

SUPPLIER QUALITY PROVISIONS

Requirements of this Procedure shall be followed in the fabricating of all detail parts, sub-assemblies, assemblies, standard parts and tooling involved in the manufacturing of all Serbin Machining customer products. Compliance with Purchase Order (PO) requirements, which include SQPs, is subject to Serbin Machining and/or Regulatory Authority on-site verifications. Serbin Machining, our customers and any Regulatory Authority shall have a right of access to all facilities involved in the purchase order. Primary Serbin Machining suppliers who use sub-tier suppliers to manufacture Serbin Machining customer product, shall be responsible for flowing down the Supplier Quality Provision requirements to the sub-tier supplier. Serbin Machining suppliers are also responsible for obtaining and submitting all sub-tier quality records to Serbin Machining when the product is delivered to Serbin Machining.

Material Review Board (MRB) authority is considered **not** delegated to suppliers.

All Supplier non-conformances shall be promptly reported by submitting a Nonconformance Report (NCR) to Serbin Machining.

Suppliers must obtain organizational approval before processing of all NCRs.

Notification of Defective Delivered Product (escapes):

Serbin Machining requires written notification of any nonconformance's that may be discovered affecting previously delivered product.

Note: All documentation shall be in English

Handling, Storage, Packaging and Delivery

- **Handling** - The Supplier is responsible for proper handling of Serbin Machining product during Supplier's manufacturing process to prevent damage. Damage to product must be reported to Serbin Machining immediately. If damage is found during Suppliers Receiving Inspection, Supplier must take pictures of the damage and attach to e-mail for Serbin Machining review.
- **Storage** - The Supplier shall use designated storage areas or stock rooms to prevent damage or deterioration of product, pending use or delivery.
- **Packaging** - Parts will be packed in accordance with good industry standards to prevent damage in transit. Special packaging instructions may be required in addition to this provision. These instructions will be defined on the Serbin Machining PO if applicable.
- **Preservation** - The supplier shall apply appropriate methods for preservation and segregation of product when the product is under the supplier's control to prevent nonconforming product from being delivered to Serbin Machining.
- **Delivery** - The Supplier is responsible for following all Serbin Machining requirements or instructions to ensure that the product is received on time and undamaged.
- **Records** - All records must be maintained for a minimum of 10 years unless otherwise specified. Any variation to the 10 year minimum retention requirement will be on an individual Purchase Order basis and will only apply to the specified PO.

Serbin Machining Owned Equipment - The Supplier shall exercise care with Serbin Machining property while it is under the Supplier's control or being used by the Supplier. The Supplier shall identify, verify, protect, and safeguard Serbin Machining property. If Serbin Machining property is lost, damaged or otherwise found to be unsuitable for use, the Supplier must report this to Serbin Machining immediately

NOTE: ALL GENERAL STATEMENTS PRECEDING SQP1 APPLY TO EVERY PURCHASE ORDER.

SQP 1) Key Characteristics (KC) - This requirement is applicable when it is specified on the Customer drawing (symbol) and defined on the Serbin Machining Purchase Order. The Supplier shall provide variable data (Report) to Serbin Machining for each part manufactured. Serial numbers must also be listed with the measurement if applicable. Attribute (*go/no-go*) data shall be used only if no other inspection technique is feasible. The Supplier must contact Serbin Machining Quality to request this alternate method of measuring. Serbin Machining Quality will review the request and approve if it is determined to be a valid request.

SQP 2) Standard / Military Hardware - The Supplier shall deliver standard/military hardware (AN, **MS**, NAS, etc.) that is compliant with the latest specification revision, unless otherwise specified by Serbin Machining. The Supplier shall provide a Certificate of Conformance (C of C) stating that the hardware conforms to the specification defined on the Serbin Machining Purchase order. Refer to SOP 5 for required C of C data.

SQP 3) Raw Material Certification - Suppliers shall supply Serbin Machining with all mill certifications, which contain the actual and complete values for chemical and mechanical test data that meet the acceptance requirements of the applicable material specification defined on the Serbin Machining Purchase Order. Material Certifications that are illegible will not be accepted. Common factors include Suppliers receiving copies that are not from original records or when illegible copies have been faxed from poor quality equipment.

SQP 4) Product Identification (Part Marking) - The Supplier will be responsible for Part Marking when this SQP is listed or checked (check box) on the Serbin Machining PO. The Part Marking Requirement will be defined on the Serbin Machining Purchase Order including the Specification (if applicable) as noted on the Customer Drawing or Parts List. It is the responsibility of the Supplier to contact Serbin Machining Quality if the Part Marking requirements are not clearly understood. The Part Marking specification must be listed on the C of C.

SQP 5) Certificates of Conformance (C of C) The Supplier is required to submit a Certificate of Conformance indicating compliance to all Serbin Machining Purchase Order requirements that include Customer defined specifications. The Suppliers authorized representative (Quality Manager or designee) must sign the "C of C".

As a minimum the C of C shall include

- Name of Supplier
- C of C date
- Serbin Machining Purchase Order (PO)
- Part Number and (Revision Letter for machining or assembly)
- Quantity Shipped
- Include all product/process specifications including the revision called out on the Serbin Machining Purchase Order

SQP 6) Fixed Process Control- The Supplier shall provide Travelers (Routers), Inspection Plans, and all applicable Work Instructions to Serbin Machining Quality for review and approval prior to the start of production. This SQP requirement is typically stated on the PO for Special Processes (see SQP 11) and for any recurring nonconforming issues that Serbin Machining believes are not in control by the Supplier. Suppliers must notify the organization of changes in product and/or process, changes of suppliers, changes of manufacturing facility location and, where required, obtain organization approval.

SQP 7) Inspection Plans and Sampling (In Process) Acceptance - The Supplier shall establish and maintain documented processes for Inspection and Sampling (In Process) activities that verify product conformance. The supplier shall comply with the following requirements as defined on Serbin Machining Purchase Orders:

- 100% Inspection of every feature on every part is required when manufacturing non-production product. The Supplier must provide inspection reports with variable data for each part manufactured. These reports must be sent to the Quality department.
- Sampling Inspection can be used for production product only. Only Serbin Machining approved Sampling Plans can be used by Serbin Machining Suppliers. The Supplier must contact Serbin Machining Quality before starting production to receive the approved documents. If the Supplier has a Sampling Plan process, it may be submitted for review and approval. When Sampling Inspection is used, The Supplier must complete a 100 First Piece Inspection (Attribute) and a 100 Last Piece Inspection (Attribute). The First and Last Piece Inspection is not included as part of the In Process samples.
- Sampling Inspection for Nondestructive Inspection (e.g. Eddy Current, Radiographic, Magnetic Particle, Ultrasonic, and Fluorescent Penetrant) is **not** allowed. 100 Inspection is required.

The inspection of a product shall be traceable to the individual performing the acceptance per section **8.2.4, AS9100C: "Records shall indicate the person(s) authorizing release of product for delivery to the customer"**.

Calibration

The supplier shall establish and maintain documented procedures to control, calibrate and maintain all measuring and test equipment that can affect product quality, including test software and personally owned equipment including any Serbin Machining supplied equipment.

- Calibrations shall be traceable to internationally or nationally recognized standards.
- Equipment shall be identified with Calibration Labels and Certification records of the calibration.
- The Supplier shall conduct an impact assessment of the previous inspection results when equipment is found to be faulty or out of calibration and shall recall the product for re-inspection when the assessment indicates the result may be nonconforming product

SQP 8) Acceptance Test Procedure (ATP) Data - The Supplier shall provide a copy of the test report containing test parameters and actual results. The report shall include copies of all supporting documentation such as strip charts and time/temperature readings. The report shall reference serial or lot numbers and shall be signed by the test operator and responsible company official. The supplier shall reference the data produced by the functional tests on the Certificate of Conformance.

SQP 9) First Article Inspection: The supplier shall provide objective evidence for the inspection, verification, and documentation of the first production article. First Article Inspection documentation shall include a list of the characteristics required from the Customer drawing and Parts List. A Delta (partial) First Article Inspection shall be performed for all customer changes to the product configuration. The First Article Inspection Report (AS91 02 First Article Inspection Form) shall be submitted to Serbin Machining along with the actual product that was inspected for the FAI. The actual FAI part must be physically identified. Serbin Machining will provide "flagged" drawings and the AS91 02 form 1, 2, and 3. If the Supplier uses a Coordinate Measuring Machine (CMM) to verify product conformity, then a copy of the CMM report must be sent with the FAI form.

SQP 10) Statistical Process Control (SPC) - Serbin Machining Customer requirements for SPC will be the noted on the Serbin Machining Purchase Order. The features that are required to be measured and tracked will also be defined on the Customer drawing. It is the responsibility of the Supplier to contact Serbin Machining if the Customer requirement is not clearly understood. All SPC data will be submitted to Serbin Machining along with the delivery of the product.

SQP 11) Special Processes - Suppliers shall be responsible for imposing satisfactory oversight and controls for any in-house or subcontracted special processing and non-destructive testing used on Serbin Machining product. National Aerospace and Defense Contractors Accreditation Program (NADCAP) or similar accreditation is the preferred method of approval for Special Processes.

Note: Loss of third party accreditation requires written notification to the Serbin Machining Quality Manager.

SQP 6, Fixed Process Control may be added as a result of Loss of Accreditation or recurring nonconforming issues that Serbin Machining believes are not in control by the Supplier.

Special processes include:

- Non-destructive testing (radiographic, ultrasonic, fluorescent penetrant, magnetic particle, etc.)
- Non-conventional machining (Le. Electrochemical Machining (ECM), Electrochemical Grinding (ECG), Electrical Discharge Machining (EDM), Laser Beam Machining (LBM), Chemical Milling)
- Shot Peening
- Chemical processing (i.e. Painting, Plating, Anodizing, Chemical Cleaning, Chemical Milling, Conversion / Phosphate Coatings, Paint / Dry Film Coatings, Plating, Stripping, Surface Treatment / Passivation, Etching)
- Materials testing (metals testing only, hardness, metallography, micro-hardness, mechanical testing, chemical analysis)
- Heat-treating, Hot Forming and Furnace Brazing
- Welding (i.e. Friction Stir, Electron Beam, Resistance, Laser, Fusion)
- Sealant application

Note: A Certificate of Conformance is required per SQP 5.

SQP 12) Source Inspection - The supplier must contact Serbin Machining Quality when ready for source inspection within a reasonable amount of time (5 days minimum) to allow Serbin Machining to make arrangements for the visit and not jeopardize the On Time Delivery commitment to Serbin Machining's customer. Send notification to Serbin Quality Manager.

SQP 13) DFARS - Defense Federal Acquisition Regulation Supplement - DFARS 225.872-1 General, Contracting with qualifying country sources. Supplement available at <http://twmetals.com/resources/dfar/DFARS2258721.aspx>

SQP 14) DPAS - Defense Priorities and Allocations System - This is a rated order certified for national defense use. You are required to follow all the provisions of the defense priorities and allocation system regulation (15 CFR Part 700) <http://law.justia.com/us/cfr/title15/15-2.1.3.2.1.html>

SQP 15) ITAR -International Traffic in Arms Regulation - Employees must be U.S. citizens, a legal immigrant with a Green card; or a "protected individual" (refugee/someone with asylum). http://pmdotc.state.gov/regulations_laws/itar_official.html