



SUPPLIER QUALITY REQUIREMENTS MANUAL

Lincoln Electric Automation - Coldwater, Ohio Facility / Fort Loramie, Ohio Facility



DECEMBER 1, 2022
LINCOLN ELECTRIC AUTOMATION

Contents

Introduction	3
Scope.....	3
Supplier Agreement, Responsibility and Certification	3
Quality System Requirements	4
1.1. Management Responsibility	4
1.2. Quality System	4
1.3. Contract Review	4
1.3.1. Technical Conflict	5
1.3.2. Verbal Instructions.....	5
1.4. Document and Data Control	5
1.5. Purchasing.....	5
1.5.1. Subcontracting (Sub-Tiers):.....	5
1.5.2. Subcontractor Controls:.....	6
1.6. Control of Customer Supplied Product.....	6
1.6.1. Supplier responsibility related to LEA owned inventory	6
1.6.2. LEA provided tooling & fixtures	6
1.7. Product Identification and Traceability.....	7
1.8. Process Control	7
1.8.1. Special Processes	7
1.9. Inspection and Testing.....	8
1.9.1. Verification of Incoming Product	8
1.9.2. Final Inspection and Testing	8
1.10. Inspection, Measuring and Testing Equipment Control	8
1.10.1. Gage R & R	8
1.11. Inspection and Test Status.....	9
1.11.1. Technical Plan	9
1.11.2. Certificate Of Conformance	9
1.12. Control of Nonconforming Material	10
1.13. Corrective and Preventive Action	10
1.14. Handling, Storage, Packaging and Preservation	11
1.14.1. Foreign Object Damage (FOD)	11
1.14.2. Preservation	11
1.14.3. Packing Slips.....	11
1.14.4. Delivery and Freight (Shipping to a non-LEA location) General Instructions:	11

- 1.15. Control of Quality Records..... 12
- 1.16. Internal Quality Audits 12
- 1.17. Training 12
- 1.18. Statistical Techniques 13
 - 1.18.1. Statistical Process Control (SPC) 13
 - 1.18.2. Containment Plan 13
 - 1.18.3. Sampling Plans 13
- 1.19. Production Part Approval - FAIR (First Article Inspection Report)..... 13
- 1.20. Continuous Improvement..... 14
- 1.21. Manufacturing Capabilities..... 14
 - 1.21.1. Preventative Maintenance..... 14
 - 1.21.2. Tooling 14
- 1.22. Software Control (Non-deliverable)..... 15
- 1.23 Calibration Supplier Requirements 15
 - 1.23.1. System Requirements 15
- 1.24 Counterfeit Goods..... 15
- 1.25 Design and Development Control..... 16
- Supplier Qualification..... 17
 - 2.1. Approved Supplier 17
 - 2.2. Methods of Qualification and Continued Qualification 17
 - 2.3. Right of Entry 18
 - 2.4. Purchasing Documents 18
- Quality Planning..... 18
 - 3.1 General..... 18
- Environmental And Hazardous Material Processes..... 19
 - 4.1 General..... 19
 - 4.1.1. Safety Data Sheets (SDS)..... 19
- Confidentiality Agreement..... 19
 - 5.1 General..... 19

Introduction

Lincoln Electric Automation business depends on a reliable, global network of skilled suppliers that provide the materials, parts and services to make our products and deliver them to our customers, conforming to LEA requirements and their customer's requirements. Goods and services provided by our suppliers have a key impact on the quality and safety of the products, solutions and services we offer our customers.

To maintain a high level of quality and ethical behavior we are determined to establish and maintain close and long-lasting relationships with our suppliers working in a zero-defect culture from our supply chain.

Lincoln Electric Automation (Coldwater & Fort Loramie Facilities) recommends all suppliers of components, materials or services to be, or become, third party registered to ISO 9001 International Industry Quality Standard or AS9100 Quality Management System Requirements for Aviation, Space & Defense Organizations. In cases where supplier is unable to obtain such registration LEA may conduct on-site assessments of suppliers to make a determination of the supplier's ability to meet LEA requirements and will monitor the supplier's on-time delivery and quality performance.

Scope

This manual will be used as a basis for establishing workable relationships between LEA and all of its suppliers. It is part of the purchase order by reference which will contain a description of the processes, products, and services to be provided including the identification of relevant technical data. The direction in this manual will not relieve the supplier of the obligation to furnish material conforming to all the requirements of the purchase order. However, the document is not intended to supersede any applicable contract or specification requirement. When conflicts occur, the order of precedence shall be:

1. The contract or purchase order
2. The engineering drawing
3. Specifications called out on the engineering drawing
4. This document

This manual applies to all LEA suppliers of production materials, parts and services. It does not apply to suppliers of office supplies, shop supplies, tools, lubricants, and other items/services not contributing directly to the manufacture of LEA products.

Supplier Agreement, Responsibility and Certification

The supplier is responsible for establishing a quality system in accordance with this manual. The supplier's quality system shall prevent the shipment of nonconforming product, as well as minimize waste and costs.

The supplier is required to provide material in accordance with engineering specifications, material specifications, special processes and purchase order requirements, as outlined in this manual and as required by the purchase order.

The supplier is responsible for all materials supplied to LEA, whether manufactured or processed by the supplier or procured from a sub contracted-supplier. The supplier will provide a corrective action plan to correct non-conformances of supplied material within 30 days.

The approval of processes, products and services can be obtained through sign-off on the design & validation, PPAP submissions, FAI submissions, witness testing.

Approval of methods, processes and equipment can be obtained through approval of control plans, test plans, equipment capability & maintenance plans, validation through safety, regulatory and 3rd parties, e.g. welding: technical product, process and employee certifications.

Approval of conditions under which products and services will be released or performed, e.g. on consignment, release schedule, on demand, etc. Other release conditions may relate to onsite customer inspection, 3rd party inspections, etc.

Quality System Requirements

1.1. Management Responsibility

Suppliers must adopt a process approach when developing and improving the effectiveness of their Quality System. The Supplier's top management shall define its policy for Quality, including its objectives and commitment for quality. The supplier shall have a documented organization structure that is appropriate for its requirements. The Supplier's quality objectives and policies shall be clearly understood at all levels within the organization.

The supplier shall have a continuous improvement plan for processes and quality systems, with the status periodically reviewed and updated.

The supplier shall be responsive to LEA needs. They shall have a system in place to address any customer-related problems and track key events such as quotes, tooling, pricing, quality, delivery and engineering problems.

1.2. Quality System

The supplier shall maintain an effective documented Quality System. The documented quality system should be defined with manual, procedures and instructions in accordance with requirements of ISO 9001/AS9100, or equivalent specification(s). Systems not well defined in the manual shall be well defined in a procedure or work instructions.

1.3. Contract Review

The supplier shall establish and maintain documented procedures for contract review and for the coordination of these activities. They shall review all orders to ensure that:

- All requirements are adequately defined and all differences are adequately resolved.
- The supplier has the capability to meet the contract requirements. Including a risk-analysis, identifying any risk factors that may impact the supplier's ability to fulfill all contract requirements.

- Pricing is accurate and any discrepancies are resolved in advance of shipments.
- Delivery dates are confirmed within 7 work days after receipt of order.
- Supplier has all applicable specifications at the revision level current at the date of the contract. Any needed customer specification stated on the purchase order shall be promptly requested from LEA Purchasing Department.

Note: it is the supplier's responsibility to purchase any applicable Industry Specification to the current revision.

Any discrepancies or queries shall be resolved before the order or contract is accepted. Amendments and/or revisions to orders or contracts shall also be formally reviewed.

1.3.1. Technical Conflict

If there is a conflict of technical terms or conditions associated with a purchase order, the order of precedence shall be:

- Text of Purchase Order
- The Drawing(s) referenced on the order, including published changes.
- Documents/specifications referenced on the drawing or purchase order.
- Documents/specifications referenced in other documents/specifications including this manual. Conflict in such secondary documents requires resolutions by LEA Purchasing supported by Supplier Engineering.

1.3.2. Verbal Instructions

Decisions between the supplier and LEA's coordinating personnel shall not be binding upon either party unless authorized in writing by purchase order or amendment.

1.4. Document and Data Control

The supplier must have a verifiable system and procedures for the distribution and updating of drawings, standards, specifications, procedures and work instructions. The system must prevent the use of outdated documents and assure that current documents are available and in use by all individuals and work areas which require them.

LEA provided specifications and drawings are strictly proprietary. Suppliers are not authorized to copy, or in any way make use of LEA provided information other than for the purpose of fulfilling specific contract requirements, without the written approval of LEA.

1.5. Purchasing

1.5.1. Subcontracting (Sub-Tiers):

Suppliers must use subcontractors that are approved by LEA's end use customer when applicable. The supplier shall be responsible to flow down all the LEA purchase order requirements (down to the lowest tier) and ensure their adherence.

LEA reserves the right to disallow work being performed by any subcontractor. LEA reserves the right to evaluate and audit any supplier subcontractor. Any such action will not relieve the supplier of his responsibility to ensure the quality of any product or service obtained.

1.5.2. Subcontractor Controls:

The supplier shall have a documented Approved Supplier List.

The supplier is expected to have a system for the control of material/product purchased from subcontractors to assure all incoming material meets physical, chemical, visual, functional and dimensional requirement.

The supplier must encourage its sub-suppliers to comply with the requirements of ISO 9001, AS9100, or appropriate Industry specification(s).

The supplier shall plan, implement, and control processes, appropriate to the organization and the product, for the prevention of counterfeit or suspect counterfeit part use and their inclusion in product(s) delivered to the customer.

1.6. Control of Customer Supplied Product

The supplier shall establish and maintain documented procedures for the control of verification, storage and maintenance of LEA or LEA's customer's supplied product. Any such product that is lost damaged or is otherwise unsuitable for use shall be recorded and reported to LEA Purchasing for resolution.

1.6.1. Supplier responsibility related to LEA owned inventory

LEA owned inventory should not be consumed or processed in any way without a purchase order and release from LEA.

Within 24 hours of receipt of LEA owned inventory the supplier shall provide information on part numbers and quantities received.

LEA reserves the right to inspect (with reasonable notification) any LEA owned inventory held by suppliers.

1.6.2. LEA provided tooling & fixtures

Upon receipt, the supplier shall inspect for identification and general condition. The supplier shall immediately report damaged, malfunctioning or otherwise unacceptable items to LEA Purchasing.

LEA provided tooling & fixtures shall remain the property of LEA. Supplier is responsible for the value of any lost/damaged tooling & fixture, other than normal wear and tear resulting from usage.

LEA owned equipment may only be used for the production of LEA orders. LEA reserves the right to audit and inspect LEA furnished property and equipment.

1.7. Product Identification and Traceability

The supplier is required to establish a lot traceability system that provides for positive identification and record keeping for each part throughout the major phases of receipt, manufacturing, inspection, testing, to the finished product.

When suppliers are processing products with lot trace systems from other internal or external suppliers, they must maintain the identity of the original lot trace number.

1.8. Process Control

The Supplier shall develop and maintain documented procedures, operator instructions, process sheets and test instructions for production, where the absence of such documents could adversely affect quality.

The supplier shall notify LEA and obtain approval for any changes to processes, products, services or design change that may affect the fit, form or function of deliverable product. Included but not limited to changes of the location of manufacture, manufacturing method and/or material used in the process.

The Supplier shall comply with all LEA and/or their customer's requirements for documenting and controlling special characteristics, which may include critical items or key characteristics.

1.8.1. Special Processes

LEA considers the following Supplier processes "special processes". The process and or operators of the special process shall be qualified as deemed necessary by the applicable end use customer or a 3rd party registrar such as NADCAP. Note: Where a special process is in use, procedures shall be established by the Supplier to verify the accuracy, skills and special environments needed to perform such operations.

The list of "Special Processes" that LEA requires elevated levels of quality and statistical process control, by the Supplier include, but are not limited to;

- Plating
- FPI
- Brazing
- Welding
- Heat Treatment
- Laser Marking/Engraving

1.9. Inspection and Testing

Inspection and testing activities shall be performed at a minimum of:

1.9.1. Verification of Incoming Product

Verification of Incoming Product can include one of the following methods:

- Receipt of statistical data
- Receiving inspection and/or testing
- Second or third party assessment
- Part evaluation by accredited contractor or test laboratory
- Subcontractor warrants or certifications (in combination with one of the methods above.
- Incoming inspection may be waived if supported by statistical data.

1.9.2. Final Inspection and Testing

Final Inspection and Testing shall be conducted according to established processes. Records of all inspection activities will be maintained in accordance with supplier retention schedules and procedures.

Final Inspection Test data - When required by LEA drawing, contract or PO the supplier must assure reports are supplied with each shipment. Data must be reviewed for completeness and conformance as part of the final inspection process.

1.10. Inspection, Measuring and Testing Equipment Control

The supplier must utilize and maintain adequate inspection, measuring and test equipment to ensure the accuracy of all materials supplied to LEA. The supplier shall ensure the environment for performance of inspections and test is adequate in respect to temperature, humidity, vibration, lighting and any other factors that could affect the accuracy of inspection and test results.

The supplier must maintain a documented calibration system for all measuring and test equipment. All personal measuring instruments are to be included in the program. The calibration program shall comply with the requirements traceable to the National Institute of Standards and Technology (NIST).

Evidence of evaluation and calibration shall be recorded and made available to LEA upon request. The supplier shall notify LEA Quality in the event of any calibration failures that may affect any products previously supplied.

1.10.1. Gage R & R

LEA may require that the amount of variation caused by the measurement system be determined by performing Gage R & R studies.

Gage R & R Studies are required whenever Critical Characteristics have been identified, either on the blueprint or purchase order. Total Gage variation shall not exceed 20% of the blueprint tolerance unless specifically authorized by LEA.

1.11. Inspection and Test Status

The inspection, test status and verification of product shall be identified by suitable means, which indicates the conformance or non-conformance of product with regard to inspections and tests performed.

The identification of inspection, test status and verification shall be maintained, as defined in a control plan and/or documented procedures, traceable throughout production and delivery of the product to LEA to ensure that only product that has passed the required inspections and tests are shipped.

Note: Location of product in the normal production flow does not constitute suitable indication of inspection and test status.

1.11.1. Technical Plan

When a Technical Plan is required either by LEA or LEA's customer, the supplier will be required to develop a detailed Technical Plan describing the intended steps in producing the part.

The Technical Plan will be sent to LEA for approval. LEA will obtain approval from the customer or internally as necessary. When approved, a signed copy of the Technical Plan will be sent back to the supplier. In the event that the supplier's process is deemed proprietary, the supplier may submit the Technical Plan directly to the customer. The supplier shall not commence work until an approval has been obtained.

The supplier is expected to perform work in strict adherence to the proper revision of the Approved Technical Plan.

1.11.2. Certificate Of Conformance

A Certificate of Conformance, indicating parts meet all applicable specifications, is required for each shipment. This certificate must be signed or stamped by an authorized company representative. It must contain, as a minimum:

- Supplier Name And Address,
- LEA's Part Number And Revision Level
- Purchase Order Number
- Quantity Shipped
- Date Shipped
- Heat lot number (raw material, forgings, castings)
- Applicable Specifications & Revision level
- If a Technical Plan requirement is applicable, The proper revision of the Technical plan shall also be stated in the Certification

1.12. Control of Nonconforming Material

The supplier shall establish and maintain a system to ensure that all non-conforming and suspect product is immediately identified, segregated and dispositioned. The supplier is expected to properly record all non-conformances and dispositions.

When a supplier becomes aware that nonconforming or suspect material has been shipped to LEA, the supplier shall implement the following:

- Promptly notify LEA Supplier Quality or Purchasing, that LEA may have received the nonconforming or suspect material.
- Communicate to LEA what corrective action has been taken.
- Any product or services provided by the Supplier which do not meet the acceptance criteria, whether found by LEA or LEA's Customer, will be rejected and the supplier will be responsible for correcting all nonconformances.

Lots determined to be non-conforming by LEA are subject to one or more of the following dispositions with the supplier's concurrence.

- Return to the supplier.
- Scrap at LEA facility at supplier expense.
- LEA reworks the lot at supplier expense.
- LEA performs 100% inspection, at supplier expense, and returns defective products to supplier
- Use, but provide notice of non-conformance and make adjustments necessary to compensate for deficiencies.

1.13. Corrective and Preventive Action

When either LEA or the supplier discovers a non-conformance, the supplier must have a formal system to resolve the problem and verify that the solution implemented resulted in correcting the non-conformance.

The supplier shall utilize the Eight Discipline (8D), 5 Why method, or suitable alternative. The supplier shall take corrective action, when it is determined that the process is not stable or capable of producing the required product, and/or when it is verified that material does not conform to specifications.

Corrective actions must address the root cause of the nonconformance or instability, and may not be closed until the effectiveness of the action can be verified.

LEA reviews incoming production material to ensure conformance with all applicable specification requirements. Review of the material also extends up to the time of actual use of an item or when a production operation has been performed on an item. If a nonconformance is detected by LEA in any of these stages of review, a Supplier Corrective Action Request will be issued to the supplier. Nonconformance includes, but is not limited to, product nonconformance, administrative elements, (i.e. packing list errors, invoice errors, Document omissions, nonconforming packaging etc.)

Suppliers who fail to provide adequate corrective action by the due date assigned on the Supplier Corrective Action Request, may be subject to performance penalties up to and including suspension of the supplier's qualified status.

Nonconformance of a repeated nature is an indication of poor root cause identification, or correction. LEA will institute progressively stringent containment requirements, specific to the nonconforming material, on that supplier. The extent of the containment requirements will be based on the severity of the nonconformance, and the risk they pose to LEA or its customers. Action may include suspension of the supplier's qualified status.

1.14. Handling, Storage, Packaging and Preservation

The supplier shall establish controls to ensure that product is not damaged during manufacture or transportation to LEA. The supplier shall comply with special packaging and/or preservation requirements that may be included in purchase order specifications or drawings.

1.14.1. Foreign Object Damage (FOD)

A FOD preventative program must be documented and implemented to protect LEA and its customer's product at all times. Suppliers shall establish methods and facilities for identifying, handling, and storing articles to ensure against contamination, corrosion, damage, deterioration and invasion of foreign objects or substances. For components, sub-assemblies susceptible to foreign object debris and damage, the supplier shall ensure articles are free from foreign objects and foreign object damage resulting from supplier processing. Specific attention should be given to:

- Food & beverage controlled
- Proper cleaning of internal cavities
- Tool and small part accountability control
- Loose objects

1.14.2. Preservation

The supplier shall comply with any special packaging and/or preservation requirements that may be included in purchase order specifications or drawings.

1.14.3. Packing Slips

Packing slips must be secured to accessible area on outside of carton(s) or pallet(s) and have suitable protection.

1.14.4. Delivery and Freight (Shipping to a non-LEA location) General Instructions:

Unless directed by LEA buyer all freight is to be shipped collect to the LEA account. The supplier will be responsible for cost of all freight not shipped in accordance with LEA Instructions.

LEA purchasing will communicate documents that outline the preferred method of carriage. Carrier selection is based on the location, the size and weight of the shipment. Should the suggested carriers not service the shipper's location, call your LEA Buyer for alternate routing.

1.15. Control of Quality Records

The supplier shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention and disposition of records.

LEA requires that the Quality Records pertinent to the manufacturing of the product to be available for evaluation per the following record retention requirements.

- FAIRs (First Article Inspection Reports), control plans, tooling records, purchase orders and amendments shall be maintained for three calendar years after the last delivery of that product.
- Quality performance records (e.g., control charts inspection and test results shall be retained for ten calendar years after the year in which they were created, or per the end use customer requirement, whichever is longer.
- Records of internal quality system audits and management review shall be retained for three years.

Records must be complete, legible and identifiable to the corresponding product and shall be readily retrievable. Electronic records can be kept, but must be stored and maintained in the same manner as all "hard copy" records. All records shall be stored in such a way to prevent loss, deterioration or damage for the entire retention period.

Note: These requirements do not supersede any governmental or customer requirements. All specified retention periods shall be considered "minimums".

For all Aerospace suppliers

Record Retention times shall conform to AS9100 in addition to the applicable customer requirements as flowed down in the purchase order.

1.16. Internal Quality Audits

The supplier shall have a formal documented method for auditing the complete quality management system. The audit shall verify whether quality activities and results comply with planning and to determine the effectiveness of the system.

1.17. Training

The supplier shall ensure that its personnel are aware of the relevance and importance of their activities and how they contribute to the achievement of the quality objectives.

The supplier shall establish and maintain a system for identifying the training needs and providing the training for all personnel performing activities affecting quality.

The supplier shall evaluate the effectiveness of this training and shall maintain appropriate records of training and job qualification.

1.18. Statistical Techniques

1.18.1. Statistical Process Control (SPC)

When deemed necessary or when LEA specifies on the purchase order SPC shall be used to monitor and control a process and/or part characteristic. When not required by purchase order, suppliers are strongly encouraged to use SPC as a tool for continuous improvement, to monitor and control processes and to demonstrate process capability.

For Aerospace Suppliers, some customers may require that statistical procedures be applied to all transformational processes. In such cases this requirement will be stated on the purchase order.

When SPC is required, the supplier shall provide variable data control charts and a statistical capability analysis on a quarterly basis as a minimum. A process is considered in control when a Cpk of 1.33 or greater is achieved, and variation is normally distributed.

1.18.2. Containment Plan

When process measurement indicates a Cpk of 1.0 or less, a process Containment Plan shall be developed and implemented by the supplier. This containment Plan shall be designed to ensure that nonconforming material does not get released to LEA or LEA's customers.

Some examples of Containment Plans are:

- Elimination of sampling plans
- 100% over-inspection
- Re-inspection of parts within 20% of specification limits

1.18.3. Sampling Plans

When a process is measured statistically and resulting evidence show a process is in control, supplier may request approval to implement a sampling plan. Sampling plans require written approval from LEA Quality department. Supplier shall not use any sampling plan with an acceptance level greater than zero.

Note: Aerospace suppliers shall perform 100% inspection at all times unless specific permission is granted in writing by LEA Quality Department.

1.19. Production Part Approval - FAIR (First Article Inspection Report)

If a First Article Inspection Report is required it shall be noted on the Purchase Order. When a FAIR requirement is required, a delta FAIR will automatically be required for the following circumstances:

- A change in the design affecting fit, form or function of the part.
- A change in manufacturing source(s), process(es), inspection method(s), location of manufacture, tooling or materials, that can potentially affect fit, form or function.
- A change in numerical control program or translation to another media that can potentially affect fit, form or function.
- A natural or man-made event, which may adversely affect the manufacturing process.

- A lapse in production for two years or as specified by the Customer.
- Special circumstances resulting from product or process problems.
- LEA may request a FAIR as part of a SCAR.

For Aerospace Suppliers, the FAIR must conform to AS9102 as well as the appropriate customer specific requirement flowed down on the purchase order. When a FAIR requirement is stated on the Purchase Order LEA will not accept responsibility for products or services produced prior to FAIR approval. The supplier assumes risk for any production prior to FAIR approval.

1.20. Continuous Improvement

LEA strongly recommends each supplier develop and institute a Continuous Improvement plan that includes Quality, Delivery, and Service. Other areas for continuous improvement may include:

- Increase availability of product
- Increase cost competitiveness
- Improving productivity and process control
- More efficient use of resources
- Reducing testing frequencies
- Eliminating waste
- Reducing cycle time
- Customer satisfaction
- Excessive handling and storage

LEA is committed to supporting its suppliers in continuous improvement efforts wherever possible, and expects suppliers to participate in joint mutually beneficial projects. The objective of this element is to improve quality and delivery performance and reduce cost.

1.21. Manufacturing Capabilities

Suppliers shall provide appropriate technical resources for tools and gage design, fabrication and full dimensional inspection as necessary. If any of this work is subcontracted, a tracking and follow-up system is required.

1.21.1. Preventative Maintenance

All key equipment used in the manufacture of LEA product shall have a documented preventative maintenance plan in effect to ensure uninterrupted service and prevent unexpected delays in shipment. The frequency of such maintenance should be based primarily on statistical data, manufacturing equipment recommendations and past history.

1.21.2. Tooling

All tooling used in the manufacture of LEA product shall be maintained in a condition that will assure that quality parts will be produced and reasonable tooling life will be maintained. All tooling owned by LEA must be permanently identified, or otherwise controlled by electronic records, as the property of LEA with the LEA tool number. Tooling owned by LEA shall only be used in the fulfillment LEA orders. LEA tooling

designs and tools are deemed as confidential and are not to be viewed or discussed with any party not expressly authorized by LEA.

1.22. Software Control (Non-deliverable)

The supplier must establish a Software Control Plan that addresses verification to satisfy the intended application and configuration management as a minimum; software development and verification, test criteria, identification, change control, storage & handling documentation, library control, and subcontractor control.

1.23 Calibration Supplier Requirements

1.23.1. System Requirements

Supplier's calibration system shall meet the requirements of ISO/IEC 17025-2005. Calibration certificates shall be made available LEA and are to include, as a minimum.

- Instrument Model Number
- Instrument Serial Number
- Record of all readings taken (including "as found" readings)
- Calibration method / procedure / guidelines
- Signature of person performing the calibration
- Identity of master used traceable to N.I.S.T.
- Amount of uncertainty

Calibration status labeling shall include;

- due date,
- person performing the calibration
- equipment's identification number.

Procedure or guidelines shall conform to commonly accepted industry standards.

The collective uncertainty will not exceed 4 to 1. Gages shall have a 95% reliability intolerance at the end of their interval schedule.

LEA's Quality Dept must be notified as soon as possible if a gage is found to be significantly out-of-tolerance (Exceeding 25% of product tolerance) so that proper arrangements for product risk analysis can be made.

1.24 Counterfeit Goods

"Counterfeit Goods" means goods that have been misrepresented as having been designed and/or produced under an approved quality system or by an approved means or source.

Examples of Counterfeit Goods include, but are not limited to:

- Goods that are an illegal or unauthorized copy or substitute of an Original Equipment Manufacturer (“OEM”) item;
- Goods that are not manufactured in accordance with the OEM design or that do not contain proper materials or components;
- Goods that are used, refurbished, or reclaimed but that Seller represents as being new;
- Goods that have not successfully passed all OEM-required testing, verification, screening, and quality control but that Seller represents as having met those requirements;
- Goods that are non-OEM items with a label or other marking intended, or reasonably likely, to mislead a reasonable person into believing they are genuine OEM items; and
- Goods identified, marked, and/or altered by a source other than the item's legally authorized source and misrepresented to be an authorized item of the legally authorized source.

Supplier (seller) will warrant and certify that goods delivered pursuant to this Agreement are not and do not contain any Counterfeit Goods. Seller shall provide to Purchaser the OEM’s certificate of conformance for any Goods acquired from an authorized OEM reseller or distributor. Seller shall not acquire Goods from independent distributors or brokers unless Purchaser authorizes it in writing.

For all electrical, electronic, and electromechanical (“EEE”) items included in Goods, Seller shall maintain a method that allows the tracing of the EEE items through the supply chain back to their initial manufacturer. This traceability method shall clearly identify the name and location of all of the intermediaries from the manufacturer to the Seller, and shall include the manufacturer's batch identification for the item(s) (for example, date codes, lot codes, or serializations). Upon Purchaser’s request, Seller shall provide OEM documentation that authenticates traceability of the EEE items to the applicable OEM.

Seller shall immediately notify Purchaser if it knows or suspects that it has provided Counterfeit Goods.

If Seller delivers Counterfeit Goods under this Agreement, Seller shall at its expense promptly replace them with genuine Goods. Seller shall be liable for all costs relating to the removal or replacement of Counterfeit Goods, including without limitation Purchaser’s or Purchaser’s customer’s costs related to removing such Counterfeit Goods, inserting genuine Goods, and conducting any necessary tests.

Purchaser reserves the right to turn over suspected Counterfeit Goods to US Governmental authorities (for example, the Office of Inspector General, Defense Criminal Investigative Service, or Federal Bureau of investigation) for investigation, LEA reserves the right to withhold payment for the suspect Counterfeit Goods pending the results of the investigation.

1.25 Design and Development Control

The supplier shall apply controls to the design and development process to ensure that:

- The results to be achieved are defined
- Reviews are conducted to evaluate the ability of the results of design and development to meet requirements
- Verification activities are conducted to ensure that the design and development outputs meet the input requirements

- Validation activities are conducted to ensure that the resulting products and services meet the requirements for the specified application or intended use
- Any necessary actions are taken on problems determined during the reviews, or verification and validation activities
- Documented information of these activities is retained
- Progression to the next stage is authorized

When tests are necessary for verification and validation, these tests shall be planned, controlled, reviewed, and documented to ensure and prove the following:

- Test plans or specifications identify the test item being tested and the resources being used, define test objectives and conditions, parameters to be recorded and relevant acceptance criteria
- Test procedures describe the test methods to be used, how to perform the test, and how to record the results
- The correct configuration of the test item is submitted for test
- The requirements of the test plan and the test procedures are observed
- The acceptance criteria are met

At the completion of design and development, the organization will ensure that reports, calculations, test results, etc., are able to demonstrate the design for the product or service meets the specification requirement for all identified operational conditions. The supplier may be required to provide test specimens as part of the approval process, inspection/verification, investigating, or auditing.

Supplier Qualification

2.1. Approved Supplier

LEA will create and maintain an Approved Supplier List (ASL) for suppliers of production material and processes. Suppliers are added to this list as they meet established criteria and maintain an acceptable performance rating. LEA does not purchase materials or product related services from companies, which are not on the approved supplier list.

2.2. Methods of Qualification and Continued Qualification

Suppliers are selected on their ability to provide processes, products and services that meet all requirements of the specifications, drawings and purchasing documents.

Supplier Ratings

Suppliers will be evaluated on quality and delivery.

- Quality goal is zero nonconformances.
- 100% On-time delivery is expected.

Evaluations and considerations will be conducted on a monthly basis.

Those suppliers who demonstrate 2 months of not meeting quality and delivery goals will be deemed as conditionally approved until they can demonstrate 3 consecutive months without either quality or delivery deficiencies.

Those suppliers who demonstrate 3 months or greater of not achieving quality and on-time delivery goals will be deemed disapproved.

Those suppliers who are disapproved and want to be placed back on the approved supplier list must have their quality system audited by the Quality Manager and deemed acceptable to be rated as conditionally approved.

Status of approved, conditionally approved, disapproved will be maintained on the approved supplier list.

2.3. Right of Entry

Employees of LEA or LEA's customer have the right of entry to the Supplier's facility. The Supplier must in turn include right of entry provisions in any authorized subcontractors.

This right of entry provisions shall allow employees of LEA, or LEA's customer that is authorized by LEA, to verify the quality of workmanship, records, materials, and physically review applicable production lines in process, at any facility of the supplier or subcontractor. Note: Representatives of LEA, or LEA's customer that require access to your facility, will sign any applicable non-disclosure agreements that you may deem necessary.

2.4. Purchasing Documents

It is the responsibility of the supplier to obtain any and all referenced documents on LEA PO, drawing or other communication. All documents must be requested through the LEA buyer to assure the correct revisions are provided.

LEA is not responsible for errors or omissions as a result of documents referenced but not supplied by LEA. It is the supplier's responsibility to perform a complete contract review.

Quality Planning

3.1 General

When required, Advanced Quality Planning of new or changed products shall be carried out by crossfunctional teams that use appropriate techniques to establish process controls. Including but not limited to:

- Develop and review Process Failure Mode and Effects Analysis (PFMEA).
- Develop a Process Control Plan.
-

Environmental And Hazardous Material Processes

4.1 General

A supplier shall have a process to ensure compliance with all applicable government safety and environmental regulations, including those concerning handling, recycling, eliminating or disposing of hazardous materials. Appropriate certificates or letters of compliance should evidence this. Suppliers are encouraged to adopt the principles of the ISO 14001 Environmental Management System.

4.1.1. Safety Data Sheets (SDS)

SDS are maintained at all LEA facilities for all chemicals used in that facility. Any chemical being shipped to an Lincoln Electric site must be accompanied by a SDS or it must be supplied in advance of shipment.

Confidentiality Agreement

5.1 General

Supplier agrees not to make use of or disclose to third parties any data, designs, drawings, specifications and other information furnished to it by LEA.

All LEA order information is confidential between Lincoln Electric Automation and Supplier and it is agreed by Supplier that none of the details connected therein shall be published or disclosed to any third party without Lincoln Electric Automation's written permission.