustaining or causing damage, misalignment or interface.
- Functional Interchangeability – Parts equivalent in safety, characteristics of operation, performance, durability, serviceability, structural strength, material and protective finish.

TSS Albany has an obligation to our customers to control all of our products and processes throughout the supply chain. These customers demand prior notification and approval for any changes to design, process, equipment, location of manufacture, source of supply or materials for products we supply them. Once a process is approved through acceptance of the First Article, it is considered 'locked in' as the 'Process of Record' (POR) or 'Process Qualification Program' (PQP). However, these rules apply to all parts whether or not a formal POR or PQP exist. Aspects of a product which fall under 'Copy Exact' rules include specifications, ingredients, particle size, particle shape, manufacturing/construction/assembly process, location of manufacture, equipment used in manufacturing, and the use of subcontracted parts, materials or services. Any material reformulation per the above criteria must be communicated to the TSS Albany Supply Chain with one year advance notice prior to ceasing the old formulation in order for TSS Albany to qualify a new or alternate formulation, and also to be able to purchase a bridge quantity of material for use during the qualification process.

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5.10 Sub-Tier Quality Assurance

It is TSS Albany's requirement that suppliers maintain responsibility for all sub-tier suppliers and processing providers, including flow down of purchase order requirements.

- Quality Management System Requirements – Control of documents and records, identification and traceability, control of monitoring and measuring equipment, control of non-conforming material, corrective and preventive action requirements must be flowed down to sub-tier processes in order to verify good product, reduce potential for error, and contain any suspect batch lots.
- Copy Exact Requirements – Process of Record requirements as noted in section 5.9 must be flowed down to sub-tier suppliers.
- Sub-Tier Special Processes & NADCAP Requirements – Certain end customers of TSS Albany may require additional NADCAP certification on sub tier sources that perform special processes. Such special processes may include but is not limited to chemical processing, coating application, composite materials, machining, heat treating, material testing, non-destructive testing, and welding. If applicable, these requirements may be noted in the purchase order, contract, or engineering print and sourcing must be strictly enforced.
- Test Laboratories & Calibration – Sub-tier sources for testing are required to be certified to ISO17025 with a scope which includes the type of testing being performed. All inspection measurements which take place at a sub-tier facility shall be conducted using the appropriate equipment which are calibrated in accordance with a recognized standard (such as ISO10012 or ANSI/NCSS Z540.3).

5.11 Customer Designated Sources

When defined to use a specified source for the material, the supplier must abide by these requests or otherwise notify TSS Albany prior to proceeding with any purchasing and fabrication of the order.

5.12 Deviation & Waiver Requests

In the case that the supplier identifies a non-conformance or otherwise questionable attribute in their supplied product, they will need to submit a deviation/waiver request to allow shipment. The supplier should contact their TSS Albany Purchaser to notify them of the situation and request a TSS Albany deviation/waiver form. On this form the supplier shall provide as much detail as possible including the part number, lot number, quantity, purchase order number, description of the nonconformance, root cause & corrective action, the "Requested By" person and date, then submits this to TSS Albany Supply Chain for evaluation prior to shipping the product to TSS Albany. The supplier should also include at this time any information on lead time for new product if the deviation/waiver request is rejected.

Upon disposition of the deviation/waiver, the TSS Albany Purchaser will contact the supplier and notify them on the acceptance or rejection. If the deviation/waiver request is accepted, then a signed copy of the form will be e-mailed or faxed to the supplier which will allow them to ship the parts. A copy of the signed deviation/waiver form must be included and stapled to the front of the packing list documents when shipping the product to TSS Albany.

In some cases, a disposition cannot be made until the discrepant parts are looked at by TSS Albany Engineering. In these circumstances, the Purchaser shall notify the supplier that they should ship parts for investigation. A copy of the unapproved deviation/waiver shall be included and stapled to the front of the packing list documents with a note in the approval box stating, 'Approval pending TSS Albany investigation'.

5.13 Supplier Configuration Management & Part Obsolescence

The TSS Albany purchase order is the only document which specifies the acceptable part configuration to be produced. Only product made to the drawing revision level and/or material specification level noted on the purchase order may be provided. It is the supplier's responsibility to verify the documents used to manufacture and inspect the parts are at the correct configuration level matching the purchase order. If there is an issue with being able to produce to the purchase order revision level noted, then TSS Albany Purchaser needs to be notified by the supplier immediately in order to correct the situation.

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In the case that the supplier has stock on hand of a prior revision level part, these parts will need to be segregated from production and TSS Albany Purchaser needs to be immediately notified for disposition activities.

5.14 Control of Records

Record control & retention related to TSS Albany purchase orders and product shall be in accordance with the supplier's standard procedure for control of records, and such procedures must meet, at a minimum, the requirements of ISO 9001. Any product which is manufactured for the aerospace industry must meet control of record requirements per AS9100. Records shall remain legible, readily identifiable and retrievable within 72 hours of TSS Albany's request to the supplier. Records shall be retained and remain available for review for a period of 10 years after completion of the work of TSS Albany's purchase order unless otherwise specified by the purchase order and/or specifications. When records are to be disposed of, they must be destroyed in a manner in which confidentiality is maintained.

5.15 Continuous Improvement

TSS Albany is committed in the Continual Improvement of our products, processes, systems, and people. The culture of Continuous Improvement is vital to the development and growth of our supply base for the mutual benefit of the supplier and TSS Albany. Tools that can effectively be used to promote Continuous Improvement include, but are not limited to:

- Attainment of a quality system certification
- Use of Lean sigma tools & techniques
- Error-proofing equipment for quality and safety
- Process mapping, Fishbone, 5 why concepts
- 5S workplace organization
- Design & process FMEA's (Failure Modes & Effects Analysis)
- Preventative maintenance program
- Monitoring of SPC (Statistical Process Control)
- Waste analysis
- 8D problem solving methodology

TSS Albany has resources which can help suppliers identify opportunities for improvement and growth regardless of the size and scope of the supplier and encourage our supply base to engage us in their continuous improvement activities.

5.16 Shelf Life Material

All shelf life material shall be permanently marked on the container &/or packaging with the following information:

- Lot traceability identification
- Date of expiration or best if used by date
- Any storage conditions to achieve shelf life, if not stated on material package

Any shelf life material must have greater than the specified minimum amount of life remaining as detailed per the TSS Albany specification upon receipt at TSS Albany. The date of manufacture is defined as the date the product completes all production processes required to make it usable for its intended purpose. The date of manufacture should be traceable by batch/lot identification.

5.17 TSS Albany Owned Tooling

Tooling paid for by TSS Albany and used at a supplier facility may not be utilized for customers other than TSS Albany, unless expressed written consent including terms of this usage has been given through TSS Albany Management. Tooling owned by TSS Albany should be clearly marked as TSS Albany property. Any TSS Albany owned tooling must be surrendered back to TSS Albany upon request.

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The supplier shall establish and maintain documented procedures for the verification, storage, and maintenance of TSS Albany supplied tooling. Any damage or loss of such tooling shall be immediately reported through the TSS Albany Supply Chain.

5.18 Calibration Service and Calibrated Device Suppliers

All measurement devices must be calibrated or verified, or both at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; when no such standard exist, the basis used for calibration or verification shall be retained as documents information.

Measurement equipment must be uniquely identified in order to determine their status.

The calibration period for devices should be specified on the TSS Albany PO. If it is not specified, the buyer, Director of Quality, or the VP of operations should be contacted to clarify.

If the service being purchased is for calibration, ADC requires a certification that contains “as found/as left” numbers.

5.19 Counterfeit Parts Policy

This policy applies to all components delivered to TSS Albany, either in assemblies or as individual components that are to be used in aerospace and defense products supplied to customers. TSS Albany supplier partners are required to purchase from OCM, OEM, or authorized/franchised distributors for such OCM/OEM, as sole and exclusive sources for all components to be delivered to TSS Albany and to obtain and retain written records for such per the policy. Suppliers shall secure a C of C for all components to provide to TSS Albany upon request and maintain on file as described within applicable TSS Albany purchase orders and in compliance with AS9100 requirements and as directed in the “OI-194 Counterfeit Parts Policy”.

- 1) For purposes of this clause, Work consists of those parts delivered under this contract that are the lowest level of separately identifiable items (e.g., articles, components, goods, and assemblies). “Counterfeit Work” means work that is or contains misrepresentation as having been designed and/or produced under an approved system or other acceptable method. 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.
- 2) SELLER agrees and shall ensure that Counterfeit Work is not delivered to the Company.
- 3) Seller shall only purchase products to be delivered or incorporated as work to the Company directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), or through an OCM/OEM authorized distributor chain/Dealer. Work shall not be acquired from unauthorized sources unless approved in advance in writing by the Company.
- 4) SELLER shall immediately notify TSS Albany with the pertinent facts if SELLER becomes aware or suspects that it has furnished Counterfeit Work. When requested by the Company, SELLER shall provide OCM/OEM documentation that authenticates Traceability of the affected items to the applicable OCM/OEM.
- 5) In the event that Work delivered under this Contract constitutes or includes Counterfeit Work, SELLER shall, at its expense, promptly replace such Counterfeit Work with genuine Work conforming to the requirements of this Contract. Notwithstanding any other provision in this Contract, SELLER shall be liable for all costs relating to the removal and replacement of Counterfeit Work, including without limitation TSS Albany and its customer’s costs of removing Counterfeit Work, of reinserting replacement Work and of any testing necessitated by the reinstallation of Work after Counterfeit Work has been exchanged. The remedies contained in this paragraph are in addition to any remedies the Company may have at law, equity or under other provisions of this Contract.
- 6) This clause applies in addition to any quality provision, specification, statement of work or other provision included in this Contract addressing the authenticity of Work. To the extent such provisions conflict with this clause, this clause prevails.

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- 7) SELLER shall include paragraphs (a) through (d) of this clause or equivalent provisions in lower tier subcontracts for delivery of items that will be included in or furnished as Work to the Company.

6 REFERENCE

6.1 Acronyms & Glossary of TSS Albany Term

A Suppliers – Suppliers who make up the top 80% of overall TSS Albany spend (80%, 15%, 5% in spend analysis)

ANSI – American National Standards Institute (specification source)

APQP – Advanced Product Quality Planning

AQL – Acceptance Quality Level

ASME – American Society of Mechanical Engineers (specification source)

ASTM - American Society for Testing and Materials (specification source)

B Suppliers – Suppliers who make up the middle 15% of overall TSS Albany spend (80%, 15%, 5% in spend analysis)

BOM – Bill of Material

C Suppliers – Suppliers who make up the bottom 5% of overall TSS Albany spend (80%, 15%, 5% in spend analysis)

CAR – Corrective Action Request

CI – Continuous Improvement

CMM – Coordinate Measuring Machines

COC – Certificate of Compliance

COTS – Commercial Off The Shelf

DWR – Deviation Waiver Request

EAR – Export Administration Regulations

ECN – Engineering Change Notification

ECO – Engineering Change Order

FAIR – First Article Inspection Report

FMEA – Failure Modes & Effects Analysis

ISO – International Organization for Standardization (specification source)

ITAR – International Traffic in Arms Regulations

MIL-STD – Military Standards (US Department of Defense)

MRB – Material Review Board

MSDS – Material Safety Data Sheet

NADCAP – National Aerospace & Defense Contractors Accreditation Program (specification source)

NCR – Nonconformance Report

NDA – Non-Disclosure Agreement

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NDT – Non-Destructive Testing
OEM – Original Equipment Manufacturer
OOR – Open Order Report
OSP – Outside Service Provider
Purchaser – The person who requisitions the order form TSS Albany
PAR – Preventive Action Request
PM – Preventative Maintenance
PO – Purchase Order
QA – Quality Assurance
QC – Quality Control
QML – Qualified Manufacturers List
RFQ – Request for Quote
SOP – Standard Operating Procedure
SPC – Statistical Process Control
SREC – Supplier Request for Engineering Change
Standard Work – Concept of everyone using the same best practice process
Tier 1 Supplier – Prime supplier
Tier 2, 3, ... Supplier – Sub-level supplier of Prime supplier

6.2 Industry Standards

Automotive Industry Action Group
26200 Lahser Road, Suite 200
Southfield, MI 48033-7100
USA
<http://www.aiag.org/>

AIAG guidelines for FMEA, APQP, Control Plans, etc.

American National Standards Institute
1899 L Street, NW
Washington, DC 20036
USA
<http://www.ansi.org/>

ANSI Z1.4, *Sampling Procedures and Tables for Inspection by Attributes*

ANSI/NCSL Z540.3, *Requirements for the Calibration of Measuring and Test Equipment*

American Society of Mechanical Engineers
3 Park Avenue

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New York, NY 10016-5990
USA

<http://www.asme.org/>

ASME Y14.5, *Geometric Dimensioning and Tolerancing*

ASME Y14.100, *Engineering Drawing Practices*

American Society for Testing and Materials
100 Barr Harbor Drive
PO Box C700
West Conshohocken, PA 19428-2959
USA

<http://www.astm.org/>

ASTM Materials & Testing Specifications
European Committee for Standardization
CEN-CENELEC Management Center
Avenue Marnix 17
B-1000 Brussels
Belgium

<http://www.cen.eu/>

European Standard (EN) specifications

International Organization for Standardization
1, ch. De la Voie-Creuse
CP 56
CH-1211 Geneva 20
Switzerland

<http://www.iso.org/>

ISO9001, *Quality Management System*

ISO10012, *Measurement Management Systems – Requirements for Measurement Processes and Measuring Equipment*

ISO13485, *Medical devices – Quality management systems – Requirements for regulatory purposes*

ISO14001, *Environmental Management Systems – Requirements with Guidance for Use*

ISO17025, *General Requirements for the Competence of Testing and Calibration Laboratories*

ISO/TS16949, *Quality Management Systems – Particular Requirements for the Application of ISO9001 for Automotive Production and Relevant Service Part Organizations*

Japanese Standards Association
4-1-24 Akasaka Minato-ku
Tokyo 107-8440

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Japan

http://www.jsa.or.jp/default_english.asp/

Japanese Industrial Standard (JIS) specifications

Performance Review Institute
161 Thorn Hill Road
Warrendale, PA 15086-7527
USA

<http://www.pri-network.org/Nadcap/>

NADCAP, *National Aerospace & Defense Contractors Accreditation Program*

Society of Automotive Engineers
400 Commonwealth Drive
Warrendale, PA 15096-0001
USA

<http://www.sae.org/>

ISO/EN/AS9100, *Quality Systems, Aerospace, Model for Quality Assurance in Design, Development, Production, Installation, and Servicing*

U.S. Department of Defense
Defense Standardization Program Office
<http://www.assistdocs.com/>

Military Standard (MIL-STD) specifications

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6.3 Revision History

Rev	Description	Related Section(s)	Release Date	Author	Approval
-	Initial Release	All		M. Sargent	
A	Added sections (2.6) to include requirements from AS9100D	New 2.6, 5.3, 5.11, 5.18, 5.19 Adjusted 5.1	9-29-2017	M. Sargent	R. Langone
B	Changed Automated Dynamics to TSS Albany Added "When records are to be disposed of, they must be destroyed in a manner in which confidentiality is maintained."	All Section 5.14	9-28-2020	M. Sargent	M. Sargent

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SUPPLIER ACKNOWLEDGEMENT OF SUPPLIER HANDBOOK Revision -

As a supplier of production materials to TSS Albany, our company acknowledges that we have received a copy of the TSS Albany Supplier Handbook, and have read and understand the requirements stated within this document.

We understand that any printed copy of the handbook will be considered an uncontrolled copy and that current released revision to the Supplier Handbook will be located on the TSS Albany external website, <http://www.automateddynamics.com/>.

Supplier Company Name: _____

Supplier ID Number: _____

Function	Name	Signature	Date
Customer Service Sales Management			
Operations Management			
Quality Management			

Please submit this completed acknowledgement form via e-mail to your TSS Albany Supply Chain contact.

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