



## **SUPPLIER QUALITY REQUIREMENTS:**

### **GENERAL REQUIREMENTS:**

Unless otherwise specified in the Purchase Order, the following general requirements shall apply:

#### **1. Prohibited Practices**

**Unauthorized Repairs:** Without prior written approval from Birk Manufacturing, Inc., Supplier shall not repair by any method, parts damaged or found to be faulty during fabrication.

**Change in Approved Processes, Materials or Procedures:** Supplier shall not change any process, material or procedure without prior written approval by Birk Manufacturing, Inc. if such process, material or procedure was specified or originally subject to approval by Birk Manufacturing, Inc. As to any product which has been subjected to Birk Manufacturing, Inc. or Government specified qualification procedures to qualify the product or to permit the Supplier to become a qualified source for the product, the Supplier shall not change any process, material or procedure from that used to qualify without prior notification to Birk Manufacturing, Inc. and approval by Birk Manufacturing, Inc.

**Improper Resubmittal:** Articles rejected by Birk Manufacturing, Inc. and subsequently resubmitted to Birk Manufacturing, Inc. shall be clearly and properly identified as resubmitted articles. Supplier's shipping document shall contain a statement that articles are replacement or reworked articles and shall also refer to Birk Manufacturing, Inc.'s rejection document.

**Notification of Facility Change:** Suppliers are prohibited from relocating any production, manufacturing, and/or processing facilities during performance of a Birk Manufacturing, Inc. Purchase Order without prior notification to the Birk Manufacturing, Inc. This is necessary to afford Birk Manufacturing, Inc. an opportunity to examine such facilities for compliance with Quality Assurance requirements, including any necessary approvals.

#### **2. Order of Precedence for Technical Documents**

In the event of a conflict in requirements between technical documents, the following order of precedence shall prevail:

1st Purchase Order/Contract

2nd Drawings

3rd Specifications cited on the drawings

**Note:** Contact the Birk Manufacturing, Inc. authorized buyer regarding any questions or concerns. The Configuration Requirements specified in the Purchase Order will contain applicable drawing, associated revision levels and supplemental drawing data.

#### **3. Documentation**

Birk Manufacturing, Inc. may refuse to accept items delivered under the Purchase Order if the Supplier fails to submit required documentation, e.g. test data or reports, as specified in the P.O.

A hard copy of all required documentation shall be sent with each shipment.

#### **4. Responsibility for Conformance**

Neither surveillance, inspection and/or tests made by Birk Manufacturing, Inc. or his representatives at either the Supplier's or Buyer's facility nor the Supplier's compliance with all applicable Product Assurance Requirements shall relieve the Supplier of the responsibility to furnish items which conform to the requirements of the Purchase Order. Birk expects that the Supplier will conduct their business with an emphasis on awareness of product safety, their contribution to product conformity and the importance of ethical behavior.

#### **5. Lot Sampling**

Birk Manufacturing, Inc. reserves the right to use the latest ANSI/ASQ Z1.4 or other appropriate sampling plan based on AQL1 for the acceptance or rejection of product. If the Supplier uses the latest ANSI/ASQ Z1.4 or other appropriate sampling plan and the sample contains rejected items, the Supplier must perform 100% inspection for the rejected feature or parameter to ensure that zero defects are present. All sampling plans must be based on AQL1. Rejection of a lot shall constitute 100% inspection of product for any non-conformances.

#### **6. Certificate of Conformance**

When stated on the Purchase Order the Supplier shall provide a Certificate of Conformance that certifies all materials and processes (plating, heat treatment, etching, painting, etc.) supplied are in accordance with Birk Manufacturing, Inc. Purchase Order requirements. The Certificate shall indicate, at a minimum, the following: part number, revision, lot code, serial number (if applicable), Purchase Order number, Quantity, and relevant specifications. If the shipment contains multiple processed lots/batches/date codes, then each processed lot/batch/date code must be represented on the Certificate of Conformance, along with their respective quantities. This document shall be signed and dated by the Supplier's Quality Assurance or Management Representative. Certification packages shall be included in the box with their respective parts.

#### **7. Revision Control**

Industry standard specifications noted on the purchase order or drawing shall be per the latest revision unless otherwise specified.

#### **8. Access to Supplier and Sub-Tier Facilities**

The Supplier shall grant Birk Manufacturing, Inc., its customers, and/or any regulatory authorities' right of access to the applicable areas of all facilities at any level of the supply chain involved in the Purchase Order and to all applicable records & processes used to manufacture parts for the PO. This shall also include the right to conduct a survey, audit, and/or assessment of the Supplier's facility and the Supplier's sub-tier Suppliers to determine their capability to comply with requirements.

#### **9. Identification / Marking**

The Supplier shall identify all (non-COTS) items, parts, components, subassemblies and/or assemblies with the appropriate part number and revision as noted on the part drawing or as otherwise specified by the Birk Manufacturing, Inc. Purchase Order. Unless otherwise specified by drawing or purchase order, parts and/or materials that are not suitable for marking due to size and/or configuration may be identified using the bag and tag methods outlined in SAE AS478.

#### **10. Corrective Action Requests**

When a quality problem exists, Birk Manufacturing, Inc. may request corrective action from the Supplier. Such request shall be responded to in the specified time and shall include the following information:

- Containment Actions Taken
- Analysis of the root cause of the problem
- Statement of the action taken
- Effectiveness of the action
- Copies of supporting documentation

When a formal Supplier Corrective Action Request (SCAR) is submitted to the Supplier, the Supplier shall use Birk Manufacturing, Inc.'s form provided, or the Suppliers CA form as appropriate. Supporting documentation is to be part of the SCAR's response.

#### **11. ESD Control Program**

If the items to be delivered under the Purchase Order are Electrostatic Discharge Sensitive (ESDS), the Supplier shall have an ESD control program which precludes ESD damage during all phases of fabrication, testing, handling, storage, and packaging for delivery. Nonmanufacturing Distributors shall handle, store, package and identify such items under an ESD control program which ensures continuation of the manufacturer's ESD control program. Shipping containers and packing slips shall have prominent marking/identification which identifies contents as ESD sensitive.

#### **12. Quality System**

The Supplier must be able to maintain a Quality System that meets or exceeds industry standards and ensures adequate product conformance and appropriate objective evidence to meet usual business responsibilities. It is preferable that Suppliers are able to maintain a Quality System that meets or exceeds ISO 9001 (current revision), ISO 13485 (current revision) or AS9100 (current revision). The Supplier shall notify Buyer within two working days if any ISO, AS, or NADCAP certifications are revoked or suspended. Notification of certification upgrade is mandatory. New or updated certifications are to be sent to the Birk Mfg. Purchasing Department at [purchasing@birkmfg.com](mailto:purchasing@birkmfg.com).

#### **13. Delivery Schedules / Delay of Delivery**

Supplier shall meet all scheduled delivery dates as specified on Birk Manufacturing, Inc. Purchase Order. If Supplier becomes aware of any circumstances that are likely to give rise to a delay in promised delivery date, the Supplier shall **immediately** notify Buyer, in writing, stating the reason for the delay and the new time for delivery. The Supplier shall seek authorization from Birk Manufacturing, Inc. if they wish to deliver any parts more than five days earlier than the promised delivery date. Shipments received earlier than five days before (unless authorized on the Purchase Order) or more than three days after the promised delivery date will have a negative effect on the Supplier's performance rating, which will be reflected on their Supplier Rating. In case of delay in delivery without proper notification, Birk Manufacturing, Inc. reserves the right to cancel the Purchase Order without liability to Birk Manufacturing, Inc. or any other third party. Unauthorized over shipments and early shipments may be returned at Supplier's expense. Supplier shall be liable for all storage/handling charges incurred as a result of over shipments and early shipments.

#### **14. Packaging / Handling / Preservation / Shipment**

All items delivered on this order must be adequately preserved, packaged, handled, and contained to prevent deterioration and damage during shipment. The shipping method should ensure safe arrival at destination in accordance with best commercial practices unless special packaging and shipping instructions are specified by Purchase Order, drawing, or specification. Special packaging/handling instructions may include, but are not limited to, unique marking requirements, special material traceability, or use of custom or reusable containers. If the shipment contains multiple processed lots/batches/date codes, then each processed lot/batch/date code must be segregated and clearly identified to maintain complete traceability in each shipment.



#### 15. Control of Nonconforming Product

The Supplier shall provide prompt written notification to Birk Manufacturing, Inc. when nonconforming material or products affecting a drawing, Purchase Order or specification requirement issues are discovered. The email address for submittal is through the Birk Mfg. Purchasing Department at [purchasing@birkmfg.com](mailto:purchasing@birkmfg.com). The Supplier shall not ship such nonconforming material or product until authorization to ship in the form of a written response from Birk Manufacturing, Inc. Upon authorization to ship, the non-conforming product must be labeled as non-conforming by the Supplier before shipment and all documentation related to the nonconforming product shall accompany the product at time of shipment.

#### 16. Subcontracting

The Supplier shall flow down all relevant quality requirements imposed by Birk Manufacturing, Inc. to any sub-tier Suppliers processing Birk Manufacturing, Inc. product. For Birk Manufacturing, Inc. unique part numbers, the Supplier shall not subcontract work on any article to be supplied under the Birk Manufacturing, Inc. Purchase Order without prior written approval of Buyer.

For all Birk Manufacturing, Inc. designed product, special processes - as well as certain additional processes not typically categorized as "special" - are source controlled, and must be performed by a Birk Manufacturing, Inc. approved vendor. All source-controlled processes and approved Suppliers can be found on the Birk Manufacturing, Inc.'s drawing. Approval to perform one process does NOT imply approval for any additional processes - a vendor must be approved for each special and/or controlled process it performs. If a preferred source has not been approved by Birk Manufacturing, Inc., Supplier can request approval prior to beginning work by contacting the Birk Manufacturing, Inc. Buyer. The requirement to use Birk Manufacturing, Inc. approved and/or mandated Suppliers must be flowed down to any sub-tier providers.

#### 17. Commercial-Off-The-Shelf (COTS) Items

The Supplier shall notify Birk Manufacturing, Inc. of any parts acquired through the use of 3rd party distributors or any other non-OEM sources when such sources are not certified to AS9120 or better. In these cases, the Supplier shall provide full traceability of parts detailing the characteristics, original manufacturer name, original manufacturer part number, serial/lot number, and shelf life (if applicable).

#### 18. Special Processes

For all special processes, the Supplier shall maintain adequate controls to ensure processes are performed in accordance with applicable specifications and will achieve the planned results. Controls shall include training of personnel in the applicable procedures and requirements for validation and revalidation of processes. Records of training and validation activities shall be maintained and made available to Birk Manufacturing, Inc. upon request.

The requirement to use a Birk Manufacturing, Inc. approved and/or mandated sub tier does not alleviate the Supplier of the responsibility of monitoring that Supplier and providing conforming product to Birk Manufacturing, Inc.

For each special and/or controlled processes performed, the Supplier shall furnish Certificates of Conformance in accordance with applicable specifications and/or engineering drawings. The Certificates must reference the vendor performing the process. Certificates for serialized parts and/or assemblies must reference the applicable serial number(s) for traceability.

#### 19. Foreign Object Debris/Damage (FOD) Prevention Program

Suppliers must have a FOD program for the purpose of prevention, detection, and removal of foreign objects. The program should meet the following requirements as applicable:

- FOD prevention must be implemented in all areas as applicable and FOD awareness training must be given.
- Parts must be protected from handling damage in all areas. Material handling awareness training must be provided to all employees and material handling standards documented.

#### 20. Qualified Personnel

The Supplier's personnel performing work on contracted products and services should be adequately trained to assure that their skills and competency levels will result in products that meet all contract requirements.

#### 21. First Article Inspection Report

The first time a Supplier delivers a part/assembly to a Birk Manufacturing, Inc.-designed part number, the Supplier may be asked to furnish a complete First Article Inspection Report listing actual inspection results for all drawing dimensions and applicable notes. A FAIR is not required for standard Commercial-Off-The-Shelf (COTS) parts, standard catalog items or deliverable software. The parts used to perform the First Article shall be marked. First Article acceptance by Birk Manufacturing, Inc. shall neither constitute final acceptance of the lot nor relieve the Supplier of the obligation to furnish all parts that meet all drawing, specification and/or Purchase Order requirements. The Supplier is required to use the latest revision of AS9102 for First Article Inspections.

If a First Article Inspection is required on a part for which a similar First Article Inspection Report has already been delivered to Birk Manufacturing, Inc., a Partial (Delta) First Article Inspection may be acceptable. Questions regarding the suitability of Partial First Article Inspections should be directed to Birk Manufacturing, Inc.'s Quality Department.

#### 22. Counterfeit Parts Prevention

The Supplier/subcontractor must take an active role in the elimination of all possible shipments containing counterfeit parts. The Supplier/subcontractor must only supply parts which are traceable to the actual manufacturer. The requirements of AS6174 and/or AS5553 are to be met. To eliminate the possibility of reentering the supply chain, Suspect or Counterfeit parts will be destroyed at Birk. No payment will be issued from Birk for suspect or counterfeit parts.

#### 23. Calibration

The Supplier shall perform all inspections and tests using calibrated equipment. For calibration service providers or test laboratories, accreditation to ISO 17025 is preferred. Materials used to meet applicable drawing requirement and procurement documents shall not be excluded.

#### 24. Configuration Management

For Supplier-controlled drawings, the Supplier shall maintain a specific and unique part number with revision control for Birk Manufacturing, Inc. No significant change affecting the design or manufacturing process/location shall be made without prior written authorization from Birk Manufacturing, Inc. Significant changes include, but may not be limited to, changes that affect performance, integration, system compatibility, size, function, functional performance, testing requirements, material, material types, etc.

#### 25. Maintenance of Records

Supplier shall maintain and make available to Birk Manufacturing, Inc. all records for, or related to, Birk Manufacturing, Inc. products. Records must be retained at least ten (10) years following Birk Manufacturing, Inc.'s final payment under its prime contract unless otherwise specified. Accordingly, the Supplier shall receive written approval from a Birk Manufacturing, Inc. Authorized Representative prior to destroying any of these records.

#### 26. Temperature & Shelf Life Sensitive Material

For all shelf life sensitive material, Supplier shall provide certifications for temperature, perishable and age sensitive materials (e.g. rubber products, epoxies, paints, bonding agents, adhesives, etc.), which reflect date of manufacture, date of test, shelf life, expiration date, and storage temperature as it applies to each lot/batch. Container label(s) must also reflect applicable lot/batch number(s), storage temperature, expiration date, and date of shipment. Product delivered to Buyer shall have a minimum of 80% remaining of shelf life upon receipt.

#### 27. Conflict Minerals

The Supplier/subcontractor is required to comply with section 1502 of the "Dodd-Frank Wall Street Reform and Consumer Protection Act" and must certify its supply base to be "Conflict Mineral" free. Use of the E.I.C.C. template is preferred & can be found at <http://www.conflictfreesmelter.org>. Complete & forward to the attention of the Birk Mfg. Purchasing Department at [purchasing@birkmfg.com](mailto:purchasing@birkmfg.com).

#### 28. Soldering

Any soldering process shall be completed in accordance with IPC series of J-STD, depending on the type of soldering being accomplished. The following standards apply: J-STD-001, J-STD-002, J-STD-003, J-STD-004A, J-STD-005, and J-STD-006.

#### 29. Crisis Management Program

Birk Manufacturing, Inc. Suppliers are expected to establish a comprehensive crisis management approach to deal with potential disruptions (proactive) and disasters (reactive). The approach should include plan of action, checklist of activities, communication plans, escalation procedures, and organization with teams, roles, and responsibilities.

When Birk Manufacturing Inc. deems necessary, based on the risk situation or as part of the Management Review process, the Supplier may be asked to provide risk management and business continuity plans. The Supplier is expected to conform to the risk management and business continuity requirements including alternate manufacturing site or process options wherever applicable to ensure operation's continuity. Birk Manufacturing, Inc. will notify Suppliers in writing when identified as part of a risk situation or as part of the Management Review process. In any financial risk, Birk Manufacturing, Inc. expects their Suppliers to provide requested financial information wherever applicable.

Birk Manufacturing, Inc. Suppliers must plan for the following (as applicable) disruptions:

1. Business Continuity to deal with event-based risks such as fires, chemical spills, natural disasters, terrorist threats, medical emergencies, and human resources (Example: Strikes)
2. Supply Chain Continuity to check and prepare the "Supplier's" Suppliers to deal with potential disruptions (proactive) and disaster situations (reactive)
3. Pandemics Preparedness Plan (Example: Avian Flu Pandemic)
4. IT Disaster Recovery and IT Security for "Supplier" telecommunications, data, systems and infrastructure
5. Eliminate potential disruptions due to Financial and Regulatory Non-Compliance
6. Confidentiality Policy (including protection of Birk Manufacturing, Inc. Intellectual Property), as applicable