

ERICKSON QUALITY DOCUMENT 300**TITLE: QUALITY REQUIREMENTS FOR ERICKSON PURCHASE ORDERS****PREPARED BY: LARRY HARVEY**_____ **Signature on File**_____**PETE MACNAIR**_____ **Signature on File**_____**BARB STIGER**_____ **Signature on File**_____**KEVIN HOWELL**_____ **Signature on File**_____**APPROVED BY: JEFF STEIN**_____ **Signature on File**_____**WES HURLESS**_____ **Signature on File**_____

TABLE OF REVISIONS

REV	DESCRIPTION	BY	DATE
IR	Initial release of Requirements procedure		03/17/2000
A thru 4	Removed for clarity.		07/20/2004
5	Major rewrite to accommodate Computing System changes, Supplier vs. Supplier terminology as well as business unit driven changes. Most sections affected. Added Section's A3, C6.	D. Goldstein P. MacNair K. Haataja	02/03/2015
6	Complete rewrite. Revises current procedures and meet the requirements of AS9100 Rev D.	Larry H, Pete M, Kevin H	3-02-2018
7	Added 0299 Supplier Supplement requirements for Controlled Item Parts in the "Manufacturing" Section and Maintenance Data Requirements in the "Maintenance" Section. Clarified Customer Quality Pass Down, Test Reports and Raw Material requirements. Corrected typos.	Larry H, Pete M, Kevin H.	11-27-2018
8	Remove items that were duplicated with the T&C's, Add AS9110 requirements, and revise Notifications of Changes statement. Add Maintenance Fabrication requirements	Larry H, Pete M, Barb S, Kevin H.	7-24-2019

SCOPE:

This document defines the Erickson Incorporated (Erickson) Quality Requirements that will be listed on Erickson Purchase Orders. These Quality Requirements are in addition to any Erickson design data listed on the Erickson Purchase Order (PO) and must be provided with the Articles at time of submission to Erickson by the Supplier. This document does not include other regulatory requirements e.g. DFAR, DPAS, ITAR, etc., and/or specific customer requirements which are in additional PO flow downs.

This document details requirements for Purchase Orders and Request for Quotes used by Erickson and will be included in the item line or Special Conditions section whichever is most appropriate. "General" requirements apply to all Purchase Orders, and "Manufacturing", "Maintenance", "Processes" and "Purchase" are in addition to the "General" requirement as applicable and noted per line item and/or complete Purchase Order. "Surplus" Purchase Orders do not apply to this document and are approved by Quality Management on a case by case approval.

Purchase Orders for Preliminary, Prototype, etc., may require special notes on PO and need to be coordinated with Quality prior to PO approval.

GENERAL

Supplier Minimum Quality Requirement

Suppliers shall maintain a Quality System in conformance with their own documented procedures. The supplier's quality system approval is subject to Erickson's Quality Survey and on-site audit by Erickson Quality and /or Federal Aviation Administration (FAA) representatives at any time.

Competence of Supplier

Supplier will only accept Erickson PO if company employees have competence in the work to be performed.

Customer Quality Pass Down

Parts are to be manufactured/processed to Customer Quality and Technical requirements as shown within the body of the Erickson PO. Supplier must comply with all requirements as noted. Suppliers quality system must be compliant to customers quality requirements (e.g. Sikorsky SSQR-01 and Bell SQRM-001) when customer name is specified on PO.

Customer Designated Sources

Suppliers shall use customer-designated or approved sources, including process sources (special processes) when flowed down by Erickson or specified on drawings or specifications.

Notification of Nonconformance

Suppliers shall notify Erickson of nonconforming processes, products or services and obtain Erickson's approval for their disposition. In the event a non-conformance is discovered after shipment to Erickson, the supplier must maintain a positive recall system that includes immediate disclosure of the condition and the potential consequences to Erickson.

In the event the supplier has a non-conforming article and believes it is not re-workable to the drawing, technical requirements, and/or the Erickson PO, the supplier must submit a properly executed Erickson NCR Form to the Erickson Buyer for disposition by Erickson Quality Department.

NOTE: The supplier shall only ship the non-conforming articles after Erickson Material Review Board (MRB) accepts the non-conformances or re-work is performed as directed in Erickson MRB disposition, if any, with copy of NCR.

Prevention of Counterfeit and Suspected Unapproved Parts

Supplier shall have and maintain procedures written around the guidelines of AS6174 and AS5553 that will ensure the prevention of Counterfeit and Suspected Unapproved parts. The supplier shall ensure traceability of Material and Electronics parts to the Original Equipment Manufacturer (OEM). Supplier shall validate the authenticity of Certifications for parts received.

Notification of Changes

Suppliers will notify Erickson of changes to processes, products, or services, including changes of their suppliers or location of manufacture, that could affect the contracted product and obtain Erickson's approval. Notification shall also be made for any changes that attribute to successful risk management, i.e. changes in facility, organization structure, workforce stability.

Flown Down to Sub-Tier Suppliers

The supplier shall flow down Erickson quality system requirements to sub-contract suppliers to the extent necessary to ensure the characteristics, which are not verifiable upon receipt, are adequately controlled by the sub-contract supplier.

Control and Monitoring of Suppliers

Erickson monitors supplier performance, including supplier quality and delivery performance, and may request additional information or corrective action if performance is found to be unacceptable.

Test Specimens

Suppliers shall provide test specimens for design approval, inspection/verification, investigation or auditing when requested by Erickson on purchase order.

Special Requirements

Suppliers shall manage special requirements, critical items and key characteristics as specified on Drawings.

Employee Awareness

Suppliers shall ensure that persons under their control are aware of:

- Their contribution to product or service conformity
- Their contribution to product safety
- The importance of ethical behavior

Unairworthy Conditions

Conditions under which product malfunctions, defects, and unairworthy conditions have to be reported to the concerned stakeholders.

Burn Test Certification

When applicable and to assure compliance to the applicable Federal Aviation Regulation (FAR) section, each shipment of materials requiring burn tests must be accompanied by one (1) legible and reproducible copy of a

statement certifying compliance to the applicable regulation. If the supplier lacks facilities for testing, certification from an accredited test facility will accompany the material.

Approved Sources of Supply

If your company is listed in Erickson/Erickson Customer Type Data (drawings) as an approved source for the part listed on an Erickson PO, the supplier is responsible to inform Erickson of all changes or revisions to your internal part numbers. Changes or revisions not listed in Erickson drawings will not be acceptable until Erickson Engineering incorporates these revisions to the Erickson drawing. Supplier's Quality system is charged with identifying any deviations on parts supplied to Erickson.

NOTE: All Parts/Assemblies/Processes accomplished to a revision level not shown on the Erickson drawing will be evaluated and approved prior to acceptance of incoming products.

Age/Deterioration Control (Perishable Items)

If materials and articles are subject to deterioration of quality by virtue of time or environment, item shall be identified by the date on which the shelf life began and include the limiting conditions under which the material can be held. Perishable items supplied to Erickson must have a remaining usable shelf life of at least two thirds (2/3) the original shelf life (Unless stated otherwise on Erickson PO). The supplier shall add an expiration date or shelf life duration to the labels and/or certification required by these types of items

PROCESSES

Certification Requirements

Supplier is responsible for complying with all material and process specifications contained on engineering drawings and associated documents.

Process certification must include:

The applicable specification number and revision, Part number of part processed, Quantity, Vendors name, Date, Signature of responsible representative of the agency or sub-contract supplier certifying conformance to specification requirements, Reference Erickson and/or the Supplier PO number, Where required, be traceable to original material lot, approved standards, or agencies.

For Castings/Forgings, include the drawing part number and drawing revision. Erickson lot shall be accompanied by certifications attesting that the lot is conforming to the drawing. If required by the drawing or supporting documents, chemical analysis and test results of mechanical properties will be provided for each lot produced.

NOTE: All processed parts that require machining/grinding shall have a dimensional inspection report provided for all machined/ground features.

Special Processes (Welding, Plating, Heat Treat, etc.)

Supplier shall retain a certification from the sub-tier supplier who conducted the work verifying the accomplishment of all processes. The certification shall specify the following:

Part Number, PO Number, Date, Process Name, Process Specification Number and revision, Process supplier's name.

Test Reports

Each shipment must be accompanied by one (1) dated, legible, and reproducible copy of test report, the results of which shall be identified with test requirements for the submitted material, and traceable to a specific testing machine. The reports must bear the signature and title of an authorized representative of the company, reflect the date of the test, show acceptance or rejection, and show the revision of the specification used for testing.

PURCHASE

Aircraft Parts

Parts received from a FAA Production Approval Holder (PAH) shall include a certification of airworthiness including Production Certificate number or Parts Manufacture Approval number (Authorized Release Certificate 8130-3 is preferred).

NOTE: PMA parts deemed not critical, must contain the following statement in FAA Form 8130-3 Block 12:
“This PMA part is not a critical component”.

Parts received from a supplier and/or distributor shall include Certificate of Conformance and part airworthiness certification traceable to the FAA PAH or a FAA 14 CFR Part 43 Return to Service (Authorized Release Certificate 8130-3 is preferred).

The Supplier C of C will include the following at a minimum:

Date of Certification, Erickson PO Number, Part Number, Part Quantity

Industry Standard Hardware and Commercial Parts

This applies to Aerospace specific hardware, i.e., AN, NS, NAS, MS and similar items as well as industry standard items (diodes, switches, connectors, etc.) and industry Aerospace commercial parts (tires, lights, batteries, etc.).

The supplier shall certify that they are providing parts and materials that conform to the applicable specifications, drawings, and/or purchase order requirements. The conformity statement must reference at a minimum:

Date of Certification, Erickson PO Number, Part Number, Part Quantity

For Standard Hardware, all original materials and process certifications as provided by the manufacture.

Raw Material

A Certificate of Conformity is required from the supplier. The conformity statement must reference at a minimum:

Date of Certification, Erickson PO Number, Part Number, Part Quantity

Specification number with revision.

Material must be marked with: Item number, and Erickson PO number in ink by stencil or by tagging, along with any other marking requirements listed on the Erickson PO.

Raw material supplied to an Erickson or Customer Specification, must have certifications that include the specific information called out in the specification.

Test report must be accompanied with each shipment by a dated, legible, and reproducible copy of test reports. The results of which can be identified with test requirements for the submitted material, and traceable to a specific testing machine as applicable. The reports must bear the signature and title of an authorized representative of the company, must reflect the date of the test, and must assure conformance with requirements.

Consumables / Expendables

The supplier shall certify that they are providing materials that conform to the applicable specifications, drawings, and/or purchase order requirements. The conformity statement must reference at a minimum:

Date of Certification, Erickson PO Number, Item Number, Item Quantity, Certifications as provided by the manufacture.

MANUFACTURING

Source Inspection

When specified on item line of the Erickson PO, Source Inspection is required prior to shipment of parts from the supplier's facility. A notice of 14 days minimum will be provided to Erickson Quality Department. Supplier or sub-contract supplier will furnish suitable facilities and equipment to accommodate source inspections. Supplier will provide objective evidence to Erickson source inspectors of all PO, drawing, and process requirements as well as dimensions recorded during the manufacturing or inspection process.

All Source Inspection requests will be sent to SI@ericksoninc.com and must include the part number, Erickson PO number, quantity of parts to be inspected, as well as the date the parts will be available for inspection.

The original copy of the documentation showing evidence of Erickson source inspection acceptance must accompany each shipment.

NOTE: A Source Inspection waiver may be granted based on Erickson production/repair scheduling requirements. If source inspection is waived by Erickson Quality a written waiver will be issued and shall be sent with the parts to Erickson.

Serialization

If parts and/or assemblies will be serialized in accordance with Erickson/Erickson Customer Type Data drawings and Erickson PO requirements, the requirements of ES9070 apply. Serial numbers may be assigned by Erickson as part of the PO and supplier must identify all parts using Erickson serial numbers prior to shipment. If Erickson serial numbers are not assigned via the Erickson PO, the supplier may use substitute serial numbers from their internal system where serialization is required by drawing provided the serial numbers are non-repeating.

Part/Assembly Certification of Conformity

Each shipment must be accompanied by one (1) dated, legible, and reproducible copy of a statement that certifies conformance of the items/materials shipped with Erickson/Erickson Customer drawing and/or Supplier's Source Controlled Drawing, and/or Erickson PO requirements.

If the item to be manufactured is an assembled article, a certificate of conformance is required for the assembly.

The conformity statement must reference at a minimum:

Erickson PO Number, Part Number, Part Quantity, The Date of Certification, Drawing or Specification Revisions Reference to any rework performed per rework instructions contained in a Non-Conformance Report (NCR) disposition.

Process Material Certification Requirements

Supplier is responsible for complying with all material and process specifications contained on Erickson/Erickson customer drawings and associated documents.

Materials certification requirements must include:

The applicable specification number and revision, Name and title of a representative of the agency or sub-contract supplier certifying conformance to specification requirements, Reference the Erickson's and/or Supplier's PO number, Where required, be traceable to original material lot, approved standards, or agencies.

For Castings/Forgings, include the drawing part number and drawing revision. Erickson lot shall be accompanied by certifications attesting that the lot is conforming to the drawing. If required by the drawing or supporting documents, chemical analysis and test results of mechanical properties will be provided for each lot produced.

Special Processes (Welding, Plating, Heat Treat, etc.)

The Supplier shall retain a certification from the sub-tier supplier who conducted the work verifying the accomplishment of all processes. The certification shall specify the following:

Part Number, Purchase Order Number, Date Process Name, Process Specification number and Revision, and Process Supplier's Name

Inspection Using Statistical Methods

All parts and all dimensions/features must be inspected 100%. The supplier may request to SI@ericksoninc.com for approval to statistically sample dimensions/features of parts or part families. Erickson's Director of Quality or designee must grant such sampling system approval in writing. Sampling system approval does not eliminate the requirement for 100% first article dimensions/features, etc.,

First Article or Prototype Parts

All Prototype parts, First Article parts, and assemblies must be inspected 100%. Supplier shall provide a First Article Inspection Report as required and defined (i.e. frequency, machinery move, first time manufacturing product, etc.) in compliance to *AS9102 Rev B, Aerospace First Article Inspection Requirements* including any upper level customer requirements and accompanied by all supporting material and process certifications with a "bubbled" drawing for feature identification.

Purchases of Erickson Manufactured Over Run Manufactured Parts

If items manufactured in excess to an Erickson PO from the original manufacturing company, and are traceable to the original manufacturing order, they may be purchased by Erickson at a later date by making reference on the new purchase order to the original purchase order including Drawing revision level. There is no requirement to generate a new First Article Inspection Report. Full certification of materials and processes are required to conform to Quality Requirements.

Erickson/Bell PMA

All Erickson/Bell Parts Manufacturer Approval (PMA) parts are to be part marked "EAC-FAA PMA" in the same manner as the part number. If part marking is performed with ink per drawing, cover with clear coat (lacquer or Urethane).

Parts that are in the Controlled Item Program can only be manufactured by companies that have Erickson approved programs.

Parts that require Frozen Planning must be approved by Erickson prior to inducting into the production process.

Comply with Erickson 0299 Supplier Supplement for Controlled Item Parts.

MAINTENANCE - OVERHAUL & REPAIR

Supplier is a FAA 145 Certificated Facility

Parts and/or assemblies which have been overhauled, repaired, inspected, tested, and rebuilt or altered shall be accompanied by a FAA 14 CFR Part 43 Return to Service (Authorized Release Certificate 8130-3) for the work performed.

If EASA approved Repair Station, the FAA Form 8130-3 must also provide EASA certification and "Dual Release" IAW FAA/EASA Bilateral Agreement.

Unless otherwise specified, the data used during maintenance of the article must be OEM, or other FAA approved or acceptable data.

Fabrication of Maintenance Parts

Part/Assembly Certification of Conformity - Each shipment must be accompanied by one (1) dated, legible, and reproducible copy of a statement that certifies conformance of the items/materials shipped with Erickson/Erickson Customer drawing and/or Supplier's Source Controlled Drawing, and/or Erickson PO requirements.

The conformity statement must reference at a minimum:

Erickson PO Number, Part Number, Part Quantity, The Date of Certification, Drawing or Specification Revisions Reference to any rework performed per rework instructions contained in a Non-Conformance Report (NCR) disposition.

Process Material Certification Requirements - Supplier is responsible for complying with all material and process specifications contained on Erickson/Erickson customer drawings and associated documents as called out on PO.

Supplier is a Non-Certificated Facility

If supplier is not a FAA 145 Repair Station, the facility shall be made available for FAA audits during the term of this contract. The Erickson Repair Station (JYDR439F) retains responsibility for all work performed. Supplier shall notify the Erickson Buyer/Quality Management in writing of any questions, difficulties or discrepancies encountered. Supplier must provide Certificate of Conformance for work performed and copies of all worksheets and test results at the time of delivery of the article. Final inspection and Return to Service is performed by Erickson.

The certification shall specify the following (as a minimum)

Vendor Name, Date, Quantity, Process Name, Part Number of parts processed, Process specification and Revision, Signature of responsible company representative.

Unless otherwise specified, the data used during maintenance of the article must be OEM, or other FAA approved or acceptable data.