



# **Steelhead Composites Supplier Quality Manual**



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## TERMS, DEFINITIONS AND ACRONYMS

External Provider – Organization or individual chosen to supply a product or service to a defined list of requirements (Supplier or Vendor)

FAI – First Article Inspection

FOD – Foreign Object Damage/Detection

PO – Purchase Order

SHC – Steelhead Composites



## 1. REQUIREMENTS FOR PURCHASE

External providers to SHC will be provided a copy of this manual as a requirement for purchase (This document is available on the company website [www.steelheadcomposites.com](http://www.steelheadcomposites.com)). Compliance to all sections of this manual are mandatory. External providers should review the requirements of this document and notify SHC of any requested exclusions requested in writing. Requested exclusions will be evaluated on a case by case basis and, if accepted, notification will be provided to the supplier.

## 2. CONTROL OF SUPPLIED PRODUCTS AND SERVICES

Upon acceptance of the purchase order, the supplier agrees to execute all requirements stated in the order including any referenced specifications, standards and terms & conditions. Any sub-tier suppliers used must also comply with the requirements of the purchase order, and adequate controls must be established to provide confidence of proper flow down of requirements.

When required by the purchase order, First Article Inspections must be completed. Unless authorized by SHC, no component shall be provided until acceptance of the FAI has been confirmed. Final conformity assessment of all delivered items will be completed by SHC.

## 3. MONITORING OF EXTERNAL PROVIDERS

External providers understand that SHC may monitor on-time delivery and conformity of supplied items and services. The data collected by SHC shall be available to the supplier by request.

The supplier understands that SHC maintains a ranking system of all external providers based on the criteria established in Table 1:

	Good Standing	Warning	Action
Conformity of Products	≥95%	95%>x>70%	≤70%
On-Time Delivery	≥85%	85%>x>50%	≤50%

Table 1: Supplier Criteria

Any supplier which falls into the Warning category may be required to present a corrective action plan to SHC to address how to return to Good Standing within a defined period. If a vendor's metric places them between 2 categories (i.e. Good Standing for Product Conformity but Warning for On-time Delivery), the lower category shall be used.

Steelhead reserves the right to require corrective action plans based on several factors including overall relationship, value of supplied components/material, frequency of orders and criticality to final product conformity.



#### 4. SHC RESPONSIBILITY

SHC shall ensure that all purchase orders are correct and contain the required information. In addition, SHC will maintain an open line of communication for all inquiries related to the order with the goal of responding to all inquiries within 5 business days.

When SHC supplies or sources raw material to be provided in conjunction with a purchase order, SHC will verify the conformity of the material and supply the results to the vendor.

#### 5. EXTERNAL PROVIDER RESPONSIBILITY

All suppliers have the responsibility to meet all requirements of the purchase order. Additional responsibilities are outlined on the following sections.

##### 5.1. QUALITY MANAGEMENT SYSTEM

The vendor shall implement and maintain a quality management system appropriate to the type of product or service offered to SHC. Vendors with a certified management system (i.e. ISO 9001, AS9100 etc.) will be subject to reduced oversight and SHC strongly encourages and supports the certification process.

##### 5.2. DOCUMENTATION PACKAGE

Upon completion of the purchase order, the supplier is required to prepare and submit a documentation package which must contain (at minimum):

- Packing slip (for physical deliveries)
- Certificate of Conformity for the products or services offered
- Quality Inspection data and/or test results (if required on the PO)
- First Article Inspection results (if required on the PO)
- Any other specific documentation required on the PO

Received orders missing this documentation will be considered non-conforming.

##### 5.3. NON-CONFORMING PRODUCT

Items or services not meeting the requirements of the purchase order, its contained references or this manual shall be considered non-conforming and must not be delivered. If the nature of the non-conformity is minor (as defined by SHC), the vendor may submit a non-conformance report to SHC for evaluation. SHC will notify the vendor of the disposition in writing.

Non-conforming items discovered and dispositioned prior to delivery will not be factored into the categories defined in Section 3.



#### 5.4. ON-TIME DELIVERY

Suppliers to SHC are expected to comply with the due dates contained within the purchase order. If the supplier is unable to meet the requested dates, they must notify the SHC Purchasing Agent (stated on the PO) in writing within 72 hours of the identified issue.

#### 5.5. RECORDS AND TRACEABILITY

The vendor is required to maintain all records of service/manufacture to provide assurance that all items were manufactured appropriately and meet all aspects of their requirements. This includes, but is not limited to, work orders, travelers, bills of materials, drawings, specifications, control plans, quality inspections and operating procedures. For items manufactured from raw materials, the vendor must maintain traceability to all heats, lots or otherwise unique identifiers of all raw materials used. Manufactured components that require serial number traceability will be identified on the relevant purchase order, drawing or both. Serialized components must be 100% traceable to all materials and processes used.

Record shall be kept for a minimum of 25 years unless otherwise authorized by the SHC Quality Department or stated on the purchase order.

The supplier will allow SHC access to any manufacturing documentation, records of quality inspections and all other data associated with the execution of its orders. The supplier will also make the areas where the operations take place available to SHC, SHC's customer and any regulatory/3<sup>rd</sup> party bodies for audit and review. The supplier shall ensure the access above is also maintained for any sub-tier suppliers.

#### 5.6. SOURCE INSPECTION

As required, SHC reserves the right to execute a source inspection of any parts or services at the supplier's facility prior to delivery. SHC will notify the supplier in advance if a source inspection will be required.

#### 5.7. SHC SUPPLIED MATERIAL

When SHC supplies raw materials to be used in support of a purchase order, the vendor shall take all necessary precautions to ensure the following:

1. The material is not intermixed with other raw materials (including other materials supplied by SHC) and is held in support of the specific purchase order
2. The material remains uniquely identifiable and traceable, even when partially consumed
3. The material is available for onsite inspection by SHC and, if needed, prompt return



## 5.8. SHC OWNED TOOLING

If a supplier has been provided SHC owned tooling in support of product or service provision, the supplier is required to:

1. Maintain adequate preservation of the tooling
2. Inform SHC immediately of any damages to tooling that may result in non-conforming products or services
3. Ensure the tooling is available for onsite inspection by SHC and, if needed, prompt return

Suppliers may be held financially responsible for any damage sustained to SHC tooling during their care.

## 5.9. SUB-TIER SUPPLIER SELECTION

When required, the supplier shall only use sub-tier suppliers approved by SHC. Prior to release of the purchase order, SHC will notify the supplier if this condition exists.

## 5.10. COUNTERFEIT PARTS

The vendor shall ensure that adequate controls are in place to prevent the use of counterfeit parts, processes, raw materials and documentation. Examples of adequate controls include quality inspections, verification by testing and source inspection.

Falsified inspection records and documentation are considered counterfeit.

## 5.11. CHANGE NOTIFICATION

Any changes that have the potential to affect the quality of the delivered item or process must be requested to SHC prior to the implementation of the change. These changes include relocation of manufacturing processes, new sub-tier suppliers, substantial process/equipment modifications and changes in leadership/management team members. Depending on the request, SHC reserves the right to re-perform First Article Inspections or request prototype/test items as necessary.

The change request should include details such as potential impacts to product functionality, quality and delivery schedule.

## 5.12. CALIBRATION

The supplier is required to have a calibration program for any inspection tooling, equipment or instruments used to verify conformity of SHC products or services. These



devices must have a calibration certificate traceable to a national standard or equivalent (i.e. NIST) and must be supplied to SHC upon request.

#### 5.13. EMPLOYEE COMPETENCE AND ETHICAL BEHAVIOR

The vendor shall employ competent individuals who receive training on the execution of processes related to SHC products and services. Records of the training shall be recorded and made available to SHC upon request.

In addition, the vendor must communicate the importance of ethical behavior to all employees and how their actions have the potential to impact quality and safety of the final product.

#### 5.14. FOREIGN OBJECT DAMAGE/DETECTION

As applicable, all vendors must maintain a FOD program to ensure SHC is supplied with clean and damage free components. FOD awareness training should be provided to all employees who interact and support product or service provision to SHC.

### 6. SPECIAL REQUIREMENTS

#### 6.1. PRECISION MACHINED COMPONENTS

For any purchase order(s) that include component machining to an SHC drawing or specification, the following requirements must also be met (in addition to Section 5):

- The first piece of any production run must be 100% inspected to the drawing and results made available to SHC
- All inspection dimensions must be 100% inspected and reported to SHC with the documentation package referenced in Section 5.2
- All thread functionality shall be verified and major/minor diameters shall be reported as applicable
- If the PO includes the purchase of raw materials:
  - Mill certs and material test reports must be provided to SHC with the documentation package referenced in Section 5.2
  - Raw materials must comply with any regulatory requirements stated on the PO





## 6.2. WELDMENTS AND SHEET METAL COMPONENTS

For any purchase order(s) that include welded components, their assemblies/sub-assemblies and/or sheet metal components manufactured to an SHC drawing or specification, the following requirements must also be met (in addition to Section 5):

- The first piece of any production run must be 100% inspected to the drawing and results made available to SHC
- All inspection dimensions must be 100% inspected, documented and made available to SHC
- If the PO includes the purchase of raw materials:
  - Mill certs and material test reports must be retained and made available to SHC
  - Raw materials must comply with any regulatory requirements stated on the PO
- Welding must be performed by company's certified welder
- Welding equipment to be calibrated (see Section 5.12)
- Welds to be inspected by CWI upon SHC's request