Introduction to the Fluke Supplier Handbook

Dear Fluke Supplier,

The Fluke Supplier Handbook was written for you to better understand Fluke and Fluke’s engagement with you, our valued supplier. I would especially encourage you to review our mission and quality policy along with the links to Fluke’s Values, Fluke’s Supplier Code of Conduct, and Fluke’s expectations for Integrity and Compliance. This will go a long way in understanding Fluke, how we conduct business and how we expect our suppliers to do the same.

You will find two major sections in this handbook. The first focused on quality system expectations of suppliers and the second on purchasing processes and requirements. This is all what we consider “standard work.” Please take the time to read and should you have any questions, please contact your Fluke Commodity manager for answers.

Thanks for your support of Fluke.

Sincerely,

Aleks Neubauer

Vice President, Global Procurement
Fluke Corporation
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FLUKE CORPORATION (Fluke)

MISSION STATEMENT and FLUKE’S QUALITY POLICY:
See Fluke Corporate Scope and Context Statement.

CORE VALUES:
See http://www.fortive.com/core-values

SUPPLIER CODE OF CONDUCT:
See http://www.fortive.com/suppliers

INTEGRITY AND COMPLIANCE:
See http://www.fortive.com/integrity-and-compliance

FORTIVE BUSINESS SYSTEMS (FBS):
See http://www.fortive.com/fortive-business-system

The FBS is who we are and how we do what we do. It is more than a management system or business model - it is part of the mentality of virtually every associate in the company. Through FBS, Fluke achieves world-class excellence in customer satisfaction, beginning with the voice of the customer, continuously improving quality, delivery, cost, and innovation.

FBS is at the core of our quality system. We focus on defect prevention contrary to defect detection. Suppliers must employ an effective methodology and error proofing of their manufacturing processes so that zero defects can be achieved. To achieve zero defects, it is imperative that the supplier has processes in place using six sigma and lean manufacturing methodologies.
2 QUALITY SYSTEM EXPECTATIONS AND REQUIREMENTS FOR FLUKE SUPPLIERS

The ability of a supplier to develop and maintain an acceptable quality system is an essential factor in qualifying and continuing as a Fluke supplier. This section defines the quality systems expectations for suppliers (Sub-contractors, distributors, and OEMs) of production parts and assemblies to Fluke.

2.1 SUPPLIER RESPONSIBILITIES

Suppliers are responsible for maintaining a quality system that ensures each product complies with all the requirements included in the engineering drawing, prescribed on the Purchase Order (PO), terms and conditions listed on the back of the PO, and outlined in this handbook.

If the supplier is accepting a PO from Fluke, the supplier is accepting the terms listed in this handbook.

2.1.1 FLUKE ENGINEERING DRAWINGS

When conflicts exist between engineering drawings, PO, and this handbook, engineering drawings shall supersede any other document and will be the primary source of quality requirements; Fluke PO will be secondary, followed by this handbook.

Suppliers are responsible for understanding all engineering drawing and specification requirements. If any questionable areas appear to exist, the supplier must contact Fluke engineering for clarification. Drawing clarifications must be resolved before manufacturing of production parts. Only formal deviation "Supplier Deviation/Change Request Form" can supersede engineering drawings and specifications.

Suppliers shall establish internal critical characteristics and performance testing criteria in alignment with Fluke’s critical characteristics and performance criteria indicated in the Fluke drawing, and implement appropriate controls for each.

Suppliers are responsible for extending the requirements of the Fluke engineering drawings, Fluke PO, “Fluke Appearance Standard,” and this document to their suppliers.

Suppliers are responsible for all the sub-contractor quality non-conformances and quality performance. When instances occur, which warrant the review of a sub-supplier's process or control system, the supplier is expected to coordinate such review.

2.1.2 ORIGINAL EQUIPMENT MANUFACTURER (OEM)

Suppliers who control the design of the product shall maintain sufficient technical documentation, such as, DFMEA, PFMEA, Process Flow Diagram, and Control Plan.

2.1.3 SUPPLIER QUALITY

Suppliers are responsible for the quality of their products and are not to rely on Fluke to determine the quality level of their material or service. The use of sampling techniques is not intended to imply that defective material at any level is acceptable. Any defect found in a Fluke facility requires prompt investigation of the product failure mode, understanding root cause and taking appropriate corrective action.

Suppliers are responsible for notifying Fluke of any proposed changes in design, processing or manufacturing location before the change. Suppliers must obtain Fluke’s written approval of any proposed changes. Requests for changes or deviations must be submitted on a "Supplier Deviation/Change Request Form."

Suppliers are responsible for implementing the “Fluke Appearance Standard” into the final
inspection, and if there is a concern in using this standard, suppliers must communicate it to the appropriate commodity manager.

2.1.4 NONCONFORMANCE MATERIAL

Suppliers are responsible for repairing or replacing the non-conforming material with satisfying material specifications in time to meet Fluke delivery requirements. In some cases, material urgently required to meet customer shipments may be reworked by Fluke at the supplier’s expense.

2.1.5 FLUKE PROPERTY

Fluke-owned tooling, instruments, fixtures, and any other piece of equipment shall be permanently identified as Fluke property and be cared for per the terms and conditions outlined in the PO.

2.1.6 COMPLIANCE REGULATIONS

Suppliers are responsible for complying with all specified regulatory and environmental compliance regulations that are detailed for Fluke products and components. The supplier is also expected to be a collaborative partner in resolving compliance-related questions with these regulations.

If the purchased product is flagged critical to safety or under an Atmosphere Explosive (ATEX) directive component in the PO, then the supplier must meet Fluke specification and/or PO instructions as indicated.

Unless requested otherwise, a Certificate of Conformance (C of C) shall be supplied to Fluke with all critical to safety and ATEX component lots supplied to Fluke. The C of C data must include:

- Suppliers name
- Purchase order number
- Purchase order line item number
- Fluke part number
- Part description
- Fluke drawing revision
- Quantity
- Process specification number if applicable
- C of C of any treatments or processes from sub-contractors
- Manufacturer’s name
- If applicable, traceability data (such as melt or heat number, batch, serial number, lot/date code or cure date)
- Supplier's authorized representative signature and title

The supplier shall retain C of C, and/or test data for a period ending at least ten years. Upon request, the supplier shall provide Fluke with a copy of the completed C of C. The C of C should also include an unambiguous statement detailing the supplier’s conformity, inspection, test and compliance with the purchase order requirement. No changes can be made without Fluke’s written approval; verbal approvals are not acceptable. As needed, Fluke may perform annual ATEX audit to ISO/IEC 800079-34 at supplier facility.

2.2 ISO CERTIFICATION

Suppliers who maintain a continuing business relationship with Fluke must demonstrate that they have a quality system that meets or exceeds Fluke requirements. Suppliers with ISO certification
must provide a copy of the ISO certificate. Current suppliers who do not meet these criteria are expected to be working toward a viable quality system complying with a standard, such as ISO9001. Suppliers are responsible to provide quality performance records upon request.

Suppliers shall participate in the “Fluke Supplier Self-Evaluation Audit” which contains questions that allow Fluke or the supplier to evaluate the extent to which a given quality system addresses each of these elements.

2.3 APPROVED SUPPLIER LIST (ASL)

Suppliers are selected after a thorough review and evaluation of their overall business health, technology, and their ability to manufacture products that meet Fluke’s requirements. Fluke reserves the right to audit the suppliers’ quality system. Fluke may conduct audits at the supplier’s manufacturing facilities. Following an acceptable assessment of the supplier’s complete evaluation, the supplier is included on the ASL.

Ongoing supplier performance is measured by monitoring quality, delivery and cost performance as described in Section 2. Any supplier failing to meet the Fluke Performance requirements may be subject to removal from the ASL.

Supplier status is noted on the ASL as either:

a. Preferred: suppliers as defined in section 2.6
b. Qualified: suppliers who have been approved and are a candidate for preferred status.
c. Approved: suppliers who have been assessed and meet the minimum requirements of this document.
d. Disqualified: suppliers who have been assessed in the past but have been removed from the ASL or who have not met the minimum Fluke’s requirements.

2.4 INITIAL SUPPLIER APPROVAL PROCESS

Suppliers with ISO certification may submit a quality manual and a Fluke Supplier Self-Evaluation Audit to initiate the Fluke approval process. Suppliers without ISO certification may submit a Fluke Supplier Self-Evaluation Audit form only.

2.5 ON-SITE QUALITY SYSTEM AUDIT

After review of the quality manual and/or Fluke Supplier Self-Evaluation Audit form, an on-site quality system audit may be conducted. The audit conducted at the supplier’s manufacturing location will determine conformance to the Fluke quality requirements. The audit will be conducted using the completed Fluke Supplier Self-Evaluation Audit form.

2.6 PREFERRED SUPPLIER PROGRAM

Preferred suppliers are fundamental to Fluke’s success. The objective of the preferred supplier program is to develop our supply base to consistently provide parts, which meet the quality, delivery, cost, and service objectives to maintain Fluke as a world-class manufacturer.

The preferred supply base is a managed group of suppliers who align with Fluke’s strategic vision and performance expectations. Fluke will focus growth and consolidation efforts with these suppliers. Select preferred suppliers will have the opportunity to learn appropriate FBS tools and Kaizen to improve quality and processes. The preferred supplier program supports all commodities in Fluke.
Fluke awards preferred supplier status to suppliers who work with Fluke on the following objectives:

- It achieves a minimum score of $\geq 70$ on the Supplier Self-Audit Assessment document for each applicable section
- It achieves less of 2,000 PPMs three months rolling
- It extends 5% per year over year (YCY) price reductions (contractual commitment across entire spend portfolio), proactive price benchmarking, and YCY productivity gains
- It achieves on-time delivery % of $\geq 98\%$ measured by dock date and no more than three days early and zero days late
- It can accept minimum 90-days payment term or accept P-card
- It participates in e-auctions with experience
- It has a written business continuity plan
- It has signed a Memorandum of Understanding (MOU) with Fluke
- It provides value engineering support through the product lifecycle
- It offers 24-hour turnaround on warranty/non-warranty repair support
- Holding safety stock for unplanned upside in demand (lead-time = transit time = 5-day maximum)

Preferred suppliers will have a preferential position relative to future sourcing opportunities.

2.7 DISQUALIFICATION
Any supplier failing to meet the quality or performance requirements is subject to removal from Fluke’s ASL.

2.8 QUALITY SYSTEMS ASSESSMENT
The audit checklist and scoring guidelines included in the Supplier Self-Audit Assessment document reflects the elements expected of an effective quality system and will be used in Fluke’s evaluation of a supplier’s quality system. The audit summary should not be confused with a supplier rating system or scorecard, which might include such performance factors as quality of received material, on-time delivery, etc.

The audit and classification sections of this document allow suppliers to understand Fluke expectations.

The design and operation of the supplier’s quality system must direct the quality approach toward prevention of defects through product qualification planning and process control techniques in place of defect detection through inspection or test methods. This type of system leads to increased productivity and continuous improvement in quality, both of which mutually benefit Fluke and the supplier.

The minimum target score is 70 in each section of the Supplier Self-Audit Assessment document for approval. If a supplier reaches a score of $< 70$ on any section, they may submit a corrective action plan to improve performance.

The corrective action plan will be tracked by Supplier Quality Assurance (SQA) and reassessed when corrective actions have been implemented.

3 PURCHASING PROCESSES AND REQUIREMENTS
This section defines the Fluke procurement process, including requests for quotation, initial supplier approval, contracts and PO, shipping and transportation, communications, expectations concerning cost savings, proprietary information and supplier performance rating.

3.1 REQUEST FOR QUOTATION (RFQ) ACTIVITIES
The commodity managers, New-Product Introduction (NPI) and planner buyers will submit RFQs to potential suppliers.

The RFQ will include the following:
- Work Package
- Terms and Conditions
- Link to access the Fluke Supplier Handbook
- Fluke Appearance Standard
- Packaging Handbook for Suppliers
- Bid Due Date
- Method of shipment and F.O.B. point
- Terms of payment
- Engineering Drawing
- Request for Country of Origin
- All other pertinent information to ensure the accuracy of the suppliers' quotes
- The Supplier quotation should be returned to the requestor and include the following:
  - All requested quote information
  - Supplier acceptance of Fluke Terms and Conditions or a detailed list of exceptions to those terms and conditions
  - Suppliers shall use Fluke endorsed carriers when Fluke incurs transportation costs. A list of endorsed carriers is available from the buyer and is updated annually
  - RoHS certification
  - Fluke Supplier Handbook Acknowledgement of receipt

3.2 PROPRIETARY INFORMATION
Fluke will initiate a Non-Disclosure Agreement (NDA) between Fluke and the supplier early in the relationship.

Fluke information such as drawings, materials used, technology, customers, and financial information are proprietary information. As such, the supplier will not divulge this information to other parties. In particular, drawings of parts designed by Fluke are proprietary, and as such, the supplier should not manufacture parts from these drawings for any party other than Fluke.

3.3 COMMUNICATION
The Commodity Manager, in conjunction with the Fluke factory and supplier, will define the appropriate communication channel at the commencement of the relationship. The commodity manager is responsible for communications regarding:
- Price changes
- Multiple Fluke factory quality/delivery issues
- Contractual changes
- The commodity manager will be responsible for providing the Fluke Supplier Handbook to the
supplier and organizing quality audits.

- All instructions must be confirmed in writing. A Fax or email is considered an acceptable form of written communication
- Changes to the Fluke PO will be communicated via a written change notice such as a PO change
- Acceptance of the PO should be communicated to the appropriate buyer
- Supplier requests for temporary deviations or permanent changes may be documented on a Supplier Deviation/Change Request form and forwarded to Fluke. This form, or an equivalent, must be used to request temporary deviations or permanent changes with materials, dimensions, cosmetic, processes, etc. Fluke will review the request and respond to the supplier
- Suppliers are required to communicate potential late deliveries and deviations to Fluke as soon as the supplier is aware of them. This communication can be verbal but must be confirmed in writing comments

3.4 COST REDUCTIONS/IMPROVEMENTS
We expect Suppliers to proactively engage with Fluke to reduce costs on an ongoing/annual basis.

3.5 SUPPLIER PERFORMANCE RATING
Fluke maintains a supplier rating system to measure supplier performance. This performance information will be one factor used by Purchasing to select suppliers and to determine the supplier’s status in the preferred supplier program. The overall rating is based on the supplier’s monthly performance, which is monitored by a supplier performance scorecard and reviewed in periodic business reviews. Though these rating systems may vary by Fluke factory location, suppliers can expect to dialog about overall performance. Below is an example of the Fluke North America scorecard that is shared with suppliers routinely.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Metric</th>
<th>Weight</th>
<th>Score</th>
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</thead>
<tbody>
<tr>
<td>Quality</td>
<td>PDM%</td>
<td>29%</td>
<td>[-1, 0, 1]</td>
</tr>
<tr>
<td>Delivery</td>
<td>OTD%</td>
<td>29%</td>
<td>[-1, 0, 1]</td>
</tr>
<tr>
<td>Cost</td>
<td>PPV%</td>
<td>29%</td>
<td>[-1, 0, 1]</td>
</tr>
<tr>
<td>Lead Time</td>
<td>Weighted Average Lead Time</td>
<td>13%</td>
<td>[-0.5, 0.5]</td>
</tr>
<tr>
<td>MOQ Turns</td>
<td>MOQ Turns</td>
<td>Bonus</td>
<td>[0,0.5]</td>
</tr>
<tr>
<td>FINAL RATING</td>
<td></td>
<td>100%</td>
<td>[-3.5 ...4]</td>
</tr>
</tbody>
</table>

The supplier scorecard rating is measured based on five criteria – quality, delivery, cost, (QDC) weighted average lead time, and MOQ turns. If the supplier is not meeting acceptable score, a SCAR, a Supplier action plan, or on-site audit may be initiated.
## Document Change Record

<table>
<thead>
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<th>REV/ DATE</th>
<th>BRIEF DESCRIPTION OF CHANGE(S)</th>
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<tr>
<td>Rev: 05</td>
<td>The document number was updated to QSD111.04</td>
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<tr>
<td>4/13/17</td>
<td>Section 1.1 the Fluke self-audit assessment file name change to “Fluke Supplier QDCIR and EHS Evaluation Audit form” and adding an Intelex link. Also adding the links to “Appearance Standard” and “Supplier Deviation/Change Request form.”</td>
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<tr>
<td></td>
<td>Page 6, Adding the critical characteristics statement.</td>
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<tr>
<td></td>
<td>Page 5, Quality Policy was updated.</td>
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<tr>
<td></td>
<td>Section 2.1 adding “Fluke Packaging Handbook for Suppliers.”</td>
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<tr>
<td>5/23/17</td>
<td>Table of Content was updated.</td>
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<tr>
<td>Rev. 7</td>
<td>Sections 1.1, 1.4, 1.5 The name of the file “Fluke Supplier QDCIR and EHS Evaluation Audit” changed to “Fluke Supplier Self-Evaluation Audit.”</td>
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<tr>
<td>5/17/18</td>
<td>Page 4 Fluke Electronics Corporation title change to Fluke Corporation.</td>
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<tr>
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<td>Section 2 the title change from Quality system expectations for fluke suppliers to Quality system expectations and requirements for fluke suppliers.</td>
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<tr>
<td></td>
<td>Section 2.1 adding subtitles, Fluke Engineering Drawing, Original Equipment Manufacturer (OEM), Supplier Quality, Nonconformance Material, Fluke Property, and Compliance Regulation.</td>
</tr>
<tr>
<td></td>
<td>Section 2.1.5 The ATEX components requirements were listed.</td>
</tr>
<tr>
<td></td>
<td>Section 2.5 Quality Manual title change to “Initial Supplier Approval Process.”</td>
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