



Supplier Handbook

Dear Supplier,

Competing in today's global market requires that products and services are of high quality and competitively priced. In order for Carlisle, Inc., its affiliated companies, and subsidiaries (collectively referred to as "Carlisle") to be successful in meeting our Customer requirements, we must have the processes and tools in place that will encourage and support our Suppliers in meeting certain strict quality requirements.

Suppliers play an essential role in Carlisle's success as partners in our global enterprise. We challenge our Suppliers to be best-in-class in service, quality, delivery, and cost. Suppliers that meet this challenge will have the opportunity to compete with their peers for additional business and take part in projects for product or process developement.

The objective of this handbook is to provide our Suppliers with our expectations when conducting business with Carlisle. This handbook will provide a basis for high-quality and lasting business relationships. All Suppliers of production components, services, and assemblies must comply with the requirements contained within this document, unless a special agreement states otherwise. Our intent is that our Supplier Handbook is used as a tool to clarify communication and foster continuous improvement. Carlisle expects its Suppliers to embrace the content of this handbook and incorporate it into their everyday operations and product development activities.

We look forward to your support as a partner, and we believe that by working together to meet these requirements, we can develop strategic partnerships that will benefit both Suppliers and Carlisle.

Sincerely,

Vice President, Supply Chain

Mark C Smith

Table of Contents

SUPPLY CHAIN EXCELLENCE	6
INTRODUCTION	7
GENERAL REQUIREMENTS	7
Applicability	
Right of Access	
Notification of Supplier Changes	
Purchase Order Requirements	
Responsibility for Product Conformance	
Flow-Down of CCM EU Supplier Requirements to Suppliers/Sub-Tier	
Communications	
Protection of CCM EU & Its Customers' Proprietary Information	
Confidentiality & Non-Disclosure Agreement	
Disaster Recovery Plan	
Supplier Request for Deviation	
CCM EU-Owned Tooling & Supplied Product	9
Material Obsolescence	
ENVIRONMENTAL REQUIREMENTS/ REGULATORY/ETHICAL BUSINESS	10
Compliance With Law	
Environmental Sustainability	
EU Regulations 2017/821 (Conflict Minerals)	
RoHS	
REACH	
Anti-Human Trafficking Policy	
Export Compliance	
SUPPLIER ASSESSMENT/QUALIFICATION	12
Approved Supplier List	
Methods of Supplier Assessment	
Risk Assessment Survey/Supplier Quality Questionnaire	
Supplier Scorecard	
Supplier On-Site Audit	
Capacity	
Qualification Process	13
QUALITY MANAGEMENT SYSTEM REQUIREMENTS	13
General	
Quality Records	
Records Control	
Records	
Electronic Records	
Records Retention	
Management Responsibility	
Resource Management	
Product Realization	
Customer-Related Processes (Contract Review)	
Design & Development	
Purchasing	

Supplier Sub-Tier Control	15
Product & Service Provision	15
Control Plan	
Special Process	16
Control of Monitoring & Measuring Devices	16
Tooling & Fixtures	16
Foreign Object Debris (FOD)	
Purchase Order Schedule Changes	17
Measurement, Analysis & Improvement	
Monitoring & Measurement of Product	17
Ship to Stock/Certified Supplier Program	17
Control of Non-Conforming Product	18
Purchase Order On-Time Delivery	
Product Process Change Notification	18
Non-Conforming Material Reports (NCR)	18
Corrective Action Request	19
Expectations/Chargeback	
Corrective/Preventive Action Request (CAPA, CAR, SCAR) Extensions	20
Verification of Corrective Actions	20
Continuous Improvement	20
Development	20
Process Risk Analysis	20
Key Characteristic Monitoring	
Pricing	21
SHIPPING DOCUMENTATION REQUIREMENTS	22
Packing Slip	
Certificate of Analysis	
Packaging Requirements	
Labeling Requirements	
Test Reports	
Suppliers of Age-Sensitive Materials	
Import/Export Compliance Documents	
Country of Origin	
Harmonized Systems Codes	23

Supply Chain Excellence

We expect our Suppliers to align with us on Supply Chain Excellence, which we define as:

The collective efforts of Suppliers, operations and associates, and formalized processes and procedures that create a competitive advantage to your company and deliver sustainable, best-in-class profitability and Customer satisfaction.

Carlisle Construction Materials Europe (CCM EU) has created the following 12 Supply Chain Principles to foster a culture of improvement across the supply chain.

- **Supplier Selection** will evaluate Suppliers using audits, profiles, specifications, historical performances, total costs, corporate objectives, and compliance with CCM EU safety systems and procedures. An optimal number of Suppliers will be selected with mitigation of sole source risk exposure.
- Contract Management will encourage multi-year agreements, with annual productivity and performance commitments aligned with CCM EU expectations and market conditions.
- Supplier Management will be necessary to engage key Suppliers at every level of the organization and actively pursue joint projects to improve productivity and performance. This includes the use of COS (Lean/Six Sigma) tools by Suppliers, which can be accomplished through the CCM EU training program. A continuous process will exist to ensure the optimum number of Suppliers will be maintained and a process will be established to reward top Suppliers.
- **Supplier Performance** will be measured and evaluated using a consistent scorecard at all facilities. Suppliers will be required to consistently deliver continuous improvement in key performance areas.
- Technical Resource Management will be used to actively involve Suppliers in product development, with a shared responsibility for the execution of implementation plans. Suppliers will be directly linked with technical resources in areas including product design, application, and process capability. Development and performance needs will be anticipated by Suppliers and will be provided with timely solutions to CCM EU.
- Specification Management will be needed to establish a centralized, standard procedure to ensure all CCM EU material specifications are up-to-date and all CTQs are in place. Suppliers (if required) must certify to specifications on a per-shipment basis and ensure that a robust process for addressing changes is in place. Standardized specifications must be in place for common materials across all plants.
- **Transaction Management** will require a paperless, electronic integration with all Suppliers utilizing real-time collaborative planning information through a common exchange.
- Capacity Planning & Replenishment Management will be employed by all key Suppliers to manage inventory through electronic integration utilizing COS (Lean/Six Sigma) tools such as Just-In-Time, Kanban, Make-For-Hold, Supplier-Managed Inventory, and other advanced replenishment processes as close to the point-of-use as possible.
- Working Capital initiatives use COS (Lean/Six Sigma) to drive continuous improvement of Supply Chain processes using cross-functional and/or cross-organizational approaches to improve inventory turns and reduce Supply Chain cost or waste.
- **Comprehensive Communication** plans will be in place to ensure that Supply Chain and Supplier objectives are consistently communicated throughout all levels of the organization.
- Quality & Improvement will be employed in Supply Chain activities to support and champion Quality Systems leading to strong Supply Chain products and processes. This includes promoting the use of COS (Lean/Six Sigma, Quality Assurance Improvement, etc.) for production improvement as well as non-production processes within the Supply Chain.
- Organizational Structure/Development that is functional, process oriented, and includes a comprehensive annual Training Plan. Organizational Structure/Development will be used to drive continuous improvement between CCM EU and its Suppliers, including participation in business kaizen activities for either CCM EU or Supplierdriven events, Supplier-lead training for CCM EU associates (e.g. best techniques to use their materials), improved interaction in supply and demand planning, or mutual activities that will be used to drive continuous improvement across CCM EU.

Introduction

In order to meet our competitive global market requirements, CCM EU realizes the importance of working together with our Suppliers to develop a successful relationship. The foundation of this relationship relies on the following strategies:

- » Close interaction between CCM EU's Engineering, Manufacturing, Purchasing, and Quality personnel and its Suppliers
- » The assurance of meeting the quality requirements of ISO9001, ISO14001, and all applicable regulatory and Customer requirements
- » To provide our Suppliers with continuous feedback about their quality performance to support them in improving their overall quality and on-time delivery
- » Pursue excellence within the Supply Chain Excellence components as defined and described previously, through Supplier Relationship Management (SRM) and other joint initiatives

General Requirements

The following are mandatory General Requirements we expect our Suppliers to fulfill:

Applicability

All Suppliers are to fully comply with the stated requirements of this handbook. Practices may vary by individual CCM EU plant. Always consult with individual plants if there is a question regarding a specific requirement or form. CCM EU reserves the right to change the contents of this handbook. Content updates will result in the update of the online version and notifications being sent to Suppliers. Every attempt has been made to keep this handbook current. Updates can be viewed at the following link: https://www.ccm-europe.com/wp-content/uploads/2021/04/CCM-Europe-Supplier-Handbook-2021.pdf

Right of Access

Suppliers shall provide CCM EU, its Customers, and regulatory authorities access to their premises and facilities for cooperation on products, processes, and business issues.

By prior notice, Suppliers shall allow CCM EU and/or CCM EU Customers access to both their facilities and those of their sub-tier suppliers and subcontractors, for the purpose of evaluating parts, processes, documents (i.e. FMEA, Control Plan, instructions, records, etc.), methodologies, and systems used in manufacturing CCM EU products. CCM EU may, at its discretion, use third-party independent auditors. These individuals represent CCM EU and will audit the Supplier's processes to establish conformance to validated quality systems.



General Requirements

Notification of Supplier Changes

Changes within the Supplier's organization that may affect product quality, financials, or risk to CCM EU shall be communicated in advance. These changes may include: company ownership, company name, manufacturing location, quality approvals, significant changes to process or inspection techniques, key personnel, workmanship standards, calibration, and other systems that may impact form, fit, or function of a product. Changes must be approved by CCM EU in advance.

Purchase Order Requirements

The Supplier shall adhere to all Purchase Order (PO) Terms and Conditions and any stated special instructions. The PO is the controlling document and overrides any requirements specified in this document that conflict with the requirements in the PO. Acceptance of a PO constitutes acceptance and understanding of this Supplier Handbook. Suppliers are encouraged and expected to discuss and understand the specific applicability of these requirements with their Purchasing and Supplier Quality representatives.

Responsibility for Product Conformance

CCM EU and its Customers expect Suppliers to deliver material that is 100% compliant with all the PO requirements and product specifications. Suppliers and their sub-tier supplier(s) shall be responsible for quality, reliability, and safety of their products/services, and esure they meet all form, fit, function, industry, and regulatory requirements. CCM EU reserves the right to reject any material that does not meet the product specifications, the PO requirements, or any other applicable industry or regulatory requirements.

Flow-Down of CCM EU Supplier Requirements to Suppliers/Sub-Tier

The Supplier is responsible for cascading the requirements contained in this Handbook to all of its subcontractors and sub-tier suppliers that provide products or perform services for the Supplier in support of POs issued by CCM EU.

Communications

All communications related to the fulfillment of POs shall be carried out through the CCM EU Purchasing Department. CCM EU's Quality Department reserves the right to contact Suppliers and their sub-tier supplier(s), for all quality-related questions, issues, request for failure analysis, corrective/preventive actions, or any other quality-related concerns. Under no circumstance is the Supplier to make a direct approach to CCM EU's Customers in relation to agreed business dealings.



Protection of CCM EU & Its Customers' Proprietary Information

Any information the Supplier receives from CCM EU must be kept confidential and not disclosed to any third party without CCM EU's prior written consent. The proprietary information can include, but is not limited to, all versions of electronic data, drawings and documentation, tooling, and materials.

Confidentiality & Non-Disclosure Agreement

As a condition to CCM EU furnishing the Supplier and its respective officers, employees, principals, agents, and advisors (collectively, "representatives") with financial, technical, and other information regarding CCM EU that has not been made generally available on a non-confidential basis, the Supplier agrees to hold such information in confidence per the terms of the Confidentiality and Non-Disclosure Agreement.

Disaster Recovery Plan

Suppliers shall define and implement a plan to mitigate the potential impact of risks to the normal operation of their business in the event of a disaster. The primary objectives are to safeguard company assets (employees, facilities, equipment, and other capital assets), maintain Customer service, and to communicate responsibly with all those who have a need to know should the Supplier experience a significant business disruption.

The Business Continuity and Disaster Recovery Plan addresses the key areas necessary in the event of a disaster occurrence. Its purpose is to ensure the Supplier has a plan to maintain business operations, maintain financial and accounting activities, meet contractual obligations and requirements, meet legal and regulatory requirements, safeguard company assets, and maintain Customer Service. A copy of your Disaster Recovery Plan should be provided to CCM EU.

Supplier Request for Deviation

There may be circumstances when Suppliers discover out-of-tolerance conditions within their facility that they believe can be deviated. If the Supplier feels the condition does not affect fit, form, function, or performance of a product, a one-time deviation may be requested from CCM EU. At CCM EU's discretion, CCM EU may grant a deviation based on plant procedures and requirements.

The Supplier will always request, in writing, a formal deviation (or concession) and receive approval before shipping non-conforming products to CCM EU. The Supplier must fill out a Supplier Request for Deviation Form, or an appropriate Supplier-equivalent form, and return it for approval. If the deviation is approved by CCM EU, a copy of the signed Request for Deviation must be placed in each shipment being delivered to CCM EU, otherwise products will not be accepted. A plan to return to normal production and the time required to do so may also be required at the same time as the written request.

When accepting a deviation, CCM EU reserves the right to pursue cost recovery if costs above normal production are incurred due to the deviation, and Supplier agrees it will be responsible for such cost. Rejection of a deviation request is not an acceptable reason for missed delivery.

CCM EU-Owned Tooling & Supplied Products

All materials, tools, manufacturing, test, or inspection equipment belonging to CCM EU or its Customers will be permanently marked to clearly show that it is property of CCM EU or the Customer. These tools will only be used for CCM EU products unless an authorization in writing exists. Contact your purchasing representative for information regarding this subject. Supplied products can include intellectual property such as data used for design, production, or inspection.

Material Obsolescence

The Supplier shall notify CCM EU at least two (2) years in advance if it anticipates discontinuing the manufacture of any materials or spare parts.

The Supplier shall make discontinued materials and spare parts available for five (5) years after the materials or spare parts are discontinued by:

- » Finding an acceptable source to provide the discontinued materials or spare parts to CCM EU, or
- » Finding a substitute for the discontinued materials or spare parts that is acceptable to CCM EU, or
- » Carrying an inventory of the materials or spare parts as required to support CCM EU, or
- » After exhausting the above alternatives, providing CCM EU with the opportunity to make a last-time buy after allowing CCM EU a reasonable time to assess its needs.

Environmental Requirements/Regulatory/Ethical Business

CCM EU views responsible environmental, regulatory, and ethical business practices as a normal part of culture. We seek to always treat our employees fairly, respect the communities in which we operate, and put forth our best effort to ensure we remain a responsible business partner.

Through responsible environmental practices, CCM EU is dedicated to identifying and reducing the environmental impact of its operations, activities, and products. It is our commitment to comply with all applicable laws and other regulatory requirements concerning the environment. We are committed to preventing pollution and continually improving our environmental performance in all of our global operations. Our environmental performance will be achieved through a comprehensive Environmental Management System that provides the framework for setting and reviewing CCM EU's environmental objectives and targets. We expect the same of our Suppliers.

It is CCM EU's expectation that all Suppliers shall comply with certain business and ethical standards, as well as the laws of their countries and all other applicable laws, rules, and regulations. CCM EU expects Suppliers to implement procedures to ensure the requirements outlined in this Supplier Handbook are met. Specific conformance areas include -- but are not limited to – Compliance with Law, Environmental Sustainability, EU Regulation 2017/821 (Conflict Minerals), RoHS, REACH, Anti-Human Trafficking, and EU Regulation 428/2009 (Export Compliance). We expect Suppliers to participate in monitoring and reporting activities as required in support of these initiatives. In addition, Suppliers must notify CCM EU of any and all business relationships with other Suppliers, subcontractors, and sub-tier suppliers that do not meet the environmental, regulatory, and ethical business requirements of this Supplier Handbook. Where non-conformance is identified, the Supplier shall determine the root cause and promptly implement corrective and preventive actions to resolve. Compliance in these areas will be a significant factor in the selection of Suppliers with which CCM EU chooses to engage.

Compliance With Law

CCM EU is dedicated to conducting business only with Suppliers that demonstrate a high commitment to compliance and responsibility. To that end, the Supplier shall ensure that the products furnished to CCM EU, and any services rendered, shall be manufactured, sold, used, and rendered in compliance with all relevant laws, ordinances, and regulations of the European Union, and any other country with jurisdiction over the activities the Supplier performs for CCM EU. Without limiting the generality of the foregoing, the Supplier shall ensure its compliance with: (i) all applicable international prohibitions on child labor, (ii) the United States Foreign Corrupt Practices Act (15. U.S.C § 78 et seq.), (iii) the UK Bribery Act 2010, the Anti-Kickback Act of 1986, (iii) Federal Acquisition Regulation 52.222-50 Combating Trafficking in Persons; and (iv) any other anti-corruption laws, regulations, and policies of any other country with jurisdiction over the activities the Supplier performs for CCM EU.

CCM EU is committed to respecting all human rights, as articulated in the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, and the International Labor Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. CCM EU will respect stakeholders' views in the continuing development, implementation, and evaluation of this policy.

The Supplier should incorporate the principles set forth herein into its own code of business ethics and conduct manual.

Environmental Sustainability

Suppliers shall work to promote socially responsible and environmentally sustainable practices throughout their operations. Consideration should be given to product design, packaging, and life-cycle management in an effort to lead their company/industry toward reduced environmental impact. Suppliers shall initiate, maintain, and communicate programs which support these goals. It is preferred that Suppliers have an Environmental Management System to guide advancement of environmental objectives and targets.

EU Regulation 2017/821 (Conflict Minerals)

The Supplier recognizes the significant legal and non-legal risks associated with sourcing tin, tantalum, tungsten, their ores, and gold. By accepting a PO, the Supplier must certify that it complies with the EU Regulation 2017/821 ("The Regulation") reporting requirements, regardless of the country or countries in which it is doing business. If any tin, tungsten, tantalum, their ores, or gold are used in products provided to CCM EU, this must be disclosed to the CCM EU purchasing representative. For the minerals identified, we expect the Supplier to perform a reasonable country of origin inquiry and proper due diligence to determine the conflict status of the smelter and/or mine. The Supplier certifies and warrants that it will not knowingly deliver to CCM EU any products that contain conflict minerals as defined in the Regulation. In the event that the Supplier discovers that there are any conflict minerals contained in the products delivered to CCM EU, the Supplier agrees to use its best efforts to eliminate the use of such conflict minerals for use in the products without adversely affecting its ability to continue to meet the product specifications.

The Supplier agrees that it shall require its own subcontractors and sub-tier suppliers in the Supply Chain for products delivered to CCM EU to comply with the requirements of this document. Additionally, Suppliers at any tier may be requested to provide evidence that a proactive policy adhering to EU Regulation 2017/821 is in place.

RoHS

The Restriction of Hazardous Substances Directive 2002/95/EC (RoHS) was adopted in February 2003 by the European Union. All Suppliers shall know and understand the contents of its products, including the products of its sub-tier suppliers. Upon CCM EU's request, Suppliers shall provide a complete listing of the product's physical contents. If necessary, CCM EU will require documentation from the Supplier certifying its product to be RoHS compliant.

REACH

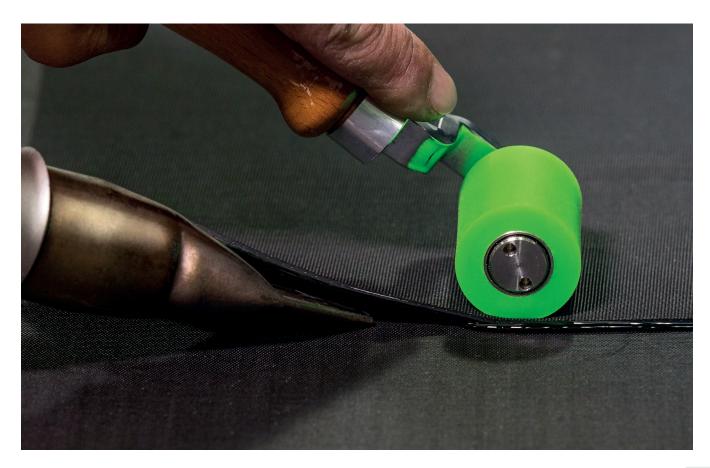
The European Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) entered into force in June 2007. Suppliers shall comply with all applicable REACH requirements that affect the products they supply to CCM EU. CCM EU expects Suppliers will have a dialogue with their own Supply Chain and with CCM EU regarding all applicable aspects of REACH. Upon CCM EU's request, Suppliers shall provide a complete listing of the product's physical contents.

Anti-Human Trafficking Policy

All CCM EU Suppliers are required to certify that materials incorporated into the product comply with the laws regarding slavery and human trafficking of the country or countries in which they are doing business. In addition, the Suppliers are expected to comply with Directive 2011/36/EU as applicable.

Export Compliance - EU Regulation 428/2009

By accepting a PO the Supplier must certify that it complies with EU Regulation 428/2009 ("The Regulation") and its reporting requirements, regardless of the country or countries in which it is doing business.



Supplier Assessment/Qualification

Approved Supplier List

CCM EU maintains an approved Supplier list for all certified/approved Suppliers, which may be maintained at the plant level.

Methods of Supplier Assessment

Risk Assessment Survey/Supplier Quality Questionnaire

A Supplier Risk Assessment Survey and/or Supplier Quality Questionnaire are used for both new Supplier evaluation as well as for periodic assessment. The Survey/Questionnaire shall be completely filled out, evaluated, and approved prior to CCM EU placing production POs with the Supplier. All questions must be completely and appropriately answered. If the Supplier has any questions regarding the Supplier Quality Questionnaire, it may contact the CCM EU Purchasing or Quality Department.

The purpose of this Survey/Questionnaire is to give an initial overview of the Supplier's organization, systems, and capabilities. After the completed document has been evaluated by CCM EU, a decision will be made to determine the level of approval granted.

Supplier Scorecard

CCM EU will monitor the performance of select Suppliers using some or all of the following criteria:

» On-time Delivery

» Days Payable Outstanding (DPO)

» Quality

» Supplier Service Responsiveness

» Lead Time

» Productivity

More specific information on performance levels in these key criteria is available. A Supplier's continuous improvement plans should target zero defects and 100% on-time delivery. Regular reporting of performance to select Suppliers will be communicated via a Supplier scorecard.

Supplier On-Site Audit

As part of CCM EU's Supplier Development Program and Supplier Control Process, all approved Suppliers may be subject to an on-site Supplier Verification Audit. Selected Suppliers will be audited as necessary to verify product/process conformance.

The purposes of the on-site audit are to:

- » Evaluate new and existing Suppliers' compliance, and its ability to effectively execute quality processes/ procedures required by CCM EU
- » Facilitate improvement in a Supplier's quality and other functional systems by driving corrective action in areas of non-conformance or general concern
- » Provide input regarding the Supplier's quality performance to the enterprise
- » Provide an overall estimate of the level of CCM EU support required in bringing a Supplier to acceptable status

Re-evaluation of existing Suppliers may be done in the following cases:

- » Necessity of the re-evaluation of an approved/existing Supplier will be decided on a case-by-case basis by CCM EU
- » Acquisition, merger, lay-off after employee strike, after riots, after natural calamity e.g. flood, etc.
- » Change of process, Supplier, equipment, machines, etc.
- » Repeated quality non-conformances or consecutive quarters below minimum scorecard metrics
- » Process audits may be performed on an annual basis



Capacity

CCM EU expects the Suppliers to have sufficient capacity to meet quoted demand at all times. CCM EU may require the Supplier to validate this capacity in terms of Manpower, Machine, and Material with objective data. This may be verified during or at any time after the Supplier selection process. We expect Suppliers to flex their capacity within a reasonable time frame for their industry and to respond to fluctuations in CCM EU schedules without increasing lead times. This may require operating for extended hours as needed. We expect our Suppliers to add or source appropriate capacity as CCM EU requirements grow. We may periodically perform rate readiness reviews with our Suppliers based on Customer demand.

Qualification Process

The sourcing process below describes the general process that CCM EU uses to evaluate its potential Suppliers and determines where specific parts will be purchased. This process may vary on a case by case basis.

Potential Supplier Potential Supplier Confidentiality Request for Supplier Self Assessment **Agreement** Quote **Assessment** External Contract **CCM EU Final** Internal Review/Award Qualification Qualification Supplier Validation

Maintaining Qualification Status

Suppliers are expected to maintain full control of their operations in accordance with this Handbook. If the Supplier fails to meet CCM EU's expectations, it may be subject to a progressive level of discipline ranging from notification and probation up to disqualification.

Quality Management System Requirements

General

It is preferred that all Suppliers have a Quality Management System that meets the intent of a globally-accepted standard as appropriate for the commodity type being manufactured. Acceptable Quality Management Systems include:

- » ISO 9001
- » ISO 14001
- » ISO 50001

The Supplier shall implement and maintain a Quality Management System that complies with the applicable Quality System standard or specifications. The Supplier shall establish and maintain a clearly-documented quality system that provides means of ensuring that products conform to specified requirements. This system shall control the issue of drawings, specifications, procedures, etc. Provision shall be made for the control of obsolete copies and their subsequent archiving and disposition.



Quality Records

Records Control

The Supplier shall maintain a documented procedure for record creation, change (handwritten or other), completion, and control of Quality records in accordance with the applicable Quality System standard (i.e. – ISO9001).

Records

Records and documents must be provided in the local language of the CCM EU facility to which the records are sent. If this is not available English should be used. This includes any correspondence, test reports, inspection results, certificates of compliance, return material authorizations, deviations, requests for changes, and any record intended to communicate information.

Electronic Records

Records may be maintained in an electronic format such as PDFs or in databases as long as appropriate approval signatures are maintained. Data maintained in databases shall be appropriately validated where required per quality standards.

Records Retention

Record retention schedules can vary greatly by industry. All CCM EU Suppliers must have a robust process for maintaining records consistent with the requirements of the products they deliver and the industries they serve. In some cases, it is a requirement to maintain records indefinitely. Prior to discarding, transferring to another organization, or destroying such records, the Supplier shall notify CCM EU in writing and give CCM EU the opportunity to gain possession of the records. These requirements are applicable to records generated by the Supplier's sub-tier sources. The Supplier shall provide CCM EU, its Customers, and regulatory authority access to all applicable records. Applicable records include, but are not limited to, test reports, calibration records, production records, and sub-tier supplier certificates of conformance.

Management Responsibility

The Supplier shall make known a person to CCM EU, who will have the necessary authority to assume responsibility for product quality. It is expected that the named person will provide evidence of the Supplier's commitment to the development and implementation of the Quality Management System and the continued improvement of its effectiveness.

Resource Management

The Supplier shall determine and provide the resources needed to maintain the Quality System and continually improve its effectiveness and enhance Customer satisfaction by meeting CCM EU requirements. Personnel performing work affecting product quality shall be competent on the basis of appropriate education, training, skills, and experience. They should be aware of the organization's quality policy and objectives, understand their contribution to product conformity, safety, and the importance of ethical behavior. The Supplier shall determine, provide, and maintain the infrastructure needed to achieve conformity to product requirements.



Product Realization

Customer-Related Processes (Contract Review)

Orders or contracts shall be formally reviewed to ensure that the Supplier has the technical and logistical capabilities to meet the requirements. Any discrepancies or queries shall be resolved before the order or contract is accepted. Amendments to orders or contracts shall be formally reviewed. Records of contract review shall be maintained.

Design & Development

If design activities are undertaken for CCM EU by the Supplier, design inputs and outputs shall be adequately specified (e.g. by specifications). Formal documented reviews shall be held at appropriate stages of design. Designs shall be checked by verification (theoretical check) and validation (practical check). All design changes shall be documented and approved by CCM EU engineering personnel before implementation.

Purchasing

The Supplier shall not substitute or sub-contract any materials or work awarded by CCM EU without the prior written approval from CCM EU. The Supplier shall maintain records of lot code traceability throughout the product life. The Supplier shall establish and implement activities to ensure that purchased material is conforming to all applicable requirements.

Supplier Sub-Tier Control

The Supplier shall ensure that subcontractors/sub-tier suppliers are evaluated and selected on their ability to meet specified requirements. A list of approved subcontractors/sub-tier suppliers shall be maintained. Purchasing documents shall clearly describe the relevant drawings and specifications, including issue status and the quality requirements to be applied. CCM EU expects its Suppliers to bear responsibility and maintain control over subsequent processes done at a sub-tier.

Product & Service Provision

Manufacturing processes shall be defined by documented procedures. Value Stream Maps or similar methods should be used to describe approved manufacturing processes. Criteria for quality shall be defined in a clear and practical manner. Where processes cannot be verified by subsequent inspection or testing, such processes shall be performed by qualified operators or have suitable process control parameters established.

Control Plan

The Supplier shall maintain a written summary description of the system used to minimize process and product variation and to control parts and processes. A multi-functional team shall develop the Control Plan by utilizing all the available information such as:

- » Manufacturing flow chart and Supply Chain flow chart
- » Product risk analysis (DFMEA) and process risk analysis (PFMEA)
- » Product and process key characteristics
- » Lessons learned, team's knowledge
- » Testing and inspection strategy
- » Optimization methodologies (e.g., quality function deployment, design of experiment, etc.)



The Control Plan Form shall contain the list of actions (e.g. measurements, controls, tests, inspections, etc.) that are required at each phase of the process including receiving, in process, and outgoing requirements to assure that all process outputs will be in a state of control. For each action, the Control Plan shall also include the following information (or document reference):

- » Product/process specification tolerance
- » Evaluation/measurement technique
- » Sample size and frequency
- » Control method (e.g. inspection gate ref. No., SPC Chart ref No., etc.)
- » Reaction plan which describes the activities performed in case of Out of Control (Out of Control Action Plan)

The Control Plan shall be continuously updated to reflect the current system.

Special Processes

Any processes for production and service provision where the resulting output cannot be verified by subsequent monitoring or measurement and, as a consequence, deficiencies become apparent only after the product is in use or the service has been delivered, will be managed in an appropriate manner.

All special processes completed in support of CCM EU POs must be performed by organizations holding applicable NADCAP approvals. Any deviations to this requirement must be referred to CCM EU Quality Management prior to commencement of work.

Special processes include:

- » Non-Destructive Testing (NDT)
- » Heat Treatment (HT)
- » Coatings Including Painting (CT)
- » Chemical Processing (CP)
- » Welding (WLD)
- » Non-Conventional Machining & Surface Enhancement (NMSE), e.g. shot peening (SE)

CCM EU reserves the right to either refuse the approval/use of any Special Process Company at any time based on unacceptable Quality, Cost or Delivery performances, or specific Customer instruction.

Control of Monitoring & Measuring Devices

All measuring and test equipment used to demonstrate conformance of products shall be calibrated with reference to international and national standards or other CCM EU-approved standards. Such equipment shall be clearly marked with identification of its calibration status, including expiry date. Records of calibrated equipment shall be maintained. When equipment is found to be out of calibration, actions shall be taken to identify any affected products, including products already dispatched.

Tooling & Fixtures

The Supplier shall establish and maintain tools, tooling, equipment, and fixtures via a preventive maintenance program. The program shall include accommodations for Customer-owned items to ensure they are properly maintained, calibrated, and remain in good working order.

The Supplier shall also establish and maintain procedures for implementing new tools, tooling, equipment, and fixtures to ensure the items are properly installed and validated.



Foreign Object Debris (FOD)

The Supplier shall develop and maintain a Foreign Object Debris (FOD) prevention program to identify and eliminate foreign object entrapment areas and paths through which foreign objects may migrate and cause product failure. The FOD program will include design, manufacturing, and process controls to prevent FOD in deliverable items. The Supplier shall include periodic self-assessment of internal FOD prevention practices to measure effectiveness. Delivered materials must be clean and free from any material/debris, such as machined chips, burrs, grinding dust, forming materials, corrosion, oil, and other foreign material on surfaces to prevent FOD entrapment. The Supplier shall be responsible for all product cleanliness which includes all packaging materials (including internal packaging and returnable dunnage if applicable) for such components. The Supplier should have special emphasis controls in place appropriate for the manufacturing environments.

Electro Static Discharge (ESD) controls will be implemented where and as applicable to ensure products are protected at all times. This is to include ESD workspaces, packaging materials, and handling processes of ESD sensitive parts.

Purchase Order Schedule Changes

Periodically, POs may be required to be expedited or deferred. All Suppliers are required to assist with the re-scheduling of these orders as needed by CCM EU. Each individual case may be subject to review based on the Supplier's ability to perform, but a quick response with information (within 1 business day) is expected unless otherwise stated and/or agreed upon.

Measurement, Analysis & Improvement

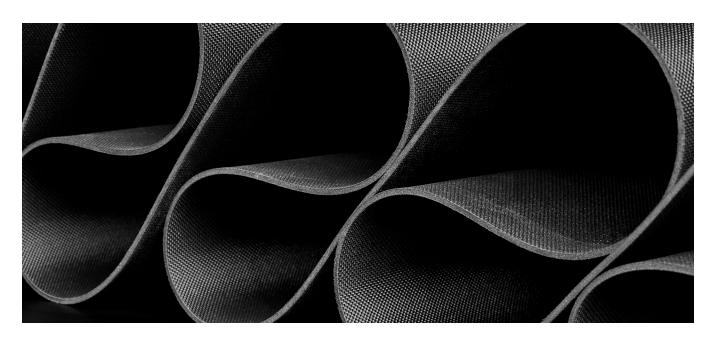
Monitoring & Measurement of Product

The Supplier shall monitor and measure the characteristics of the product to verify that the product requirements have been met. This shall be carried out at appropriate stages of the product realization process in accordance with the planned arrangements. The Supplier shall utilize Measure System Analysis (MSA) practices to ensure monitoring process are appropriate and adequate for the application.

Ship to Stock/Certified Supplier Program

CCM EU defines a Certified Supplier as one who is found to supply material of such quality that it is not necessary to perform routine testing on each lot received. Materials or services may be received directly into stock, with only the agreed upon Supplier-prepared certification documents accompanying each shipment, and after they are reviewed by the appropriate CCM EU personnel. Certified Suppliers will be viewed as strategic to the continued growth and success of CCM EU.

CCM EU seeks to certify Suppliers on the basis of sound business and quality practices consistent with our own. Suppliers selected to participate in CCM EU Ship to Stock or Certified Supplier Programs will be notified by the Quality Department and will undergo a strict qualification process.



Control of Non-Conforming Product

The Supplier and its sub-tier supplier(s) shall have an established procedure for CCM EU's advance notification of escaped non-conforming products and make all necessary arrangements for immediate containment and product recall if necessary. The advance notification shall, by the Supplier and/or its sub-tier supplier(s), happen immediately upon discovery of the non-conformity.

The advance notification shall include details of product information, nature of non-conformity, manufacturing date, lot and part traceability information to the point of origin, containment plan, and actions in all locations and en route.

The Supplier agrees to bear all costs associated with the escape of non-conforming products including but not limited to: rework cost, recall cost, non-conforming material cost, and any other cost that CCM EU may encounter due to the escape of the non-conforming products.

Material Review Board (MRB) disposition authority is not delegated to the Supplier.

Purchase Order On-Time Delivery

CCM EU expects Suppliers to deliver the right product at the right time in the right packaging using the right carrier as specified by the PO. We expect 100% on-time delivery of correct quantities with correct shipping documentation. On-time delivery (OTD) is defined as three (3) days early to zero (0) days late, or as otherwise agreed. If a Supplier is unable to meet a delivery commitment and does not provide sufficient notice to CCM EU of its inability to meet its commitment or provide an acceptable recovery plan, CCM EU reserves the right to utilize premium freight and/or labor to meet commitments to its Customers and charge the Supplier for the additional costs incurred.

Product Process Change Notification

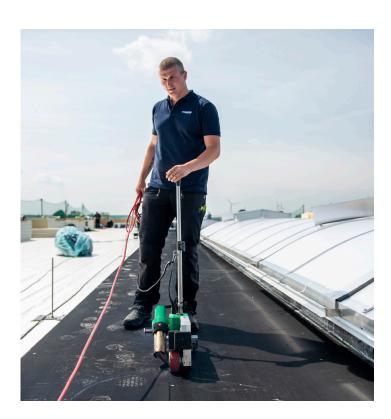
If the Supplier would like to initiate a change, the request should be made in writing and not implemented until written approval is given by CCM EU. This applies, but is not limited to, the following cases:

- » Transferring of the production line (partial or total) to a new or existing plant or building in the same or other country
- » Changing a sub-tier supplier that provides raw material, components, sub-assemblies, or outside processes
- » New production layout or new/different equipment
- » Packaging changes or repackaging operations
- » Renewal of current tooling
- » Change of raw material
- » Permanently outsourcing part of the production to a sub-tier supplier
- » Request for product design changes such as dimensions, functions, appearance

Non-Conforming Material Reports (NCR)

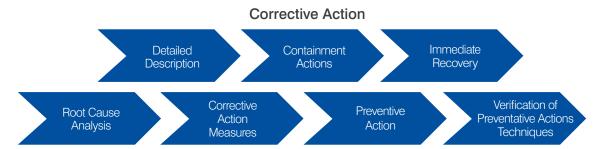
In the event that CCM EU receives non-conforming materials from the Supplier, discovery of product field failures, malfunctioning products, or request from CCM EU's Customer(s), CCM EU may request that the Supplier conduct a formal investigation and provide failure analysis reports with objective evidence to identify the root cause(s) of the non-conformities.

The primary purpose of an NCR is for the Supplier to provide an effective, immediate containment of the non-conforming product. The Supplier shall provide CCM EU with a Return Material Authorization (RMA) or equivalent to return non-conforming materials. The RMA shall include all necessary information to return products to the Supplier. The RMA should be provided within five (5) business days and credits issued within fifteen (15) days for non-conforming materials.



Corrective Action Request (CAR)

When deemed necessary by CCM EU, the Supplier shall provide a Corrective Action Request (CAR) - also referred to as Supplier Corrective Action Request (SCAR), Corrective and Preventive Action (CAPA), or Supplier Quality Report (SQR) - with verifiable documents that include implementation and target dates for non-conformities reported by CCM EU.



Per the request of CCM EU, the Supplier shall take immediate action to implement and document the following requirements on the report:

- » Detailed description of non-conformity
- » Actions taken to assure 100% containment of suspect parts/products/raw materials at all locations and in-transit
- » Immediate recovery plan
- » Root cause analysis of non-conformities/determination of failure modes
- » Corrective action measures
- » Preventive action plans to prevent reoccurrence
- » Verification method(s)/technique(s) to confirm effectiveness of corrective and preventive action(s)

Product(s) rejected by CCM EU and resubmitted by the Supplier shall be clearly identified as re-submitted product(s), and it must also be documented on the Supplier's shipping documents that product(s) delivered are either "replacement" or "reworked" product(s).

The Supplier's documents shall include reference to CCM EU's rejection document number and the Supplier's copy of the corrective and preventive action reports as applicable.

Expectations/Chargeback

To protect CCM EU and prevent further defective materials from leaving the Supplier facility, it is imperative that the Supplier takes immediate action and initiates containment. The Supplier is responsible for both containing non-conforming material at its location, as well as material in-transit, at sub-tier suppliers, or other lots already delivered to CCM EU. If the Supplier fails to initiate immediate action and containment or it is determined to be ineffective, CCM EU may use a third-party service at the Supplier's expense.

If the Supplier suspects non-conforming parts have been shipped to a CCM EU facility or finds non-conforming parts within the Supplier's finished goods inventory, CCM EU expects the Supplier to immediately notify CCM EU of the problem. CCM EU will look positively on a Supplier that takes the initiative to inform CCM EU about a potential defect.

In the event that there is an issue found at CCM EU, the Supplier is expected to confirm the receipt of the CAR request by telephone or mail within one (1) business day. Quicker response may be required based on the severity of the situation. CCM EU expects the Supplier to define, implement, document, and communicate the containment actions to CCM EU within two (2) business days. Within two (2) weeks, the final determined root cause and preliminary preventative and corrective actions should be communicated. After thirty (30) days, the preventative and corrective actions should be in place to prevent a reoccurrence at CCM EU.

In some situations, CCM EU may decide to visit the Supplier or subcontractor in order to participate in the root-cause analysis. CCM EU reserves the right to utilize on-site (or 3rd party) staffing for sorting and containment in order to meet production demands or Customer service. Any CCM EU labor utilized in containment activities will be charged back to the Supplier at a negotiated rate. Lost production time due to non-conforming supplied products will be documented and charged back at the current shop rate. In addition, any premium freight incurred to meet Customer demands will be charged back to the Supplier at the invoiced amount.

CCM EU monitors Supplier-caused disruption costs to CCM EU and its Customers. Costs associated with Supplier-caused disruptions will be recovered from the Supplier. Typically, these costs could arise from:

- a. Non-conforming material detected within CCM EU or by its Customers
- b. Supplier-caused warranty issues
- c. Line stoppages at CCM EU or its Customers due to Supplier issues
- d. Supplier Quality Improvement work beyond normal planned activity
- e. Scrap incurred at downstream operations due to defective material

Corrective/Preventive Action Request (CAPA, CAR, SCAR) Extensions

The Supplier shall make all efforts to fulfill the corrective action requirements including meeting all action dates and providing objective evidence. If the Supplier is unable to fulfill the SCAR requirements, the Supplier may contact a CCM EU Supplier Quality Representative to request an extension. The Supplier shall formally request the extension at least five (5) business days before the SCAR is due. Extensions are reviewed and approved by CCM EU Quality Department on a case-by-case basis. A reasonable explanation shall be provided by the Supplier with extension requests. Failure to meet SCAR due dates and/or requesting an extension prior to the assigned due date may result in a negative impact on the Supplier's quality rating which may potentially lead to disqualification of the Supplier.

Verification of Corrective Actions

CCM EU reserves the right to request objective evidence that the SCAR has been effectively implemented. If deemed necessary, CCM EU may conduct a Supplier Audit or Surveillance to verify the effectiveness of submitted SCARs.

Continuous Improvement

The Supplier shall demonstrate a top management commitment to continuous improvement. A comprehensive philosophy of continuous improvement must be identifiable throughout the entire Supplier organization. Suppliers must endeavor to make continuous improvements to the quality, deliveries, schedules, and prices to both parties' benefit. The philosophy of continuous improvement should be extended to all business processes. Specified plans must be drawn up for those processes that are considered important. CCM EU encourages the Supplier to work on:

- » Error Proofing Techniques (POKA YOKE)
- » Six Sigma
- » Lean Manufacturing
- » SPC (Statistical Process Control)

- » TPM (Total Productive Maintenance)
- » The "Five S" Philosophy
- » Visual Management Systems
- » Electronic Integration

Development

Suppliers are expected to provide CCM EU with exceptional quality, delivery, cost, and capability to enable CCM EU to meet its business goals and those of its Customers and stakeholders. Action will be taken to improve or remove poor performers and to better utilize Suppliers that excel.

Process Risk Analysis

It is expected that the Supplier has a defined procedure describing the systematic approach used to perform risk analysis and formalize the mental discipline to list and quote all risks. Actions should be taken to eliminate, control, or reduce identified risks.

Key Characteristic Monitoring

Suppliers may be asked to participate in a Key Characteristic Monitoring Program. In these situations, Suppliers will be expected to provide CCM EU periodic statistical process capability data. The Cpk/Ppk values will be reviewed against performance expectations to ensure process control methods are effective.



Pricing

All pricing from a Supplier is considered firm for an indefinite period or as agreed (in writing). CCM EU expects continual pricing improvement and for the Supplier to maintain and/or reduce pricing to benefit both CCM EU and the Supplier. If adjustments are identified by a Supplier that result in an increase in price, CCM EU requires ninety (90) days written notice of request for price adjustment and a presentation by the Supplier specifically expressing the need for the change to include suggestions for offsetting or absorbing the change, unless otherwise determined by the contractual agreement. All requests for price increases need to be submitted to the CCM EU corporate office in Hamburg, Germany. Adjustments that result in a price reduction must be reviewed by CCM EU before any changes are made. Completion of the above increase or reduction procedure does not constitute acceptance by CCM EU. However, CCM EU will gain the ability to review the situation and identify alternative items to aid cost control by CCM EU and its Suppliers.

The Supplier should work collaboratively with CCM EU to develop products and services that allow both parties to continually reduce costs each year. Savings are defined as efforts that result in changes to product design, manufacturing processes, packaging, shipping, inventory management, and any and/or all direct and indirect costs that ultimately lower our mutual costs.



Shipping Documentation Requirements

Packing Slip

The Supplier shall provide a packing sheet or attachments for each separate shipment with the following minimum requirements:

- » Supplier company name and address Note: The manufacturing/shipping address that has been surveyed and approved by CCM EU for the Supplier code listed on the PO must be noted on the packing slip or certification
- » PO number, line item(s), and part number(s)
- » CCM EU dispositioned non-conformance document number(s); if applicable
- » Evidence of CCM EU and/or Government Source Inspection acceptance when applicable

Certificate of Analysis

The Supplier is responsible for ensuring that CCM EU receives 100% defect-free products to the correct print revision level by the agreed delivery date or be liable for any cost incurred due to late shipments or incorrect materials. Unless the PO specifically notes otherwise, the Supplier shall provide a Certificate of Analysis (C of A) written in the local language of the facility to which the C of A is sent (or if this is not available then in English), assuring that all work performed in connection with the PO conforms to requirements therein. The C of A may be a separate document or included on the packing sheet with the following content:

- » Statement of Confirmation
- » Authorized representative's approval via a signature, printed name and title, and date; OR controlled inspection stamp and date
- » Company name, address, and phone number of the Supplier
- » Unique PO number
- » Part number (CCM EU's) and manufacturer's part number as listed on PO
- » Drawing number and revision as listed on PO
- » BOM or parts list revision
- » A lot, run, batch, date code, or serial number for the product
- » Distributors shall attach original manufacturer's Certificate of Analysis with their own Certificate of Analysis
- » In the event of shipping multiple lot codes of the same part number, each lot code and the corresponding quantity must be stated on the C of A

Packaging Requirements

CCM EU Sustainability programs require all Suppliers to adopt processes that minimize impact on the environment, including their packaging processes. CCM EU expects all Suppliers to work with us on using returnable/reusable containers, recyclable/eco-friendly materials, and minimal packaging.

CCM EU and the Supplier shall agree upon the packaging, labeling, and shipping requirements. Suppliers providing products on a global scale shall work with the receiving location to ensure the packaging is sufficiently robust to withstand shipment by sea and arrive on time, without damage.

In the absence of specific packaging requirements from CCM EU (in writing) the Supplier shall control packing, packaging, and marking processes to the extent necessary to ensure conformity with minimum industry requirements. Products shipped on a skid must be fixed in a manner that will not allow shifting or damage during shipment. Cartons must be of sufficient strength to ensure that component quality will not be affected during shipment or storage. Bulk containers must have sufficient strength to ensure that the quality of the contents will not be affected during shipment or storage. The top of every bulk container must be covered (lid, cardboard pad, shrink wrap, etc.) to protect contents. Products found damaged upon receipt, while still on the carrier, will not be accepted by CCM EU. The Supplier will be notified of the return so that immediate corrective action can be taken to ensure that supply is not interrupted.

Labeling Requirements

Container labels and packing slips should include at a minimum: CCM EU part number, engineering revision level, quantity, PO number, and line item(s), and product deviation number (if applicable). Some CCM EU sites require the key information on the label to be both barcode and human-readable.

Test Reports

Depending on the materials provided and/or end-Customer requirements, CCM EU may require additional test report documentation be provided with each shipment. These requirements will be communicated in advance to Suppliers.

Suppliers of Age-Sensitive Materials

The Supplier shall provide original manufacturing/cure date, and lot number(s), and the shelf life expiration date (if indefinite or unlimited, so state). The Supplier shall physically identify the shelf-life expiration date on the deliverable product or the unit packaging according to the applicable standard. In addition, the Supplier shall forward any special storage/handling instructions to CCM EU. The Supplier is responsible for determining if an acceptance test report submittal is required in accordance with applicable material specifications. Date-sensitive materials must have at least 85% of their active life remaining at the time of shipping to CCM EU unless otherwise agreed to in advance.

Import/Export Compliance Documents

Country of Origin

All items must list the County of Origin and if requested, the Supplier will provide a Certificate of Origin that meets the requirements of the various Free Trade Agreements which the EU are signatories to.

Harmonized Systems Codes

All articles must list the HS Code or Customs Tariff Number. This information may be accessed at: https://www.tariffnumber.com.





www.CCM-Europe.com