# **Quality Manual**







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#### Introduction

This quality manual should be viewed as a summary of our entire quality management system and the quality management culture that characterises our daily life at Link Solutions ApS.

In order to give our partners an insight into our thoughts and approach to quality, we have chosen to prepare this manual, which describes the quality management system that is the cornerstone of our work, both in administration and production.

A high, uniform quality delivered by our professional production unit is an essential part of our DNA. We take pride in the fact that our customers can always expect that they as a minimum are delivered the agreed quality at the agreed time.

If you or your organisation have any further questions about our quality as a result of your review of this manual, you are of course always welcome to contact our quality organisation and/or our top management.

#### ISO9001:2015 & AS9100D

Our quality management system is built on the requirements and principles in DS/EN ISO9001:2015. We have been certified according to ISO9001 for a number of years and ever since these requirements became relevant, we of course also lived up to the new requirements in version 2015.

Process approach and risk assessment of our individual processes are fundamental mindsets in both ISO9001:2015 and Link Solutions ApS' approach to quality management.

All production dedicated to the aviation industry is also produced in accordance with the requirements in AS9100D. This standard is a supplementary standard that is based on the same structure as ISO9001:2015, but which also places a number of additional requirements.

Link Solutions ApS maintains certification in accordance with ISO9001 and maintains a compliance to AS9100D.

## **Quality policy**

Link Solutions ApS develop and manufacture unique, customized solutions and formats of industrial marking of wires, cables and switchboards.

All products are made according to either customer needs and specifications or market requirements. The aim is to ensure expected competitiveness and delivery performance, as well as compliance with established quality and relevant standards and normatives on the basis of a tested and well-documented foundation.

Solutions must be implemented according to the agreed processes, in partnership with our customers and suppliers, and in line with the company's internal processes.

Requirements and expectations must be assessed on an ongoing basis. Any changes and improvements must be implemented, as and when they arise, in a timely manner and with due care and attention.

Management shall show demonstrated commitment and understanding to ensure good collaboration and teamwork throughout the company. This entails efficient flow, visible and established structures, and optimal workflows. Management must also ensure excellent and prompt communication with our customers and suppliers with the aim of nurturing and maintaining good relationships. Management is also responsible for ensuring the personal and professional development of employees, with the promotion of internal knowledge, quality awareness and high levels of satisfaction among the company's stakeholders. Finally, management must ensure openness, receptivity, and a reactive and proactive approach to input from all staff.



All internal and external activities must always adhere to the company's established strategy, vision and values. These activities must form part of our ongoing assessment of our performance and our requirements for resources and capacity to ensure the satisfaction of our customers, suppliers and other stakeholders who are critical to our success.

Our quality work and quality objectives are integrated into our processes and workflows, where the focus on efficiency and continuous improvement is managed through a fully accessible, well-documented and certified quality management system according to ISO9001: 2015 and a fully prepared quality management system according to EN9100: 2018 (AS9100D).

Jesper Pedersen & Carsten Jensen Direktør & salgsdirektør Link Solutions ApS



## **Quality and improvement objectives**

We continuously work with quality and improvement objectives, which we monitor and to which we optimise our processes. The current objectives at Link Solutions ApS are:

#### *Improvement target 1:*

At least 99% of all manufacturing orders for standard products are completed within 10 working days from the registration date of the order in Dynamics NAV.

#### Procedure

Once per month (in connection with P3. Please see action plan B811) the compliance with delivery time is quantified by printing data from Dynamics NAV (OTD report (filtered on own manufactured products via product category code)).

The result is put in a folder in the quality manager's office. In case of non-compliance/negative development, a nonconformity report including analysis and action plan for future optimisations is created.

#### *In charge*

Quality control manager/top management

#### *Improvement target 2:*

Regarding notification of defects: The goal is that the percentage for the notification of defects does not exceed 1%.

items in connection with notification of defects 
$$\times 100 \% \le 1 \%$$

A notification of defect is a filed complaint from the customer regarding product quality, possibly a box, spool, jumbo spool, bulk spool or mini spool.

## Procedure

The percentage for the notification of defects is calculated monthly (in connection with P3. Please see action plan B811) and year-to-date. The statement is created based on the number of notifications of defects as a percentage of the number of product lines (items sold) from the OTD report. The results are put in a folder at the office. In case of non-compliance/negative development, a nonconformity report including analysis and action plan for future optimisations is created.

## In charge

Quality control manager/quality control coordinator/top management

#### Regarding AS9100D.

From time to time, product discrepancies, poor delivery performance or similar registration of deviation /improvement may lead to the need for the establishment of additional quality/improvement targets to ensure continuous improvements in production. These objectives are monitored and quantified monthly.



## The organisation's framework and terms

The organisation's framework and terms (Scope)

#### Scope ISO9001:2015

Manufacturing company of Industrial Marking Materials for Wires and Cables.

## Scope AS9100D / EN9100:2016 (Only applicable for Link Solutions)

Customisation and manufacturing of products for industrial marking of wires and cables for the aerospace, military and defence industries.

## The needs and expectations of our stakeholders

Link Solutions ApS continuously analyses and monitors the individual needs and possibly any specific wishes/expectations of our business partners and other stakeholders.

We do this to optimise collaboration, and to ensure satisfied stakeholders to the greatest extent possible.

Since our stakeholder analysis contains confidential information that is only available internally in our organisation as well as for the relevant stakeholder, we cannot publish our entire analysis in this quality manual.

If you or your organisation are interested in hearing more about relevant parameters for stakeholders in your field, you are always welcome to contact our quality organisation.

## Leadership

## Leadership and commitment

The top management, the quality control manager and the coordinator will periodically, at least once every half-year, review the management system to ensure that the system remains suitable and efficient.

The effectiveness and ability of the management system to live up to the stated objectives and policies is evaluated by the top management.

Furthermore, the top management participates in all external audits, and at the same time, as a minimum, is thoroughly informed about the results and developments recorded in internal audits.

There is a fixed agenda for the management evaluation. Results from internal audits, ongoing evaluations, nonconformity/improvement reporting as well as any supervisory cases are reviewed and evaluated.

The agenda in the event of further quality control meetings will at least always include:

- a) Top management reviews and vouches for the effectiveness of the quality management system.
- b) It is ensured that the quality policy and quality objectives of the quality management system are established and are consistent with the organisation's framework, conditions and strategic direction.
- c) It must be ensured that the requirements of the quality management system are integrated into the other business processes of the organisation.
- d) Use of process orientation and risk-based thinking is promoted in connection with the company's ISO9001:2015.
- e) It is ensured that the necessary resources for the quality management system are available.
- f) How is the importance of effective quality management and compliance with the requirements of the quality management system communicated?
- g) Is the quality management system currently heading in the direction of the intended results? (Analyse input/registrations)



- h) How is the organisation engaged, managed and supported in contributing to the effectiveness of the quality management system?
- i) Status of ongoing improvements. PDCA cycles in progress? Implementation of achieved results and the like?
- j) How are other relevant leadership roles in the organisation supported to exercise leadership in their respective areas of responsibility?

## Quality policy

See previous sections of this quality manual.

## Roles and responsibilities in the organisation

Link Solutions ApS' organisational chart, including the company's quality organisation, is shown in Appendix 1 of the quality manual.

## **Planning**

## Risks and opportunities / Risk assessments

In order to continuously optimise the company's administrative and operational processes, Link Solutions ApS is working on a continuous risk assessment of the company's processes. This risk assessment is continuously updated to ensure continued optimal knowledge of the company's framework, including both opportunities for optimisation and possible challenges.

Through a thorough risk assessment and proactive implementation of controlling measures, we are able to eliminate a number of challenges even before they potentially arise.

The risk assessment itself is an internal work tool that is not published in this quality manual. But if you or your organisation want more in-depth knowledge of our working methods in this context, you are always very welcome to contact our quality organisation.

#### Quality objective

See previous sections of this quality manual.

#### Support

## Resources and competence

Ensuring the company, the infrastructure and resources that are needed in achieving the compliance required by the company's products and services is a matter of course at Link Solutions ApS. Thus, resource considerations are made continuously.

At Link Solution ApS, we consider the employees' competencies to be our most important resource. Therefore, our internal competences are continuously monitored, optimised and registered. Employees who cannot conduct the task they have to perform or manage must always be trained and/or peer-to-peer trained before the employee is allowed to perform the task independently.

The qualification form is completed and updated on an ongoing basis with the functions and training needed to maintain the agreed quality.

Re-training is carried out on an ongoing basis as needed and/or if the requirements for the manufactured products change. The quality control manager and/or coordinator assesses the competencies of the employees, and may at any time, without regard to other circumstances, withdraw an employee from the production and re-train them.



#### Internal and external communication

#### Internal communication

Changes in the quality management system are communicated internally at biannual quality meetings and/or in connection with management's evaluation.

In addition, all significant changes, with an impact on daily work, are regularly notified to the employees. Common information is provided at weekly staff meetings. Information for individual employees or smaller groups of employees is provided orally upon need.

If external conditions influence the company's quality and/or the day-to-day work in production, the employees are also informed about this on an ongoing basis.

#### External communication

All inquiries about the company's quality management can be communicated orally or in writing to the quality control manager or to the coordinator who are in charge of answers.

It is important for Link Solutions ApS that all quality-related inquiries are answered clearly and unambiguously, so that any misunderstandings and potential nonconformities are avoided. Inquiries with requirements and requests regarding the company's products are always clarified with the production manager before feedback is given.

#### *Suggestions for improvements*

Good ideas are always welcome. This applies to suggestions for improvements to the quality management system, equipment and operation. Suggestions can be submitted orally or in writing to the quality manager or to the coordinator.

All submitted suggestions for improvements/changes are processed on an ongoing basis.

## **Operation**

## Operations planning

Quality control in our production is a core value in our business, which is why the following quality control plan is the starting point for all quality controls performed in our production.

Please see Appendix 2.

#### **Production**

On the basis of predefined quality control, a carefully defined control is carried out on all products manufactured by Link Solutions ApS.

All raw materials are controlled by trained employees with regard to reception control upon the arrival of the materials to the company.

After this, the control is differentiated according to the product to be manufactured. In the company's quality management system, there are a number of written instructions on how to carry out regular checks. All employees in the company's production are trained in these control instructions before being allowed to work independently at Link Solutions ApS.

After completion of production, exit controls are also carried out before the products are released, as described below.



If you or your organisation have special requirements, for instance, for increased or changed control, you are always welcome to contact our quality organisation. We would always like to enter into a constructive dialogue on quality requirements, provided that these at least continue to meet our own high outcome requirements.

## Release of products

All orders undergo quality control as described in the quality process plan (see Appendix 2).

All controls in the production at Link Solutions ApS are "stop and release" controls, which means that a product that cannot undergo a control as required, is immediately labelled with a quarantine mark and placed in the quarantine area until the circumstances are clarified. It is then clarified whether the product is discarded, can be modified/changed or subsequently approved.

Only approved items may be driven to the packing and shipping area.

## Control of nonconforming outputs

All permanently or temporarily nonconforming products are, as mentioned, marked with an indication of "quarantine" and placed in the quarantine area until the circumstances are finally settled.

If the circumstances cannot be resolved immediately, a discrepancy report is created. Only approved goods may be driven from the packing and shipping area.

If a nonconformity of a product results in conditions, e.g. a delay in delivery, which affects the overall order, the customer is continuously informed of the cause and development of the case.

#### **Performance assessment**

## Monitoring and measurement

Control/inspection is carried out according to the company's quality process plan. In other words, all products as a minimum undergo reception control, production control and final inspection.

This monitoring is recorded and used for continuous measurement of the quality performance of the company itself and that of its partners'.

Through continuous monitoring and measurement, both production and the quality management system are optimised in general.

The company also monitors and measures, among other things. discrepancies, customer satisfaction, supplier evaluations, etc.

## Internal audit

An internal audit is conducted at least once a year prior to the management's evaluation. The quality manager and/or coordinator, or an external consultant, will prepare an audit plan.

The audit is conducted by the coordinator and/or an external auditor.

The audit is always conducted through interviews, examination of documents and observation of activities and conditions by means of checklists that are prepared by the coordinator/external consultant.

In connection with all internal audits, customer requirements and the relevant legislation/guidelines/regulations applicable at any given time are taken into account.

In the event of changed requirements or registered issues and/or new focal points, a special focus will be maintained on these areas.



Any discrepancies and deficiencies are recorded in discrepancy reports, and an audit report is prepared which documents the audit process and the results as well as recommendations for corrective actions.

The results of the audit are presented to the top management/quality control managers and relevant key employees. Corrective action is followed up by the quality control manager where the discrepancies are recorded in the company's discrepancy system. These discrepancies and corrective actions are evaluated at the next quality meeting/management review.

## Management review

The top management, the quality control manager and the coordinator regularly conduct, at least once a year, a management review.

There is a fixed agenda for the management review/evaluation. Results from internal audits, evaluations, nonconformity/improvement reporting as well as any supervisory cases are reviewed and evaluated by the company's quality organisation.

The agenda of the management review meets the requirements of ISO9001:2015 and certain aspects of AS9100D are reviewed upon requirement.

## **Improvement**

## Handling of nonconformity and management of corrective action

The employee or manager who finds a discrepancy or a potential improvement is responsible for this being recorded as described in the company's quality management system.

The company's quality control coordinator ensures that all discrepancies are indexed in the company's discrepancy system. All nonconforming products are clearly marked with a quarantine label.

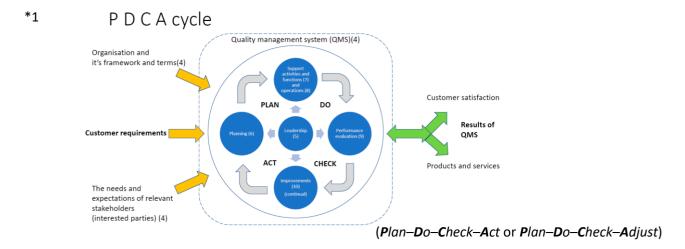
The coordinator and the relevant managers regularly review the nonconformity reports received and assess and decide on the corrective action. Where a supplier or another's partner is responsible for or otherwise involved in the nonconformity, it is ensured that all corrective actions are implemented with the partner(s) concerned.

## Continual improvements to the quality management system

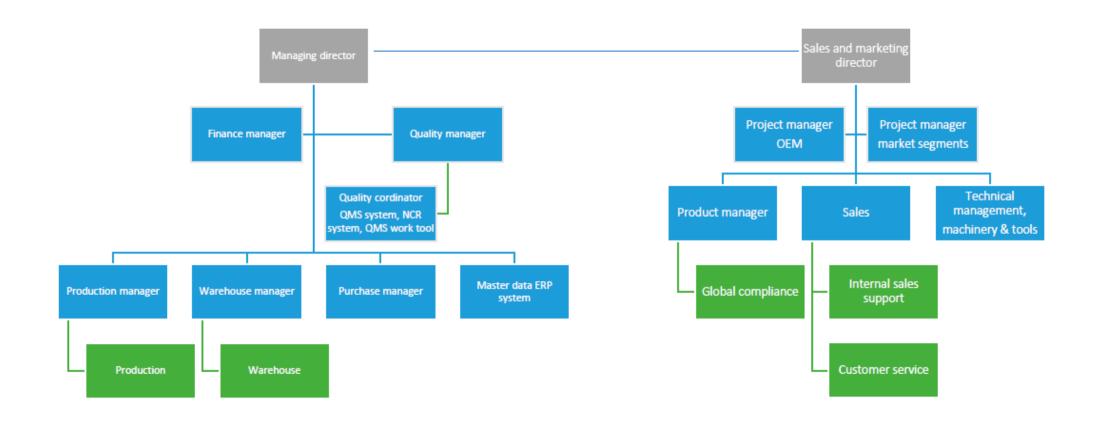
Based on a process-related review, the quality control manager plans and monitors in collaboration with the coordinator, continuously developing the quality of the company.

The PDCA cycle<sup>\*1</sup> is used at Link Solutions ApS as the starting point for continual improvement. The reason/motivation for starting one or more new PDCA cycles may, for example, be results of audits, inquiries from stakeholders, nonconformity registrations or the like.

The PDCA cycle can lead to the creation of one or more quality objectives, which are subsequently measured and evaluated over a specified period.



# Appendix 1 - Organisational chart





Appendix 2 - Quality process plan

