



# Supplier Quality Assurance Manual

5675 West Burlingame  
Road  
Tucson, Arizona 85743  
Phone 520.744.1000  
Fax: 520.744.9494

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**Purpose:** The purpose of this document is to describe in detail the Quality Requirements and Procedures for Suppliers doing business with Sargent Aerospace & Defense. All Suppliers are required to comply with the requirements included herein. This document supersedes all previous documents and will be the controlling standard for quality as a Sargent supplier.

**Introduction:** Sargent, a RBC Company, is engaged in the manufacture of components and assemblies for use in Commercial and Military Aerospace, Transportation and Marine applications. Sargent is AS9100 certified, and requires that the suppliers' quality systems are also ISO 9001 and AS9100 compliant. We will review your system through the completion of a preliminary questionnaire and or a verification audit within the first year of doing business with Sargent.

Our supply base is one of our greatest assets, in that spirit, we are committed to making Sargent business an important asset to our suppliers. We are committed to helping our suppliers meet their Quality and Delivery goals, and offering assistance in improving quality and communications between our suppliers and Sargent.

**Right of Access:** The supplier shall make available for review all documents, facilities, materials and process to Sargent, its designated representatives, regulatory/certification bodies, and end customers. This right of access shall also apply to sub-suppliers and distributors of parts, materials and processes used on product supplied to Sargent. We reserve the right for Sargent, Sargent customers or a designated third party agency to audit/inspect the supplier's facility, processes and documentation.

**Supplier Code of Conduct:** Roller Bearing Company (RBC) understands that our success depends on our reputation for ethical business performance and performing our jobs honestly, diligently and with integrity, in compliance with all applicable laws and regulations. Consistent with our commitment to conduct business fairly and honestly, we seek out business partners who share in our culture, values and business practices. This Supplier Code of Conduct (this "Supplier Code") is an extension of the Roller Bearing Company Business Conduct and Ethics and establishes the standards for conducting business with Roller Bearing Company (RBC).

For the purposes of this Supplier Code, "Supplier" means any company, corporation or other entity or person that sells, or seeks to sell, goods or services to Roller Bearing Company (RBC), including the Supplier's employees, agents, subcontractors and other sub-tier sources.

Supplier is responsible for communicating the contents of this Supplier Code of Conduct to its officers, directors, employees, agents, subcontractors and sub-tier sources who are involved in the procurement and production process related to products and services provided to Roller Bearing Company (RBC).

**Product Safety and Conformance:** Supplier is required to plan, implement, and control the processes needed to assure product quality to ensure product safety for Sargent product. Control of processes should account for but not limited to: hazards, conformance to requirements, critical safety items, frozen planning and training.

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## Section 1: Definitions - Acronyms

APQP	Advance Process Quality Planning: Method by which potential failure modes are identified, ranked and process controls developed to prevent them from occurring
ASL	Approved Supplier List
CPP	Certified Part Program: Same as Certified Supplier Program with the difference that source delegation will be controlled by part number
DMA/MRR	Discrepant Material Action/ Material Review Report issued when nonconformance to standards is detected; response is required. Discrepant Material Action and Material Review Report are the same form.
DFMEA, PFMEA	Design/Process Failure Mode and Effects Analysis: Method of analysis that evaluates potential risk of failure, impact of the failure on the process, and the likelihood of detecting the failure before the product is sent to the next level of processing or delivered to the customer. Values are assigned and the failure mode is evaluated based on its overall impact.
DMS	Diminishing Manufacturing Sources
FOD	Foreign Object Debris/Foreign Object Damage (FOD) Prevention
KC	Key Characteristics: The features of a material, process, or part whose variation has a significant influence on product fit, performance, service life, or manufacturability, that requires specific actions for the purpose of controlling variation
NADCAP	National Aerospace and Defense Contractors Accreditation Program: Worldwide cooperative program of major companies designed to manage a cost-effective consensus approach to special processes & products and provide continual improvement within the aerospace and automotive industries
NIST	National Institute for Standards and Testing: Official source for measurement standards for the US, based in Bethesda, MD
OSP	Outside Processing/Processor
OTD	On-Time Delivery: Percentage of product received on or before the due date as described in the purchase order
PQR	Production Quality Requirements: Coded clauses added to the purchase order to describe additional requirements and restrictions. A list of the PQR's is included within the PO.
QAS	Quality Approved Supplier: Sargent supplier that has completed all Quality requirements and has maintained an acceptable quality approval rating
QMS	Quality Management System: Policies and systems for managing quality as described by the supplier's quality manual.
SCAR	Supplier Corrective Action Request

SDMR	Supplier Discrepant Material Report: Form used to report discrepancies detected by the supplier (Form #2.385).
SPC	Statistical Process Control: Method of mathematically predicting with a very high degree of certainty the overall compliance of a population based on measurements taken on a limited sample
SQE	Supplier Quality Engineer
LTA	Long Term Agreement
RFI	Request For Information

## Section 2: Quality System Requirements

**Procurement Control:** Current standards, drawings and specifications are used in the specification, acquisition, and verification of all parts, materials and processes associated with Sargent product. These standards, drawings and specifications must be readily available and accessible to Receiving Inspection. Certification of all outside parts, materials and processes is required, and must be passed on unaltered and all documentation provided shall be written in the English language to Sargent with the end product when original certification is required. Sub-suppliers are verified to assure that the products and services supplied are consistently compliant with Sargent standards.

Due to the nature of our business we require 100% compliance with all physical and chemical requirements as defined in the material specifications. We do not accept general commercial-grade materials unless they comply with the specified standard and are certified as such. The Supplier is responsible for supplying material that is as specified and is certified as such. Sargent receiving inspection may sample material by Analyzer to confirm material. Certification of Compliance is required on all materials and services supplied to Sargent when original certifications are not required. All specialty metals supplied to Sargent must comply with DOD 252.225-7014 Preference for Specialty Metals Alternate I (APR 2003) [DFARS]. Approved countries of origin are listed in the standard, and must be included on the certification.

**Sub-tier Control:** Suppliers are required to maintain a program by which they review the Quality Management Systems of the sub-suppliers that are used to supply Sargent with materials and processing. Acceptable evidence of compliance to QMS requirements include:

- certification to ISO 9001/AS9100
- Nationally or internationally recognized registration body
- End-customer approval (such as Boeing) as a source for the materials/processes supplied
- Listing on the Sargent Approved Supplier List (ASL)
- As a specified by Sargent contract.

All supplier-sourced sub-suppliers must also meet the same standards as Sargent's Suppliers. If the supplier cannot verify the compliance of the sub-supplier to ISO 9001/AS9100 standards; the supplier may seek assistance in locating an approved supplier from Sargent Supplier Quality.

**Quality Records:** Sargent is AS9100 certified and adheres to the principals defined in ISO9001. Records of events in the QMS are required, to provide evidence. Process changes and adjustments, machine records, maintenance records, and training are just a few of the records that are required besides in-process and final inspection results.

Sargent does not currently require SPC systems be used on all of our products, but we realize the value in predictive analysis and control. If SPC is required, it will be specified in the purchase order.

Sargent requires that all records be retained for seven years, unless otherwise specified by contract. If a longer record retention is required by our customer this will be included with the original quote and the purchase order.

**Traceability and Lot Control:** Parts, materials and processes must maintain strict traceability on all aspects of the parts, processes and materials produced. Sargent requires traceability of all aspects of the parts, materials and processes supplied, and identification by lot of all raw materials used and must be provided for review. This includes the national origin of certain parts as described in the Sargent purchase order.

**Storage Control:** All parts and materials must maintain strict lot identity and separation at all times and be protected from external contamination and degradation by the clauses. Raw materials must be identified by lot numbers that are directly traceable to the certifications for that material. Manufacturing lots must be directly traceable to the individual quality records and raw material lots that they came from. At no time during the receipt, storage, manufacture or shipping can a part or product be allowed to be mixed, or to lose its unique identity. Parts and materials shall be identified with the part number, lot number, date of manufacture and condition. For materials that have a shelf-life, the expiration date shall be clearly identified.

**Inspection Records:** All variable data measurements must be recorded unless specified by contract. Records can be retained as electronic files as long as they are saved as copies of the original collection sheet and are unalterable. All dimensional checks that are taken as variable data shall be recorded as read, not marked as pass/fail. Individual quality records shall include at the minimum:

- The part or component number
- The material lot number – this includes heat numbers or manufacturing lot numbers for OSP's
- The date that the product was processed
- The number of parts processed
- The number of parts accepted
- The disposition of rejected parts and scrap
- The standard or specification to which the measurement was taken
- In-process test results, including the number of parts sampled, variable data if taken, the mark, stamp or signature of the person that did the testing and the date that the test was done
- Unique identification of measuring tools – gage number or serial number traceable to calibration records

**Retention of Records:** Sargent requires that all quality records be retained for seven (7) years after final payment. There are also special circumstances and customer requirements that may be longer. Special requirements will be defined in the purchase order or in the LTA if one is in place.

**Sampling Plan:** All attribute inspection of product for Sargent shall be done using a sampling plan compliant with ANSI/ASQ Z1.4-2003 "current revision".

**Variation Management:** Sargent recommends the use of any and all tools for advanced design and process development in order to manage variation in their processes and final products. Various tools aid in planning, monitoring, and maintaining production;

- Statistical Process Control (SPC),
- Failure Modes and Effects Analysis (FMEA),
- Measurement System Analysis (MSA).

In addition to implementation and use of these tools, Frozen Process Control Planning may be used to formalize and control the process sequence, special process requirements, and manufacturing controls. Statistical Process Control (QC16) and/or Key Characteristic Control (QC41) may be required and identified on the purchase order for the key characteristics.

**Frozen Planning:** The requirement for Supplier Frozen Process Control Plans are identified on the purchase order line with the PQR (QC27). A Sargent Supplier Frozen Process Control Plan (FPCP) Form 2.389 must be submitted. Additionally, Form 5.392 shall be used as a guide to aid in the development of this planning to define the necessary value adding requirements including the control of Key Characteristics and associated SPC requirements. Detailed manufacturing is not required. **Process Control Plans are considered frozen and no changes may be incorporated without written approval** from Sargent Quality

- Initial submittals shall be submitted to Sargent prior to commencing production.
- Subsequent revisions require submittal to Sargent for approval are: changes to the process sequence, manufacturing methods, drawing revisions, changes to sub-tier suppliers when specified, or changes that impact a key characteristic.
- Minor revisions that do not require submittal for approval are: typographical corrections, changes to sub-tiers when not specified or not controlled.

Changes are controlled and a log must be maintained with each plan either directly in the plan or as a supporting document. When required, technique sheets from sub-tier suppliers of special processes may need to be submitted in addition to frozen planning. For questions, please contact the buyer so the program specific quality engineer can provide support.

**Receiving Records:** All shipments must include copies of all certifications and lot quantities as well as the result of any tests done as part of the receiving process. If a lot of material is part of a larger run of materials, and there are multiple receipts of the same lot, each receiving lot must be identified with a unique sequence number.

**Calibration:**

Supplier Requirements:

All measurement equipment used to determine acceptance of material shall be identified with labeling and subject to, as a minimum, an initial calibration, and re-calibration thereafter using a calibration recall process. If calibration is accomplished by an outside source, the accreditation of the calibration source shall be available for review. All outside calibration sources must be certified or have an accreditation as a calibration source by one of the following

means, but not limited to ISO10012, Z540 ISO17025 (current revision). Exceptions are limited to recalibration by the original manufacturer when accredited calibration sources are unavailable. In such cases the calibration source shall supply certification of traceability of standards to NIST.

Calibration services minimum requirements:

A calibration service supplier providing services directly to Sargent must be certified or have an accreditation as a calibration source by one of the following means: ISO10012, Z540 ISO17025, (current revision).

Exceptions are limited to recalibration by the original manufacturer when accredited calibration sources are unavailable. In such cases the calibration source shall supply certification of traceability of standards to NIST or other recognized national or international standards organization.

**Non-Conforming Material Control:** Non-conforming material must be clearly identified and segregated from conforming product to prevent the accidental introduction into the product stream. Likewise, material that has not been verified as acceptable shall be identified and segregated from the product stream until it can be verified. In the event the supplier request Sargent disposition nonconforming material; a corrective action shall accompany the SDMR form 2.385 to prevent reoccurrence.

**Drawing and Change Control:** The supplier shall have a procedure for the issue, return and secure disposal of controlled documents and drawings that insures that the current revision of these documents are available and the obsolete documents and drawings are permanently removed from access by the production floor. When design is the responsibility of the Sargent supplier, the supplier shall implement no changes in design, materials, process or control without prior written approval from Sargent.

**Foreign Object Debris/Foreign Object Damage (FOD) Prevention:** Suppliers shall ensure that FOD prevention program is implemented as part of the manufacturing and packaging process. Suppliers and sub-contractors shall ensure that parts are cleaned of debris etc. prior to next operation; to ensure that there is no foreign objects within bores etc. and parts are protected against scratches / dents and those parts are delivered FOD-Free. National Aerospace Standard, NAS 412–Foreign Object Damage / Foreign Object Debris (FOD) Prevention Standard Practice, is a reference document which provides information on Foreign Objects (FO), Foreign Object Debris (FOD) and elimination to help create a FO/FOD free work environment.

**Counterfeit Parts Prevention:** In order to minimize the risk of procuring counterfeit product, the following requirements in accordance with AS-5553 and/or AS6174 are invoked on all purchase orders to help ensure that conforming, authentic material is provided.

Counterfeit Parts Prevention Program requirements in accordance with AS-5553 and/or AS6174 shall be flowed to each level of sub-tier suppliers.

Statement to be flowed down:

- a. *For purposes of this clause, Work consists of those commodities delivered under this Contract that are the lowest level of separately identifiable items (e.g., articles, components, standard hardware, goods, raw materials and assemblies). "Counterfeit Work" means Work that is, or contains, items misrepresented 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.*



- b. *Seller shall only purchase products to be delivered or incorporated as Work to Buyer directly from the Original Component Manufacturer (OCM)/Original Equipment Manufacturer (OEM), OCM/OEM authorized distributor chain, Aftermarket Manufacturer, or Authorized Reseller. These products shall have verification that Work is traceable to OCM/OEM; OCM/OEM authorized distributor chain, Aftermarket Manufacturer, or Authorized Reseller that identifies the name and location of all the supply chain intermediaries from the part manufacturer to the direct source of the product for the Seller. Work can only be acquired from independent distributors or brokers in cases of diminishing material supply (DMS) or obsolescence and shall be subjected to a screening process appropriate to the commodity in accordance with the Counterfeit Parts / Material Prevention and Control Plan.*

*The seller shall maintain a method of commodity and item level traceability that ensures tracking of the supply chain back to the manufacturer of all <MATERIAL> being delivered per this order. This traceability method shall clearly identify the name and location of all of the supply chain intermediaries from the manufacturer to the direct source of the materiel for the seller and shall include the manufacturer's commodity or item level identification for the item(s) such as date codes, lot codes, heat codes, serializations, unique item identifiers, or batch identifications.”*

*If traceability is not obtainable, written notice shall be provided to the Supplier Quality Engineer and buyer prior to delivery with records of evidentiary tests and inspections performed and conformance of the product to specified acceptance criteria that ensures verification activities taken to assure authenticity. Written notice is not required for raw material and standard hardware purchased from independent distributors or brokers, but products must be able to provide commodity level traceability to the Original Manufacturer.*

- c. *Seller shall notify Supplier Quality Engineer and Buyer in accordance with corrective/preventative action with the pertinent facts if Seller becomes aware or suspects that it has furnished Counterfeit Work. Seller shall provide to Supplier Quality Engineer and Buyer, upon request, the supply chain traceability to an Original Manufacturer or authorized distributor chain that identifies the name and location of all the supply chain intermediaries from the part manufacturer to the direct source of the product for the Seller.*
- d. *Seller shall include this clause or equivalent provisions in lower tier subcontracts for the delivery of items that will be included in or furnished as Work to Buyer.*

*Sellers eligible for utilization of the Government-Industry Data Exchange Program “GIDEP”) shall utilize the GIDEP process to alert the industry of encountered counterfeit parts.*

**Corrective Action, Preventive Action, Request and Reporting:**

Supplier shall:

- a. ensure effective corrective and preventive action is taken (including repetitive nonconformances dispositioned "Use-As-Is" or "Repair" by Sargent or Suppliers Material Review Board ["MRB"] actions) to prevent, minimize, or eliminate non-conformances; and
- b. evaluate each nonconformance for its potential to exist in previously produced items and notify Sargent, in writing, within 24 hours of potential or verified non-conformances impacting flight safety on items in transit or delivered to Sargent; and
- c. notify Sargent in writing within 5 working days of all other potential or verified nonconformances; and
- d. provide effective corrective and preventive action upon request by Sargent and, when requested by Sargent, provide trend data; and
- e. assess non-conformances, whether or not Item(s) were returned to Sargent, and take appropriate actions to ensure causes of non-conformances are corrected to prevent future occurrences.
- f. For any returned item which the supplier cannot verify a Sargent reported non-conformance. Do not return items unless authorized by Sargent, invade by SDMR for additional testing.

**Section 3: Becoming a Sargent Supplier**

**Sargent Aerospace & Defense Approved Supplier:** Before a supplier is approved by Sargent the following must be met:

1. For Manufacturing and Outside Processing Suppliers, they must show evidence of having a Quality Management System that complies with AS9100 or NADCAP.
2. Completion of Supplier Evaluation Checklist (Form #5.382). When submitting the Supplier Evaluation Checklist, the supplier is asked to include copies of their specialized certifications, such as NADCAP, AS9100, ISO9001 etc.
3. An on-site Quality Approved Supplier (QAS) Audit may be scheduled if product quality and or delivery do not meet Sargent requirements.
4. Suppliers that are ISO9001, AS9100, certified are only required to complete the second page of form 5.382 and present a copy of their Certificate of Registration.
5. Registration or certification by our customers is also evidence of compliance and will greatly reduce or eliminate the need for an onsite audit.

At the very minimum, the Supplier's quality system is required to have:

1. A Manual for the operation of their quality system
2. Written procedures for the execution of all tasks within the Quality Operating System
3. A measurement system directly traceable to NIST standards, or certified to comply to standards of accuracy and repeatability by an ISO17025, ISO1012 or other compliant calibration sources.
4. Records of all measurements identified on the print or other features identified in the purchase order for parts supplied to Sargent as specified by the PO and the drawing
5. Certification of all materials showing traceability to the original source of the material, including compliance to all physical and chemical specifications and country of origin. Sargent requires DFARS compliance on all material supplied if noted on the purchase order.
6. A document control system that maintains the revision level and access to all drawings, specifications and standards and prevents the use of outdated or marked up prints
7. A material control system that maintains all lot traceability and can recall all lot/product information.
8. Internal Audit, corrective/preventative action process.
9. Control of nonconforming procedure.

If there are any compliance questions, refer to the latest revision of AS9100 as the governing standard for QMS compliance. Sargent is an AS9100 certified system and we audit to AS9100 standards.

**Approval and Disapproval:** There are two levels of Approval and one level of Disapproval under Sargent's system:

- **Approved:** All components of the QMS are present and functioning. The quality records that relate to Sargent product are complete and available for review. No further action is required. This is full Quality Approved Supplier status.
- **Conditional:** All clause s of the QMS are present, but have minor deficiencies, such as incomplete records or lapses in the application of the Supplier's quality procedures. The Supplier agrees to take immediate corrective action. The corrective action shall be verified by Sargent either through the review of documentation related to the corrective action, or by re-audit. Initial response to findings is required within 30 days, and final closure will be determined on a case-by-case basis.
- **Suspended:** There are major deficiencies noted in the Supplier's QMS, and the Supplier has indicated that they do not have an interest in becoming acceptable and corrective action has not been responded to within 30 days. **No business will be placed and the Supplier is excluded from bidding on new business.**

**Approved Supplier List (ASL):** Upon completion of the qualifying review process Suppliers are added to the ASL. Approved Suppliers may select their own sources as long as they can document compliance to all requirements as specified in the PO and on the drawings. If the Supplier is a Quality Approved Supplier, and their sub-supplier is not certified to a nationally recognized organization or listed as an approved source by the end user (Boeing, Sikorsky, etc.) then evidence of verification of compliance shall be substituted in the form of on-site audits to establish compliance to requirements. Evidence of successful verification shall be maintained at the Supplier's location and made available for review upon request. If you do not have a Supplier Verification Program, sources for materials and processing are available through your Sargent Purchasing Representative. **Sargent reserves the right to specify sub-suppliers and outside processors and disqualify suppliers that do not meet Sargent's requirements.**

The Supplier is responsible for reviewing the accuracy and compliance to requirements of certifications supplied by sub-suppliers. This includes sub-suppliers specified by Sargent unless otherwise stated in the PO or through an approved SDMR (Supplier Discrepant Material Request) in special instances.

**Supplier Classification:** Sargent has a classification system that breaks our suppliers into categories based on their quality systems. These categories are used to flow down supplier-related requirements. You may be required to use Sargent Approved sources for outside processing depending on your classification. It is also an indication to show what kind of business can be placed at your facility. The classifications are as follows:

**XV.** NADCAP approved processors.

**XX.** ISO9001 or AS9100 series certified quality systems or approved by major OEM customers.

**1A.** Quality systems that provide a level of control proportionate with item complexity and contractual requirements, and control their suppliers.

**1B.** Calibration systems that meet or exceed the requirements of ISO10012-1 or ANSI/NCCL Z540-1-1994 and calibration services that are traceable to N.I.S.T. or national standards.

**1C.** \*\*\*1C classification only for Customer Mandated Supplier\*\*\*.

**1D.** Specialized quality systems for distributors and other suppliers that are not required to perform in-process inspection.

**Quality Approved Supplier:** An approved Supplier that has demonstrated compliance to AS9100 standards, either through audit or registration, and has maintained a Quality Rating of 98% or better for two consecutive quarters and is eligible for progression towards certified Supplier status.

**Certified Supplier:** Once a supplier is approved as a Quality Approved Supplier and has maintained a Quality Rating of 98% or better and an On Time Delivery Rating of 93% or better for two consecutive quarters the supplier becomes eligible for Self-Release status. This requires at least the first two (2) consecutive shipments of parts having been received on-time without defects and having completed an on-site process audit with Sargent Supplier Quality. This audit will include review of the quality system as it relates to the individual process, observation of the process in action and review of all records. Included in this are records of in-process dimensional checks, process control, corrective actions, maintenance, certifications and final inspection records.

Based on the statistical stability and the Supplier's level of process control, the frequency of audit at Sargent will vary from every 3<sup>rd</sup> to every 10<sup>th</sup> receiving lot of material. This interval will be determined by Sargent Quality Engineering. In some cases, skip lot approval can be extended to cover similar parts that are produced by the same process. This will be reviewed on a case by case basis. In that instance, the frequency of audit will be based on the number of lots that are from the same process. In the event of multiple parts from the same process being received at the same time, the part that has the most skipped lots will be audited.

**Supplier Rating System:** Suppliers will be rated based on their lot-by-lot performance and that performance is averaged to determine the overall Supplier Rating. The supplier average score is calculated and reported monthly by Sargent Purchasing. Each lot has a possible total point value of 100, and is made up of the following components:

**Lot Quality Rating** = (Quantity Accepted / Quantity Rejected) \* 50 points

Partial points for discrepant product may be awarded based on the disposition of the product. Use-As-Is = 40 points, Missing or incorrect certification = 40 points, Missing DQA Stamp = 40 points, Rework @ Sargent = 20 points, and Return to supplier for any reason = 0 points

**Lot Delivery Rating** for no more than 3 days early = 50

**Lot Delivery Rating** for no more than 0 days late = 50

**Lot Overall Rating** = Quality points + Delivery points = 100 points max

**The supplier average score** is weighted equally based on lot rating regardless of the quantity received.

**Training:** Quality Approved Suppliers, Certified Suppliers, Suppliers having Certified Inspection Tooling and Supplier having parts in the Certified Part Program will be trained in the requirements and responsibilities for their self-release designation and will be issued a Sargent controlled acceptance stamp. An Inspection Checklist (ICL) will be supplied with each lot, along with material and processing certifications and a Certificate of Compliance supplied. The ICL will list all characteristics and notes identified on the drawing and any requirements identified by Sargent. The supplier is responsible for the review of all inspection records and certifications supplied. This includes the compliance of those certifications to the standards and specifications defined in the drawing and purchase order. Both the ICL and Certificate of Compliance need to be stamped with the stamp and included with every shipment.

**If a discrepancy is found** in a lot of material that is in a self-release lot, that supplier will be removed from skip lot until the root cause and a corrective action to prevent the recurrence are in place and documented, and three consecutive shipments have been received without any defects. The three (3) lots do not have to be the same part number, but they must be similar parts from the same process. All material from the supplier may be removed from self-release if it is determined that the discrepancy indicates a breakdown in the supplier's quality system and will result in loss of preferred status.

## Section 4: Communication

**The Sargent Aerospace & Defense SecureDTS:** Upon approval as a Sargent Supplier, the Supplier will be assigned a username and password for enabling controlled sharing of technical information using Sargent's SecureDTS

**Electronic Transfer:** All documents that are available electronically can be found on the Sargent Supplier website. Some information cannot be transferred this way, and must not be sent in this manner to any sub-suppliers. If you require a sensitive document it will be necessary to make arrangements to transfer it through your Sargent Purchasing Representative, or through Sargent Quality Engineering.

**Supplier Initiated Quality Actions:** Whenever there is a problem that may affect the quality or the delivery of a product, this must be communicated. Quality problems found at the Supplier's location should be communicated to Sargent to allow for a timely response prior to shipment. If the parts are nonconforming, this must be communicated through your Purchasing Representative using an SDMR (Form #2.385). Issues communicated to Sargent and approved for shipment in advance will not affect your Supplier Quality Rating; although should only be used in rarest occasion and shall not be repetitive.

**Supplier Discrepant Material Report (Form #2.385):** SDMR's are reviewed by Sargent's Material Review Board (MRB) and only completed SDMR's will be considered for acceptance by the MRB. The SDMR must be accompanied by supporting documentation showing the scope of the requested deviation along with a complete root-cause and corrective action. Once approved, the shipment of products must be identified with SDMR number and shall also include copy of the approved SDMR.

If the shipment is late as a result of the rejected SDMR, your OTD score will be affected. This may be prevented by making arrangements prior to the due date with your Sargent Purchasing Representative. The approved SDMR is only valid for the nonconformance identified and does not guarantee acceptance of the product for additional nonconformance's once it is received. If the problem is not corrected prior to the next shipment, another SDMR must be submitted to address this nonconformance and must also include explanation why this is repetitive. If the problem occurs in a product on a LTA, the SDMR can be identified as an LTA P.O. on the P.O. number line to allow the SDMR to be applied to the entire LTA. Also, if the same problem exists on multiple line items, they can be covered by one SDMR, as long as each line item is identified separately on the SDMR.

**Diminishing Manufacturing Sources/ Obsolescence:**

- Supplier must have the ability to demonstrate how DMS identification is managed and reported internally and externally to Sargent Aerospace.
- Suppliers must review any DMS notifications issued for their current approval status and mitigation actions implemented.
- Supplier must investigate and report if any materials including but not limited to, paints, oils, lubricants, sealants or treatments that are potentially made DMS/obsolete or unavailable due to legislative changes (E.g. Registration, Evaluation, Authorization and Restriction of Chemicals REACH/ Control Of Substances Hazardous to Health COSHH) or otherwise and create a mitigation plan.

**Request for Information (Form #RFI 2.388):** When a question arises regarding specifications, applications, substitution of materials or processes, a RFI should be submitted through your purchasing representative. **RFI is information or clarification only and does not cover nonconformances.**

**Sargent Initiated Quality Actions:** Materials that are received that do not comply with the requirements specified in the purchase order, drawing specifications, condition at time of delivery, or material and processing requirements will result in the issuance of a DMA/ MRR.

**Deviated Material Action-Material Review Report (Form #SC21):** Deviated Material Action/Material Rejection Report (DMA/ MRR) requires Sargent MRB approval and will be issued for all suspect material and incorrect/missing documentation. Materials on hold waiting for MRB approval or delivery of certifications are not received into the system, and delays may result in the shipment being late and your OTD score being reduced.

**Supplier Corrective Action Request (SCAR):** Upon receipt of a SCAR, a Supplier is required to respond within the time specified in the SCAR to the Sargent Supplier Quality Engineer who issued the SCAR. If a Supplier cannot respond within the allotted time, they must contact the Sargent Supplier Quality Engineer or the Sargent Quality Manager to request an extension.

All containment, root cause and corrective action information is entered on the form. Response is required within 14 days. Late corrective action responses and implementation will be tracked by Sargent to access supplier performance.

**Supplier Evaluation Checklist (Form #5.382):** Completion of this form and review by Sargent Quality is necessary for preliminary approval as a Sargent Supplier. This survey tells us what your capabilities are, and the viability of your quality system. An on-site Quality Approved Supplier (QAS) Audit may be scheduled if the suppliers Quality system does not meet or exceed ISO 9001 or AS9100. Further action will be taken when product quality and or delivery do not meet Sargent requirements.

**Special Process Evaluation Checklist (Form #5.383):** This form is required in addition to the Supplier Evaluation Checklist if the supplier supplies any processes or services and is not NADCAP, ISO 9001 or AS9100 certified. This will include plating, heat treat and paint.

**Self-Check Guidelines for Frozen Process Control Plan (FPCP Form #2.389):** This form is a supplier self-check guide to ensure complete frozen process submittals, when required.

**Certified Inspection Tooling Checklist (Form #5.393):** This form shall be completed and signed to qualify supplier tooling as being certified.

## Section 5: Certification

**Certification:** Certificates of conformance are required for all shipments to Sargent. Certificates must;

- Declare conformance to all PO requirements
- SDMR number pertinent to the parts being shipped
- Mill certifications
  - Actual chemistry
  - Physical properties
  - Country of origin

The Supplier is responsible for the accuracy and compliance of all certifications even if a sub-supplier is mandated by contract. If a customer-mandated sub-supplier's product does not meet the requirements of the specified standard, a SDMR shall be issued and approved before the material can be used. **If a sub-supplier's certification is found to be non-conforming a DMA/ MRR will be issued to the supplier that accepted it when the material was sent to their facility.**

**Testing Certification:** Tests required for certification of materials and processing shall be accomplished by qualified technicians using calibrated equipment to certified standards and processes. The certifications shall include the actual readings and measurements taken while the product was under test, the method by which the testing was done and the standard that the results were compared to, including traceability to NIST, ISO, or other recognized national or international standards where appropriate.

**Certified Part Program:** Individual part number certification based on quality rating by individual part number and/or part family. Once a part is a CPP and has maintained a Quality Rating of 98% or better for two consecutive quarters the part or part family becomes eligible for Self-Release status. This requires at least five (5) consecutive shipments of the parts having been received without defects and having completed an on-site process audit with Sargent Supplier Quality. This audit will include review of the quality system as it relates to the individual process, observation of the process in action and review of all records. Included in this are records of in-process dimensional checks, process control, corrective actions, maintenance, certifications and final inspection records. Based on the statistical stability and the Supplier's level of process control, the frequency of audit at Sargent will vary from every 3<sup>rd</sup> to every 10<sup>th</sup> receiving lot of material.



## **Section 6: Appendix: Documents and Forms**

<b>2.351</b>	<b>Government Regulation Compliance and Business Size Certificate</b>
<b>2.388</b>	<b>Supplier Request for Information</b>
<b>2.385</b>	<b>Supplier Discrepant Material Report</b>
<b>5.250</b>	<b>Production Quality Requirements</b>
<b>5.382</b>	<b>Supplier Evaluation Checklist</b>
<b>5.383</b>	<b>Special Process Evaluation Checklist</b>
<b>2.389</b>	<b>Frozen Process Control Plan</b>
<b>5.392</b>	<b>Self-check Guidelines for Frozen Process Control plan</b>
<b>5.393</b>	<b>Certified Inspection Tooling Checklist</b>
<b>SC21</b>	<b>Deviated Material Action</b>

Forms can be obtained through your buyer or Sargents website <http://www.sargentaerospace.com/>.

**Section 7: Revision History**

<b>Revision No.</b>	<b>Date</b>	<b>Revision</b>	<b>Revised By:</b>	<b>Approved By:</b>
L	3/22/17	Extensive rewrite	C. Heckel	J. Dugle
M	10/09/17	Added DMS Requirements Clarifications on section 1-5	P. Andrade	J. Dugle
N	05/08/18	Compliance to AS9100 D	P. Andrade	J. Dugle