COILCRAFT SUPPLIER QUALITY MANUAL

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SUPPLIER QUALITY MANUAL

1.0 PURPOSE:

The purpose of this document is to define and communicate Coilcraft’s requirements and expectations to its supply base.

2.0 SCOPE:

The Coilcraft Supplier Quality Manual applies to all Coilcraft raw material suppliers.

3.0 GENERAL:

Coilcraft’s supply base is a key element to Coilcraft being able to achieve and maintain a high standard of component performance within the market place. Therefore, we consider our supply base an important part of our global Coilcraft team. As a supplier, your agreement to comply with the guidelines outlined within this document will help to ensure your place as part of that global Coilcraft team. Any documentation requested for completion, must be in English. This manual is also considered part of the Terms and Conditions of the Purchase Order. Before being considered for approval, all suppliers will be required to complete:

- **Coilcraft Supplier Information Form (Form-CW003)**
- **Coilcraft Supplier Mutual Confidentiality Agreement (Form-CW098)**
- **Corporate Social Responsibility (CSR) Audit (Form-CW083)**
- **Responsible Minerals Initiative (RMI) Conflict Minerals Letter (Form-CW120)**
- **Code Of Conduct Letter (Form-CW150)**

4.0 QUALITY MANAGEMENT SYSTEM REQUIREMENTS:

Coilcraft requires suppliers to have a Quality Management System which, at a minimum, is ISO 9001 3rd party certified, the certification body must be accredited to the International Accreditation Forum (IAF), with compliance to IATF 16949. It is preferred that suppliers be IATF 16949 3rd party certified. If the supplier does not have ISO 9001 certification, the supplier must complete a self-audit using the **Coilcraft Supplier Quality System Audit (Form-CW062)**. This will be evaluated to determine ISO 9001 compliance. An on-site 2nd party audit may be performed by Coilcraft in order to be considered for approval. Continued on-site evaluations, after approval, may be required as long as the supplier does not meet the minimum requirement of ISO 9001 3rd party certification.

5.0 ENVIRONMENTAL MANAGEMENT SYSTEM REQUIREMENTS:

Coilcraft requires suppliers to have an environmental management system which is compliant with the requirements of ISO 14001, although it is preferred that suppliers be 3rd party certified to ISO 14001.

It is required that suppliers meet all regulatory environmental requirements of the country of origin and of the country to where the materials are being shipped.
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6.0 DECLARABLE SUBSTANCES:

It is required that suppliers guarantee that all materials supplied are in compliance with the environmental requirements legislation.

Suppliers are required to provide 100% material breakdown and to declare all substances used in the construction of the materials being provided. This may be reported in one of the following manners:

- Through IMDS (International Material Data System, www.mdsystem.com); Coilcraft IMDS site ID 8203,
- **Coilcraft Self Declaration of Hazardous Substances (Form-CW034)** or by submitting a 3rd party Lab Analytical Report,
- **Supplier Component 100% Material Breakdown (Form-CW033)**, or
- Through the supplier’s own format for declaring substances.

It is the responsibility of the supplier to provide true and accurate information. The supplier shall indemnify and hold harmless Coilcraft, against any liabilities arising from the information supplied.

7.0 CONFLICT METALS (DODD FRANK ACT)

7.1 Coilcraft considers sourcing responsibility to be a core requirement of its suppliers. Suppliers of products containing Conflict Metals, described as 3TG or Tin, Tantalatum, Tungsten or Gold, shall purchase only from smelters/refiners listed as compliant to the CFSP or the LBMA. This may require the Coilcraft supplier to probe any downstream suppliers, to determine the smelter of the material, where the material is from and ascertain for a certainty that the smelter does not provide direct or indirect support to armed terror groups in the Democratic Republic of Congo or the surrounding nine nations as described in the 2010 Dodd Frank Act of the United States. Coilcraft suppliers should request that downstream suppliers provide a completed CMRT (Conflict Mineral Reporting Template), based on the latest revision.

7.2 For more information and instructions on how to submit the information via CMRT, including the latest revision, please visit [http://www.conflictfreesourcing.org/](http://www.conflictfreesourcing.org/). Reporting to Coilcraft must be on the latest revision.

7.3 Failure to report this information may adversely affect a supplier’s business with Coilcraft. As smelters change in the supply chain, Coilcraft requires its suppliers to update any changes within thirty days regarding smelter information, including but not limited to:

- A new smelter/refiner added to the CMRT
- A smelter/refiner removed from the CMRT
- A new conflict metal provided to Coilcraft
8.0 SOCIAL ACCOUNTABILITY

Suppliers are required to have a Social Accountability System which is compliant to RBA (Responsible Business Alliance) Requirements.

- **LABOR** – Freely chosen employment, young workers, working hours, wages and benefits, humane treatment, non-discrimination and freedom of association.
- **HEALTH & SAFETY** – Occupational safety, emergency preparedness, occupational injury and illness, industrial hygiene, physically demanding work, machine safeguarding and sanitation, food and housing, and health and safety communication.
- **ENVIRONMENTAL** – Environmental permits and reporting, pollution prevention and resource reduction, hazardous substances, wastewater and solid waste, air emissions, materials restrictions, water management and energy consumption and Greenhouse gas emissions.
- **ETHICS** – Business integrity, no improper advantage, disclosure of information, intellectual property, fair business, bribery, advertising and completion, protection of identity and non retaliation, responsible sourcing of materials, privacy.
- **MANAGEMENT SYSTEM** – Company commitment, management accountability and responsibility, legal and customer requirements, risk assessment and risk management, improvement objectives, training, communication, worker feedback and participation and grievance, audits and assessments, correction action process, documentation and records, and supplier responsibility.

This system outlines the supplier’s obligation to the workplace, including worker’s rights, workplace conditions and management systems. (See Responsible Minerals Initiative (RMI) Conflict Minerals Letter, Form-CW120).

Financial responsibility shall be borne by the supplier for any acts of violation of Social Accountability. The supplier shall indemnify and hold harmless Coilcraft against any liabilities from information supplied.

Coilcraft is dedicated to conducting business with the highest moral and ethical standards. Suppliers may communicate concerns that involve misconduct of an ethical or financial nature through our confidential reporting hotline available 24 hours a day, 7 days a week.

United States – [https://tnw.reportlineweb.com/custom/coilcraft](https://tnw.reportlineweb.com/custom/coilcraft)

International – [https://iwf.tnwgrc.com/coilcraft](https://iwf.tnwgrc.com/coilcraft)

Telephone: +1-855-342-6936
SUPPLIER QUALITY MANUAL

9.0 QUALITY REQUIREMENT

9.1 IDENTIFICATION AND TRACEABILITY

Suppliers are required to maintain a lot traceability system that identifies the status and lot throughout all production stages. This shall also be applied to any out-sourced operations.

The traceability system shall also include the ability to trace the raw materials used, the manufacturing date, the equipment used, the shift and the processes utilized during the production process of the product. This information is required if suspect/nonconforming material is identified by Coilcraft or by Coilcraft’s customer.

The current Coilcraft and Supplier part identification/number/revision level must be present on all supplier documentation.

If a supplier is providing to Coilcraft a part or material that is manufactured by a sub-supplier, the supplier must maintain a Counterfeit Prevention Program that satisfies the requirements of the latest version of AS5553.

9.2 CALIBRATION OF MEASUREMENT EQUIPMENT

Suppliers must ensure that measuring equipment is calibrated against standards traceable to international or national measurement standards.

All measurement equipment is to be uniquely identified and easily traceable to the calibration records.

9.3 RECORD RETENTION

Suppliers are to have an established system to control and maintain records. Examples of records are SPC charts, internal corrective actions, material certifications, process control charts, records of inspection, etc.

Records shall be available for review by Coilcraft and regulatory authorities upon request.

Unless otherwise indicated, records must be retained for a minimum of twenty (20) years after completion of an order.

If record retention is less than twenty (20) years the supplier must send the records to Coilcraft before destroying.
9.4 FIRST ARTICLE INSPECTION

First article inspection only applies to suppliers that supply custom components to Coilcraft or when requested.

**Prototype tooling:** The supplier is required to supply components and corresponding data for all components manufactured from a prototype tool.

**Production tool:** The supplier is required to supply components and corresponding data from the first lot manufactured from a production tool.

**Tool change:** If the tool is new, repaired or modified and unapproved by Coilcraft, the supplier is required to supply components and corresponding data from the first lot manufactured after a tool change.

Suppliers of Coilcraft components from multi-cavity tools shall submit for approval, individually identified samples per cavity.

To determine quantities required for approval, please contact your local Coilcraft purchasing agent.

9.5 LABELING/BARCODE SPECIFICATION

Suppliers are required to ensure that the correct labels are attached to each shipment. The information on the label must be in English.

The following standard may be referenced for barcode labeling:

- The Consumer Electronics Association (CEA) Standard CEA-556

Every lowest level package shall have a Supplier code39 barcoded label (Inner Carton/Packaging Label – see Barcode Label Requirement):

- A lowest level package is the smallest package that contains more than one unit of an individual product. The label shall be a size that is appropriate to the package and that enables the barcode to be readable.
- The minimum height of the barcode shall be 0.20 in. (5.08 mm)
- The minimum height of the human readable interpretation shall be 0.20 in. (5.08 mm)
- Narrow bar width – 0.01 in. (0.254 mm) preferred
- Wide to narrow bar ratio – 2.50 to 3.0 in. (63.50 to 76.20 mm)

The barcoded label of the Inner Carton Label shall have the following fields:

- Coilcraft part number – in barcode and English language format
- Revision – in barcode and English language format
- Supplier part number – in barcode and English language format
- RoHS information – in English language format
- Purchase order number – in barcode and English language format
- Quantity – in barcode and English language format
- Lot code – in barcode and English language format
- Expiration Date/Manufacture Date (where applicable) – in English language format, at minimum.
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Every outer container shall have a Supplier code3S barcoded label (Outer Carton Label – see Barcode Label Requirement):

- An outer level package is the package that contains more than one unit of lowest level packages. The label shall be a size that is appropriate to the package and that enables the barcode to be readable.

- The barcoded label of the Outer Carton Label shall have the following fields:
  - Coilcraft part number – in barcode and English language format
  - Revision – in barcode and English language format
  - Supplier part number – in barcode and English language format
  - RoHS information – in English language format
  - Purchase order number – in barcode and English language format
  - Quantity – in barcode and English language format
  - Lot code – in barcode and English language format
  - Package count – in English language format
  - Package weight – in English language format
  - Country of origin – in English language format
  - Coilcraft ship-to-address – in English language format

Whenever possible, the label should be affixed to the smaller end of the package or shipping container to permit ease of identification while in storage.

If a label cannot be affixed because of package or container type, shape or other constraints, the label shall then be affixed to an attached tag.

9.6 CERTIFICATE OF CONFORMANCE or ANALYSIS

Suppliers are to provide a signed Certificate of Conformance/Analysis with each shipment to Coilcraft which is dependent on the product. A copy of the Certificate of Conformance/Analysis is to be retained by the Supplier.

The Certificate of Compliance/Analysis must contain the following, unless otherwise indicated on the purchase order:

- Customer name
- Customer part number
- Supplier part number
- Purchase order number
- Material lot numbers

The Certificate must also contain a statement of conformity, such as:

“This is to certify that the enclosed material complies with the current Coilcraft and/or Supplier drawing and, as applicable, meets all dimensional and electrical properties.”
9.7 DELIVERY

It is the expectation of Coilcraft that the supplier shall ensure delivery of conforming, defect free material, 100% on-time. It is the supplier’s responsibility to ensure that materials arrive at the required Coilcraft location on the in-house required date specified on the purchase order. It is the supplier’s responsibility to ensure that deliveries are on-time despite shutdowns, vacations, etc.

Coilcraft’s on-time requirement is any period early and up to a maximum of three (3) days late.

Suppliers are to inform their local Purchasing Agent immediately of any potential issues that might interfere with meeting delivery schedules, in order to avoid production downtime.

Suppliers are required to have prepared contingency plans in order to protect Coilcraft deliveries, in the event of an emergency, such as a utility interruption, labor shortage, key equipment failure, etc.

9.8 FIFO

Coilcraft requires that materials are delivered using FIFO (First-In, First-Out) principles.

9.9 PREMIUM FREIGHT

Suppliers are responsible for premium freight charges incurred when delivery schedules are not met.

9.10 NONCONFORMING MATERIAL

Suppliers are required to immediately notify the Coilcraft buyer if suspect/nonconforming product is identified which has been shipped to Coilcraft. The following information must be supplied:

- Shipment tracking number
- Material lot codes
- Conforming material delivery date

The supplier must have a system for processing any suspect/nonconforming material received by Coilcraft. This includes providing a written corrective action using the Coilcraft Web Based DMR Application (https://dmr.coilcraft.com). The timeframes expected are:

- Acknowledgment 1 day
- Containment 2 days
- Completion 14 days

If suspect/nonconforming material is sorted/reworked at a Coilcraft location, sorting/rework fees will be charged to the supplier.
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In the event that suspect/nonconforming supplier material is identified at a Coilcraft customer location, the supplier shall indemnify and hold harmless Coilcraft, against any liabilities incurred accordingly.

9.11 PRODUCT, PROCESS AND SYSTEM AUDITS

Coilcraft has the right to perform product, process and system audits, including Social Accountability audits, at the supplier and sub-supplier location(s).

9.12 PRODUCT CHANGE REQUEST

Supplier or sub-suppliers shall not make any unauthorized changes to a product or material that has been previously approved and purchased by Coilcraft. The Product Change Request (PCR) process shall apply to the following:

- Manufacturing Location
- Process Change
- Material
- Sub-suppliers

The supplier’s completed Supplier Product Change Request (PCR) (Form-CW090), shall be forwarded to the Coilcraft Corporate Office (documentcontrol@coilcraft.com or fax to: 847-639-2370) for review and approval prior to shipment of the product or material.

There shall be no change to the supplied product, material or design without prior written approval from Coilcraft.

9.13 SUPPLIER WAIVER REQUEST / APPROVAL FOR PRODUCT

It is the policy of Coilcraft not to accept product or material that does not meet the requirements of the specification or drawing. A Supplier Engineering Specification Waiver Request (Form-CW089) for nonconforming product or material shall be forwarded to the Coilcraft Corporate Office (documentcontrol@coilcraft.com or fax to: 847-639-2370) for review and approval prior to shipment. Waivers shall only be approved for a specific time frame or quantity of components or material. A copy of the approved waiver must accompany each shipment of product for which the waiver applies.

9.14 CONTINUOUS IMPROVEMENT

The supplier shall utilize process improvement methodologies to continuously improve the effectiveness of their management system and the manufacturing process.
Continuous improvement may be supported using the following:

- Internal/External audit results
- Analysis of data
- Corrective and preventive actions

The improvement of the manufacturing process should focus on the reduction of variation and its subsequent controls.

9.15 SUPPLIER PERFORMANCE REVIEW

Suppliers shall be rated using the Coilcraft Supplier Report Card (Form-CW005) per the below frequency:

- ISO 9001 compliant – No less than once every six (6) months
- ISO 9001 or IATF 16949 certified – No less than once annually.

At a minimum, Suppliers shall be rated on the following categories:

- Quality
- On-time delivery
- Occurrences of unscheduled premium freight

Scoring will be determined on the level of approval for each supplier, based upon the results of the Coilcraft Supplier Report Card (Form-CW005):

- **100 – 75% PREFERRED status** – No action required.

- **74 – 50% FAIR status** – Action required. Supplier will receive a Supplier Performance Corrective Action Report (SPCAR) (Form-CW074) to be completed by the date on the SPCAR. The SPCAR is to be returned to the Purchasing Department contact that issued the SPCAR for review and approval.

- **49 – 0% CONDITIONAL status** – Action required. Supplier will receive a Supplier Performance Corrective Action Report (SPCAR) (Form-CW074) to be completed by the date on the SPCAR. The SPCAR is to be returned to the Purchasing Department contact that issued the SPCAR for review and approval. The Supplier may be removed from the Approved Supplier List for all future purchase orders.
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