

Supplier Quality Manual

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1. SUPPLIER QUALITY MANAGEMENT SYSTEM

Supplier shall maintain and continuously develop a Quality Management System based on ISO 9001 standard, certified by an accredited certification body.

All certificate updates need to be communicated and shared with LAULAGUN BEARINGS (LLB). Supplier shall inform immediately LLB in case the certificate:

- has been revoked
- has expired without a successful renewal
- has been temporally suspended

If a recertification is not planned by Supplier, they shall inform LLB at least 3 months before the expiry date.

Supplier shall guarantee that all requirements from LLB are defined, established and revised for all relevant functions, processes and layers across the organization.

2. TOTAL QUALITY AND 100% DELIVERY PERFORMANCE STRATEGY

In the context of quality planning, LLB expects that Supplier develops:

- A “zero defect” strategy, implementing all necessary action in order to achieve this target, through an advanced quality planning, its implementation in production, requalifications and continuous improvement process. All planned and implemented actions shall be shared with LLB under request.
- A strategy for 100% delivery performance.

Supplier shall always have a preventive approach, instead of focusing in error detection.

3. CONTRACT REVIEW. DOCUMENTATION

Supplier is obliged to review all technical documents shared by LLB, and shall inform immediately in case of any discrepancy or missing information.

If Supplier can't fulfil any specification, they are obliged to inform immediately LLB and share all necessary information so that the situation can be evaluated.

Supplier shall transmit all applicable requirements to the entire supply chain.

It's necessary to put special attention on special characteristics, as any deviation could affect product safety, function, assembly, or the nextcoming customer operation. Supplier shall implement processes which are able to track and detect possible deviations on special characteristics.

4. ADVANCED QUALITY PLANNING (APQP)

Supplier shall implement advanced product quality planning activities for the development of new products and processes in order to guarantee quality, cost, performance and deadlines. LLB could request periodical information from Supplier in this phase.

APQP shall include a feasibility study, where all customer specific requirements (CSR) will be taken

into account. These requirements will be communicated to Supplier through Purchasing or Engineering departments from LLB.

The development of a Process FMEA is also necessary and key in this phase, analyzing the risks of each production process. Supplier shall prioritize risks and implement improvement action, always considering Lessons Learned from similar projects.

5. PROCESS DOCUMENTATION. INITIAL SAMPLES (PPAP)

Supplier shall define and maintain retention periods for quality-related documentation: specifications / drawings; PPAP documentation and requalifications; process development and production records. LLB requests a minimum retention period of 10 years after discontinuation of the product / process.

Supplier shall define and document the production process, developing a PPAP presentation for the product/process approval. Samples need to be produced with the definitive production process, and shall be delivered to LLB identified as “Initial samples”. LLB will define the PPAP level in each case. For new products / processes, if nothing else is defined, PPAP level 3 will be requested. The need of producing initial samples and presenting PPAP documentation will be communicated by LLB. Once the product/process is approved, the approved production process shall be followed.

For different reasons – e.g. customer specific requirement, special risk foreseen with the supplier -, LLB might need to perform a process audit (PPAP audit) during the PPAP sample production, informing the supplier sufficiently in advance, as another condition for the approval.

At the beginning of any project, Supplier shall make a special tracking of the process in order to guarantee its robustness, and confirm that it doesn't produce defective products (Safe Launch). This Safe Launch will cover first 3 deliveries by default).

6. CHANGE MANAGEMENT. DEVIATIONS

If Supplier needs to modify the production process (raw material, specifications, production location, process), Supplier shall inform LLB sufficiently in advance, asking officially for a process change.

Supplier and LLB will assess together the opportunities and risks for the change, and if change is accepted, Supplier will prepare PPAP documentation for its approval by LLB.

In case of not being able to fulfil any specification during serial production, Supplier shall prepare and share an official deviation request before sending the material to LLB. If accepted, deviated material shall be clearly identified with the deviation number.

7. TRACEABILITY

Supplier shall guarantee traceability of all products and their conformity (individual / serialized marking is mandatory, when applicable). Traceability shall be defined so that, when a defect is detected, the manufacturer, manufacturing line and product batch, up to raw material, can be traced.

Supplier shall implement FIFO system for all raw material, in-process product and finished product.

8. QUALITY CERTIFICATES

Supplier shall guarantee the conformity of all the products delivered to LLB. Supplier is responsible for the inspection of characteristics defined by LLB, and shall deliver 3.1 quality certificates based on EN 10204 standard for each delivery. Specific documentation to deliver for each critical product is defined in the corresponding ETC document.

9. PROCESS AUDITS

LLB reserves the right to carry out process audits at Supplier's facilities, in order to verify Supplier's processes. The audits shall be previously announced and focused on those areas relevant to LLB.

LLB's staff, as well as its Customers staff (if necessary), shall have access to all areas where production, quality and development of the products supplied are carried out. During these audits, Supplier shall provide the representative of LLB with all necessary documentation and information required.

Reasonable restrictions might be accepted for reasons of company's know-how.

10. CLAIMS, COSTS AND RETURNS

Supplier shall assume responsibility for delivering all products or materials as described in the purchase order and in the specifications agreed with LLB.

In case of any deviation or non-compliance of requirement, LLB could claim Supplier. In that case, 8D report is requested for root cause analysis and corrective action plan definition. Supplier can use their proper 8D template, or LLB's one.

A quick response from Supplier is key in case of claims, so containment actions (D3) shall be communicated in 48 hours as maximum, and root cause analysis and corrective actions (D5) in 5 days. The 8D report shall be closed in 15 days maximum, after having implemented the effectiveness of corrective actions.

All additional costs generated by incidents will be charged to Supplier.

In case of repetitive incidents, or if an incident is particularly serious, LLB might use the escalation process defined in this manual.

For those materials affected which don't fulfil specifications or are suspicious, Supplier shall assume the responsibility for taking them back in less than 15 days. In case Supplier doesn't take the material to their facilities, LLB might scrap the material or charge Supplier for stocking this material at our facilities.

11. SUPPLIER EVALUATION AND FOLLOW-UP. ESCALATION

LLB carries out a frequent follow-up of suppliers and will share annual results once a year.

Annual assessment is done following these criteria (see annex 1):

- Management system certifications
- No. and type of quality incidents

- Delivery performance
- CSR risk level
- Process audits (if applicable)

Those Suppliers who are audited will keep the audit result as their evaluation during the next 12 months. In case the action plan is not satisfactorily closed, the escalation process would be launched.

Total score	Supplier level
≥ 90%	A
75% - 89%	AB
60% - 74%	B
≤ 59%	C

- Supplier shall reach “A” status (Preferred supplier) or “AB” status (Acceptable supplier).
- If reaching “B” status, corrective actions will be requested to the supplier in order to reach “A” or “AB” status in the short term.
- In case of being a “C” level Supplier, escalation process is triggered.

Depending on the criticality of the product/service supplied, LLB determines which escalation level has to be applied in each case.

The escalation process involves different phases:

Escalation LEVEL 0

Supplier has quality problems.

Possible tools / processes to apply:

- Action plans

Escalation LEVEL 1

Supplier is not able to solve problems:

Possible tools / processes to apply:

- Additional action plans
- Controlled Shipping Level 1 (CSL1)
- On-site meetings with Supplier

Escalation LEVEL 2

Supplier needs external support in order to guarantee quality of deliveries.

Possible tools / processes to apply:

- Controlled Shipping Level 2/3 (CSL2 / CSL3)
- Meeting with Supplier Management.
- Quality Development program for Supplier.

Escalation **LEVEL 3**

Supplier is not appropriate for LLB.

Possible tools / processes to apply:

- New Business On Hold: Supplier is not taken into account for future projects.
- Search of alternative Supplier.

After analysis and verification of actions taken by Supplier, their effectiveness is checked and de-escalation can start.

Supplier name:

Date, signature, stamp

Comments:

EVALUATION CRITERIA

Management system certifications (10%)

The requirement is just to have the QMS certification.

- Certified ISO 9001 Quality Management System by an accredited body → 60 points
- Certified ISO 14001 Environmental Management System by an accredited body → 20 points
- Certified ISO 45001 (or equivalent) Health & Safety Management System by an accredited body → 20 points

This parameter supposes 10% of the final score.

Quality performance (60%)

All suppliers start with a Q-score of 100 points in this section. For every NC, depending on its impact, some points will be discounted:

- Critical incident (-10 points): it could impact safety or legal requirement, and affects functionality of the bearing. The issue is not detectable by our internal controls or could suppose a quality cost bigger than 3.000€.
- Major incident (-5 points): it doesn't affect safety or legal requirement, but could affect functionality of the bearing. The issue is detectable by our internal controls or could suppose a quality cost between 300€ and 3.000€.
- Minor incident (-2 points): it doesn't affect safety or legal requirement, and has no impact on the functionality of the bearing. Resultant quality cost is less than 300€.

The Q-score of each supplier is calculated, and it supposes 60% of the final score.

Delivery performance (20%)

The delivery performance of the supplier is calculated comparing the delivery date vs the commitment date of each order. A buffer of 5 days is allowed for suppliers who deliver material by road, and 15 days for suppliers who deliver material by sea (from Asia).

A delivery fulfilment percentage is calculated, and it also supposes 20% of the final score.

CSR risk level (10%)

This parameter assesses supplier's risk level on CSR topics. Criteria for performing assessment is as follows:

	1	3	9	Explanation
Turnover	TO% < 10%	10% ≥ TO% < 30%	TO% ≥ 30%	% of turnover per type of component is considered.
Location	GCI < 25,00	25,00 ≥ GCI < 45,00	GCI ≥ 45	Global Corruption Index of the previous year is considered.
Supplier CSR Self-assessment	"A" level	"B" level	"C" level	Result of last supplier CSR self-assessment.

Suppliers and service providers will be assessed as High, Medium or Low risk suppliers. This is how we proceed in each case:

CSR Risk Level - actions	
Low	No action is required
Medium	Request evidences of self-assessment
High	Request extended self-assessment with evidences or EcoVadis self-assessment

The way of assessing this parameter is the following one:

- Low CSR risk level → 100 points.
- Medium CSR risk level, showing evidences of the self-assessment → 75 points.
- Medium CSR risk level, without any evidence of the self-assessment → 50 points.
- High CSR risk level, with evidence of positive performance in EcoVadis or extended CSR assessment (>50%) → 50 points.
- High CSR risk level, with evidence of non-positive performance in EcoVadis or extended CSR assessment (>50%) → 25 points.
- High risk level, and no evidence of requested actions is presented (EcoVadis self-assessment or extended CSR assessment) → 0 points.

This parameter supposes 10% of the final score.

Total score calculation

Finally, at the end of the year, the score of each parameter is calculated for each supplier, and final score is obtained:

$$\text{Total score} = (\text{Q-certification} \times 0,1) + (\text{Q-performance} \times 0,6) + (\text{D-performance} \times 0,2) + (\text{CSR risk} \times 0,1)$$