Global Supplier Manual 2025

Issue 2, January 2025

CONCENTRIC

LICOS a Concentric brand

EMP a Concentric brand

ALLIED ENTERPRISES a Concentric brand

GO ENGINEERING

Concentric AB is one of the world's leading pump, fan and thermal management solution manufacturers. We develop innovative technologies which are tailored to the needs of our customers. Our products include oil pumps, water pumps, fuel pumps, fans, thermal management solutions and hydraulic systems.

At Concentric AB, we are committed to delivering excellence in every aspect of our operations, driven by a relentless dedication to customer satisfaction and our success is intertwined with the quality and reliability of our suppliers.

This manual serves as a comprehensive guide outlining our expectations, standards, and processes for supplier quality management. It is designed to ensure alignment with our customer-focused approach, where meeting and exceeding the needs and expectations of our clients is paramount.

At Concentric AB, we recognize that our suppliers are integral partners in our pursuit of excellence. By upholding the highest standards of quality and reliability, together, we can continue to drive innovation, efficiency, and success throughout the automotive industry.

We trust that you will embrace and deploy this point of view.

Riccardo Cavallari
Vice President Operational Excellence
Concentric AB

1.0) Scope / Purpose

This Manual applies to all Concentric, Licos, Allied Enterprises Inc as well as EMP Corporation, that will be collectively referred to as "Concentric".

The intent of this document is to define the quality requirements necessary to ensure a successful partnership between Concentric (CAB) and our suppliers. CAB recognises the Global IATF16949 and ISO9001 standards and other customer requirements as they may apply to the automotive production and relevant service part organizations. Accordingly, all CAB production suppliers are required to establish, document, implement and maintain effective production, quality, and management systems in compliance with these standards. This includes those requirements specified through CAB Customer requirements.

CAB recognize the importance of the Environment and therefore strongly recommend suppliers to pursue the intents of ISO14001, and ISO45001 with regards to Health and Safety. All suppliers, whether certified to ISO14001, ISO45001 or to other local standards, must have processes in place to inform CAB immediately of any breaches of local Environmental or Health & Safety legislation.

1.1) Second Party Customer Approval Guidelines

CAB requires suppliers to maintain and verify all sub-contractor certifications or compliance to ISO9001 or IATF16949 quality system requirements.

1.2) Supplier Approval Requirements

The requirements listed below are minimum requirements for suppliers to CAB. The CAB Quality Team may update these requirements according to new standards, regulations, or as deemed necessary.

- The supplier must be ISO9001 or IATF16949 registered.
- It is the supplier's responsibility to ensure quality standards are maintained by subcontractors.
- Sub-contractors should also be a minimum of ISO9001 approved.
- If a non-ISO9001 subcontractor is to be used, then this must be communicated and formally agreed by CAB. As a minimum, this non-ISO9001 sub-contractor shall have been subjected, by the supplier, to a standard system and product audit, which will continue, as a minimum, on an annual basis. (As part of CAB IATF16949 certification, our customer must give formal approval to CAB if any of our suppliers or sub-contractors are non-ISO9001 approved).

1.3) Supplier Responsibility

- Suppliers should adopt a Zero-Defect philosophy and strive to achieve 100% on time delivery to CAB.
- Suppliers should understand that any PPM target set is not an acceptable quality level but represents a step towards zero defect supply.
- When required by end customers, suppliers of Castings / Forgings or their subsequent supply chain must comply with CQI-27 standards
- When required by end customers, Suppliers or their subsequent supply chain of Heat-treated product must comply with CQI-9 standards.
- When required by end customers, Suppliers or their subsequent supply chain of Plastic Injection products must comply with CQI-23 standards.
- The supplier is responsible for maintaining tooling and any associated equipment to ensure full functionality is retained.
- Suppliers are requested to work on the reduction of environmental impacts of their products and processes via continuous improvement.
- Suppliers should have full traceability of product through their manufacturing processes and supply chain.

2.0) Advanced Product Quality Planning (APQP)

- Suppliers are required to produce advanced quality plans to support the development of all new products and / or services. The plans should follow the guidelines established in the Advanced Product Quality Planning and Control Plan (APQP) manual. The Automotive Industry Action Group (AIAG) publishes this document.
- For catalogue components and components marked as off the shelf, (example: electronics, some fasteners, and some hardware items) and are noted as such by Concentric, these items may not be applicable. In some Concentric sites, a waiver may be requested in regards to PPAP. Please verify with local Concentric site for direction.

3.0) Production Trial Run

- Suppliers must perform a production trial run to verify that their actual production process and any critical sub-supplier process is capable of meeting expected volumes at an acceptable quality level.
- The supplier's process must be able to produce 120% of the quoted volume with production tools and equipment, and in the quoted work patterns, fixtures, and tooling. Production trial run parts may be used as validation samples as part of the PPAP submission.
- For catalogue components and components marked as off the shelf, (example: electronics, some fasteners, and some hardware items) and are noted as such by Concentric, these items may not be applicable. In some Concentric sites, a waiver may be requested in regards to PPAP. Please verify with local Concentric site for direction.

4.0) Production Part Approval Process (PPAP)

- All suppliers are required to obtain full approval from CAB as per the requirements of the AIAG Production Part Approval Process (PPAP) Manual.
- All sample submissions are to PPAP Level 3 unless otherwise specified by the CAB Supplier Quality or Purchasing contact and should be submitted digitally.
- The minimum number of measured samples shall be three, but the number of samples shall be at least one part from each pattern / fixture / machine.
- Unless otherwise agreed upon, all PPAP submissions must be accompanied by a material composition submission on the International Material Data Systems (IMDS – **www.mdsystem.com**) that is submitted to each CAB identity number.
- Many Customers of CAB require material content be reported. Additionally, many regulations require visibility to a product's material/substance content. Material content shall be provided prior to PPAP submission to enable CAB to approve MDS. The request may come directly from CAB and/or through the MCC (Materials Compliance Central system) via 3rd party. The product material content must be submitted as a FMD (Full Material Declaration) MDS via IMDS for automotive parts or via CDX (Compliance Data Exchange) for non-automotive parts. Should a supplier be unable to submit data in CDX for a non-automotive part, they may request an alternate reporting format (Anthesis, BoMCheck, etc.) Submission of IMDS from suppliers who supply to our European locations is mandatory and may be requested if you supply to other regions.
- Suppliers must allow a minimum of 10 business days for processing of all PPAP requests. The 10-day time line is established on date of parts receipt along with fully complete PPAP documentation to the CAB Quality department.
- Unless otherwise agreed, suppliers must conduct annual layouts for CAB drawings with either critical or major features identified to verify continued conformance to the specifications. Re-submissions may be submitted at a PPAP level 4. Level 4 submissions shall consist of at least the part submission warrant (PSW) and capability data for critical and major features. This requirement may be waived by the CAB Supplier Quality contact in the event of the supplier publishing monthly / quarterly capability data for these features.
- For catalogue components and components marked as off the shelf, (example: electronics, some fasteners, and some hardware items) and are noted as such by Concentric, these items may not be applicable. In some Concentric sites, a waiver may be requested in regards to PPAP. Please verify with local Concentric site for direction.

4.1) Change Management (SCR/PCR)

- Suppliers must submit product or process change requests in advance of any proposed changes, including a full assessment of the changes to the Concentric Supplier Quality contact.
- Change requests must be submitted on the appropriate SCR/PCR form as defined by the relevant Concentric site.
- Any change must fully comply with customer requirements and must be validated and approved by Concentric before implementation.
- Suppliers must statistically study all critical, major, and key characteristics unless otherwise directed by the Concentric Supplier Quality group. These elements must be included in the PPAP documentation. In general, Concentric requires a Quality (Cpk) index greater than or equal to 1.67 acceptance criteria for initial studies on critical, major, and key characteristics. Run at Rates will also be a validation process for supplier capability
- Suppliers delivering catalogue components and components marked as off the shelf, (example: electronics, some fasteners, and some hardware items) may submit product change requests that will be evaluated and approved or rejected by Concentric and/or its customers. In the event the proposed change(s) are not accepted Concentric may decide to switch suppliers freely.

5.0) Non-Conforming Parts

Suppliers are required to inform CAB of any risk or potential risk of shipping non-conforming parts. The supplier must provide shipping information to include the following:

1. Non-Conforming Parts concern identified
2. Quantity of parts potentially affected
3. Advice / invoice numbers
4. Crate / Pallet numbers
5. Expected arrival date at CAB
6. Containment actions detail including sort results
7. Confirmation of arrangements to support sorting of parts at CAB and/or its customer.
8. In the event of any recalls or campaigns the suppliers control system must be capable of linking production quantities to production processes to support root cause analysis activities.

6.0) Corrective Action Concern: (CAC)

CAB will notify the supplier when a non-conformance has occurred. Unless otherwise specified by CAB, a response in 8D format is required. CAB prefers the use of their form but will accept the supplier's corrective action documentation as long as it meets the general requirements of automotive problem-solving methods (8D). CAB will provide a copy of a corrective action template, if requested by supplier, with the CAC report. The following items must be completed in association with a non-conformance and CAC request:

- Short-term action and containment of the parts must be communicated by submission of an interim corrective action report within 48 hours of issue. This may involve request by CAB for allocation of third-party agent in order to sort parts. Fixed cost penalties are allocated for each CAC issued as advised by CAB Purchasing as part of general terms and conditions.
- The supplier must respond within 10 days of CAC issue to determine what is to happen with the parts. Failure to respond within the 10-day period will result in the parts being scrapped at supplier expense.
- Establish and maintain a long-term action plan within 30 days of CAC being issued. This should include an in-depth root cause analysis and identify the method used (i.e. 5-Why, Ishikawa/fishbone, FTA (Fault tree analysis)).
- Timeliness of a supplier's response to these due dates is measured and failure to adhere may result in a further corrective action request being issued.

- CAB will review all responses which must include updated copies of any relevant documentation. This may include W.I (work instruction) – Control Plans – FMEA - Signed Training Matrix - Quality Alerts.
- Unacceptable responses will be returned to the supplier for further analysis.
- Repetitive non-conformance, adverse quality trends, or other issues may escalate the corrective process to include but not limited to:
    - Formal process / product audit of the supplier's facility by a member of the CAB Quality department.
    - Focused problem-solving activity with agreed upon measures and targets.
    - Routine reporting to CAB to ensure timelines and action items are completed.

These activities would be monitored by CAB and should include the active participation of senior management from the supplier.

7.0) Logistics and Contingency Plans

Delivering product in line with Concentrics's requirements is a key element in developing a successful partnership between suppliers and Concentric (CAB). To aid with this, suppliers should be considering the following:

- Performing regular capacity to reviews to ensure that short, medium and long-term requirements have been checked with action plans generated in case of capacity shortfall.
- Where feasible the supplier shall maintain FIFO, the FIFO system control must ensure controls extend to rework / repairs and offsite subcontract processes.
- Measuring on time delivery performance from suppliers and to customers and generating action plans where necessary to improve.
- Confirming delivery dates for scheduled requirements within 48 hours of schedules being received.
- Having contingency plans in place in case of disruption to normal manufacturing methods or normal transport arrangements.
- Unless otherwise advised it is the supplier's responsibility to determine the combination and preservative substances that will protect parts and products from corrosion, mechanical damage, debris contamination during manufacture, shipping and storage.

8.0) Performance and Audits

CAB evaluates and selects suppliers based on their ability to supply products in accordance with CAB's requirements. Criteria for selection, evaluation, and re-evaluation are established.

CAB maintains an Approved Supplier List or "ASL" of suppliers that supply CAB with materials and services (including outsourced processes to CAB owned material) critical to the production of quality parts. Approved suppliers are chosen based on their quality and one or more of the following criteria:

- Customer mandated
- Quality Certification
- Pricing
- Acceptable supplier Audit

Suppliers delivering catalogue components and components marked as off the shelf, (example: electronics, some fasteners, and some hardware items) , that are previously approved by Concentric are automatically considered as approved either if they deliver directly or through authorized distributors.

The evaluation consists of the following:

Quality Evaluation– If the supplier is new to CAB, and/or is not third party registered to ISO9001 or IATF16949, a supplier Audit by the CAB is needed.

For customer mandated and CAB suppliers with a quality certification, this requirement can be omitted if deemed appropriate

Additionally, CAB will require copies of the supplier's quality management systems certificates such as ISO 9001 and IATF16949, and other audit results (copies of Government and Environmental Organizations audit results, and Warrants or Certificates of Compliance, if available).

8.1) Supplier Audits

CAB will conduct periodical audits of suppliers. CAB may also audit any supplier that is deemed critical or is performing poorly. Such audits will be based on inputs which could pose significant risk to business performance or customers.

- If issues arise due to findings with audits, CAB may issue an NCR to correct those issues. NCR timing/rules will apply for completion.
- If CAB find that the audit results are not acceptable or the percentage is not high enough, further action may be taken to improve results of supplier.

Suppliers delivering catalogue components and components marked as off the shelf, (example: electronics, some fasteners, and some hardware items) , that are previously approved by Concentric are exempt from such audits.

8.2) Supplier Evaluation

Supplier Performance Evaluations are done to monitor the performance of our critical suppliers and all our suppliers who supply parts used in product we sell to our "automotive" customers. Supplier report cards reporting a running total for the year are sent out on a monthly or quarterly basis to the critical suppliers. Those evaluated are normally rated on Delivery, Quality and Cost, although the content may change or be expanded in agreement with the corresponding Concentric site where the supplier delivers to.

9.0) Appendices

Concentric 8D Master Document

10.0) Supplier Confirmation

We confirm that we have received and understand the requirements of the Concentric Supplier Manual 2024, and will strive to meet all of the requirements.

SUPPLIER NAME	
CONTACT NAME	
TITLE	
SIGNATURE	
DATE	

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8 D Report No | **Date**

Supplier / Customer		Contact Name	
Part No		Contact email	
Part Name		Contact phone	
Concentric site(s) affected			

1. Team

Name	Department
Champion:	Department

2. Problem Description (Definition)

Total no affected (Potential)

Customer	
Despatch	
WIP	
Transit	

3. Containment Action(s) — Impl. Date — Customer Inform Date

4. Root Cause(s) — % Effect

5. Implemented Permanent Corrective Action(s) — % Effect

6. Verification of Permanent Corrective Action(s) — Verified Date

7. Actions to Prevent Recurrence (Include Update of Documents) — Responsible — Impl. Date

8. Lesson Learnt — Champion

Closure Approved by	Position	Date

Document Changes Review	Required (Tick)	Date Completed	Responsible
PFMEA Update Required?	☐		
Control Plan Update Required?	☐		
Op. Instruction Updates Required?	☐		
Process Print Updates Required?	☐		
PM Schedule Updates Required?	☐		
Tooling Change Freq. Update Req.?	☐		
Mistake Proofing To Be Incorporated?	☐		
Have all risks associated with this concern been identified and actioned?	☐		
Other (Specify):	☐		