

LEANTECHNIK AG

Quality guidelines for suppliers

LEANTECHNIK AG

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Preface

LEANTECHNIK AG is a reliable, innovative supplier of linear gear rack lift drives for use in automation technology. Our most important aim is to ensure that our products always provide our customers with outstanding precision, speed and reliability while simultaneously offering users total flexibility. Our gear rack drives are suitable for use in countless applications: they can be used wherever the high-performance transfer of motion is required. There is therefore no limit to the creative possibilities.

For over 20 years, LEANTECHNIK AG, headquartered in the German town of Oberhausen, has been manufacturing high-performance gear rack lift drives for use in automation technology. Alongside the production and marketing of the two product series lifgo® and lean SL®, the company also manufactures partial and fully functional systems under the brand name leantranspo®.

Our primary objective is to maintain and increase the satisfaction of our customers. To ensure that customer requirements are met and that all quality-related activities are planned, implemented, monitored and improved, quality assurance systems are needed in all branches of the supply industry. This is because customer satisfaction is not just a slogan but also a reality that must be tended to every single day.

The aim of these quality guidelines is to ensure the quality and reliability of the supply chain through partnership-based cooperation.

The LEANTECHNIK AG team therefore works together with suppliers that operate quality assurance systems. Only by supplying flawless products and the best possible service at a fair price can we guarantee the satisfaction of our customers.

The quality guidelines form the basis for business relations and are a component of LEANTECHNIK AG's purchase conditions. They apply in addition to the conditions set out in the purchase contract as well as the specifications defined in the technical documentation.

René Halw

Head of Purchasing/Quality Management

(Computerised document, valid without signature)

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1. Quality management

The supplier is fully responsible for the products and services it supplies. To meet this responsibility, the supplier must operate a quality management system that complies at least with ISO 9001 (current revision). Any further-reaching requirements will be defined in separate agreements or on a product-specific basis (e.g. in drawings).

LEANTECHNIK AG (hereinafter LEANTECHNIK) must be informed of the expiration of a certificate without planned recertification at least three months before the expiration date. New certificates must be sent to LEANTECHNIK as a matter of course, i.e. without being requested. The revocation of a certificate must be immediately reported.

If, for the purposes of manufacturing or performing quality assurance operations on its products, the supplier procures production or test equipment, software, services, materials or other presupplies from upstream suppliers then it must either integrate these contractually within its quality management system or ensure the quality of such inputs itself.

The purpose of the quality management system is to prevent faults and to detect and eliminate the causes of faults and departures from specifications as early as possible. In addition, the supplier must provide evidence of the suitability and operational reliability of its quality management system by performing internal audits. The supplier must grant LEANTECHNIK access to instructions, records and evidence that will allow LEANTECHNIK to verify the suitability and operational reliability of the quality management system. At regular intervals and without being requested to do so, the supplier will provide evidence of the effectiveness of its quality management system in the form of a certificate from an accredited enterprise. LEANTECHNIK reserves the right to perform audits, acceptance operations or monitoring activities at the supplier's premises and those of its sub-suppliers following prior agreement. Such activities do not release the supplier from its quality-related responsibilities.

Continuous improvement process

The supplier company must have introduced a structured continuous improvement process that applies to all products, processes, workflows and services. It must use this (and be able to provide proof of its use) for all products supplied to LEANTECHNIK as well as in the exercise of all activities associated with the business relation. It will provide evidence of its effectiveness through the continuous improvement of its quality performance, price modifications, delivery performance, flexibility and cooperation. The corresponding programs and measures relating to continuous improvement must be submitted to LEANTECHNIK upon request.

2. Scope of validity

The quality guidelines apply to supplies of raw materials, materials and components which are part of semi-finished and finished products produced by LEANTECHNIK, or which go directly to the customer as merchandise, as well as to services.

In general, the conduct of business is subject to the "LEANTECHNIK AG General Conditions of Purchase". These can be obtained from LEANTECHNIK's website.

If the supplier cannot meet one or more requirements of this quality policy, it must inform LEANTECHNIK's purchasing department in writing and obtain appropriate exclusions.

3. Business language

Either the national language of the purchaser or English is to be used as the business language.

4. Supplier authorisation and approval

LEANTECHNIK only purchases series production materials from suppliers that have been approved for delivery. The approval of suppliers is dependent on the positive outcome of a specified supplier selection process, which may include an analysis of potential and/or a supplier audit. Before delivery can begin, the requested information must be provided in full, including a supplier self-assessment and financial information, and a confidentiality agreement must be signed.

5. Purchase order documents

The supplier undertakes to deliver the contractual items in compliance with the provided technical specifications as well as with the binding production documents indicated in the purchase order. To this end, the supplier will check the purchase order documents in order to ensure that the specifications / drawings / production documents are viable for implementation in its works. The purchasing department is available to act as a contact.

The LEANTECHNIK AG General Conditions of Purchase apply to all purchase contracts between LEANTECHNIK AG and the supplier. These can be consulted at any time via the internet at www.leantechnik.com, or can be requested from LEANTECHNIK AG.

6. Risk management

The supplier will implement suitable state-of-the-art methods for the control of corrective actions to mitigate risks and to protect against possible sources of defects.

7. Requirements placed on product and process quality

The supplier is obliged to comply with the relevant technical regulations (e.g. DIN, ISO, VDE, VDI, DVS) when performing operations involving special technologies, special processes or special production procedures.

8. Planning, control and monitoring

The supplier will perform product planning for all the products included in a delivery. This project planning must include a definition of responsibilities and deadlines. At all stages of project planning, LEANTECHNIK reserves the right to inspect all documents. At LEANTECHNIK's request, the supplier must submit a project status report to LEANTECHNIK.

In addition, it is necessary to draw up a catalogue of measures that can be used as an aid if problems occur. The planning must be documented in writing and must take account of the following key issues:

- Production (machines, devices, tools, operating processes, repairs)
- Capacity and procurement (material, machines, operating and test equipment, sub-suppliers)
- Production process and product release
- Handling, storage, conservation, packaging and shipment
- Reliability analysis

9. Technical documentation

The supplier must use a distribution system to ensure that the most up-to-date technical documentation supplied by LEANTECHNIK AG is available to all relevant services and departments at all times. It must also ensure that any documents that cease to be applicable as a result of modifications are removed.

10. Changes

Changes made by suppliers to LEANTECHNIK AG's order documents and technical documentation require the written permission of LEANTECHNIK AG. The permits must be obtained from the relevant purchasing department. Notifications of approval must be kept as proof of approval. If the supplier wishes to modify the conditions that have resulted in the award of series approval (e.g. version, manufacturing and test procedures, packaging, conservation), then the corresponding modifications must be approved by LEANTECHNIK.

11. Monitoring of test equipment

The supplier will use suitable measuring and test equipment and systematically check that this measuring and test equipment complies with the permitted tolerances (calibration) in order to provide proof of correct performance. It is necessary to ensure that only measuring equipment with sufficient measuring capabilities is used. The requirements set out above also apply to production devices that are used as test equipment.

12. Tests

The supplier must plan the product characteristics to be tested, the number of samples to be examined and the resulting documentary records in the form of a systematic test plan which takes account of LEANTECHNIK's specific requirements. The frequency of testing is dependent on the process capability and level of process control. In the case of non-controlled processes, sampling is not permitted. Suitable static processes must be implemented to ensure that the process can be controlled. During the production process, the production state and test decision must be identifiable following both intermediate and final testing. The defined level of test precision will depend on the controllability of the production processes. Unless agreed to the contrary, records must be retained for three years.

13. Final tests at the supplier's premises

The supplier must ensure that only products that conform to specifications are released for shipment. This requires the use of tests designed to examine the capability of the processes. If the results of testing are negative, the supplier must immediately block any further delivery of the production output, check the causes of the defects and implement suitable corrective actions. The purchasing department of LEANTECHNIK AG must be informed immediately.

14. Audit

The supplier must perform regular product and process audits (both as per audit plan and in response to specific events) to ensure that all the specifications that apply to the delivery (manufacture, testing, identification, conservation, cleanness, packaging, delivery documents) are complied with. The results must be documented and include the measures taken, and must be handed over at LEANTECHNIK's request.

15. Initial samples

Before the commencement of series deliveries, initial samples must be submitted to LEANTECHNIK AG for approval. Initial sample inspections are required in the following cases:

- Initial order of new products
- Modifications to products
- After a two-year interruption to production
- Transfer of production to a new production site
- Following the use of alternative materials and designs

The initial samples must be manufactured under series conditions and must be tested for all the quality characteristics set out in the technical documentation. Initial samples must be supplied to LEANTECHNIK AG on the agreed date and accompanied by the initial samples test report (EMPB). Such deliveries must be clearly identified by a delivery note and the indication "Samples". The number of samples will be specified with each purchase order individually. In exceptional cases, initial samples can be dispensed with, but only via purchase approval from the purchasing department and the head of quality management at LEANTECHNIK AG. In such cases, examination of the initial sample shall be performed by LEANTECHNIK at the supplier's expense.

16. Series approval

Series delivery may only take place following series approval by LEANTECHNIK. Among other items, series approval includes

- Approval of the initial samples of parts
- Initial samples test report (EMPB)
- Approval of the quality planning

Tooling costs will only be paid for in full after both the production process and product have been approved, or will be agreed individually.

17. Routing of defective products

The supplier must set up a system for the handling of defective products. This system must include the

- Isolation and exclusion as well as the release or scrapping of affected products
- Locking and release of the devices and tools

18. Reworking of defective products

The reworking of products, in whatever form, is permitted only with the approval of LEANTECHNIK AG. This approval must be provided in writing. The supplier must make sure that any reworking of its products does not have any negative consequences (e.g. dimensions, function, strength, appearance, service life).

19. Processing of complaints

Immediately after the receipt of any complaint from LEANTECHNIK AG, it is necessary to introduce response measures, document these and, upon request, submit them in structured form to LEANTECHNIK AG. If LEANTECHNIK or any third party should undertake any reworking operations in order to ensure continued delivery capacity, the supplier will, following prior agreement, bear all costs incurred by LEANTECHNIK.

If the supplier identifies any defects which might affect deliveries that have already been sent for shipment then it must inform LEANTECHNIK AG of this immediately and notify it of the actions implemented in order to correct the defect. If the supplier is unable to eliminate the defects by the time of the next delivery, then it must inform LEANTECHNIK's purchasing department of this immediately and agree on how to proceed.

In the event of a complaint the supplier will receive an 8D report, which must be filled in by the supplier immediately and returned within seven days. This must be sent to LEANTECHNIK's purchasing department. Outstanding 8D reports are included in the supplier evaluation and have a negative effect on the supplier's performance rating.

20. Complaint costs

Upon delivery of defective parts, the supplier shall, provided that it is clearly identified as the cause, be responsible for the completion of the necessary subsequent improvement, repair, conversion and sorting work and therefore also for the costs involved. Furthermore, all additional costs that are demonstrably caused by the delivery of defective parts across the entire supply chain shall be borne by the responsible party.

21. Products for which documentation is mandatory

These are products for which a corresponding risk is expected in the light of product liability obligations. These products and the associated characteristics are indicated in LEANTECHNIK AG's technical documentation. The supplier is obliged to maintain its documentation in such a way that the uninterrupted tracing of required specifications and test results is possible.

During the compilation and maintenance of the documentation, it is necessary to comply with the corresponding standard regarding proofs and traceability. The supplier must ensure that there is a functioning system for tracing the provenance of items back to sub-supplier level.

22. Product identification

In order to ensure traceability, the logistical manufacturing chain must be designed in such a way that a unique correspondence to the part status (e.g. item number, change index, batch, completed process steps) can be identified at all times. All subcontractors must also implement this identification capability.

Identification labels on shipping documents must comply with the transport and packaging instructions, which are accessible at any time at www.leantechnik.com, and with the individually agreed labelling requirements.

23. Packaging and transport

Delivered products must be protected against the negative consequences of weather, damage and contamination during conservation, packaging and transportation. This also applies to internal transportation and intermediate storage operations. The supplier must ensure that only clean transport containers are used. All transport units must be identified as specified by LEANTECHNIK.

The packaging and transport instructions can be found in the transportation and packaging requirements, which are accessible at any time at www.leantechnik.com. Refer to the purchase order for any special packaging and identification instructions.

24. Supplier evaluation

Suppliers are evaluated on the basis of the collected data relating to the delivered products, adherence to deadlines, pricing, communications and service orientation as well as the supplier's flexibility. The results of the supplier evaluation are used by LEANTECHNIK AG's purchasing department as a basis when awarding new orders and are communicated to suppliers at regular intervals.

25. Environmental protection

The supplier is required to adhere to national environmental regulations. The supplier must adopt an effective approach to environmental management which ensures compliance with the applicable national regulations and continuously and efficiently improves the supplier's environmental profile.

All purchased materials must comply with applicable environmental and occupational safety provisions. This applies to both the country of manufacture and the country of destination.

26. Information requirements

Suppliers are obliged to familiarise themselves with the latest version of the present guidelines. After being updated, these are published on the LEANTECHNIK website.

27. Administration

| Change history | | | |
|----------------|------------------------|------------|------------|
| Revision level | Change of requirements | Date | Created by |
| A | | 15.10.2012 | Mr Halw |
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