



Quality Assurance Manual

Quality Policy

The purpose of this manual is to document the company's quality system and to instruct and guide its employees whose actions affect product quality and to inform the company's customers what controls are implemented to assure product quality.

The quality policy of De Boer & Van Hout BV hereinafter "De Boer & Van Hout" is based around customer satisfaction, where it is of the utmost importance to supply products that meet customers' specifications and needs.

We strive for continuous improvement in our quality systems and meeting the objectives of our company which are stated below:

- Supplying products that meet or exceed customer expectations
- Providing a service that results in customer satisfaction
- Continuous development of a dependable customer and supplier base

We are committed to continuous improvement in quality and the assessment of the quality system to assure its suitability to meet the requirements of our company and the requirements of our customers.

By meeting our objectives defined within this manual we will be able to:

1. Provide defect free products
2. Provide customer satisfaction by providing:
 - a) On-time deliveries
 - b) All contract requirements are met
 - c) Exceptional product quality
 - d) Exceptional service quality
3. Manage our supplier base and eradicate the possibility for late deliveries and defective products to obstruct a profitable working relationship with our clientele.

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1. Statement of objective

- 1.1 The objective of De Boer & Van Hout is to clearly define the procedures and responsibilities of a total quality assurance program with the ultimate goal being to provide valued customers with a product that meets or exceeds their specifications and requirements.
- 1.2 Provide detailed procedures required to accomplish uniform quality assurance for De Boer & Van Hout parts and products.
- 1.3 Furnish general – purpose information useful in the administration of quality assurance activities.
- 1.4 Any product supplied by De Boer & Van Hout under contract shall be manufactured under appropriate supervision and by European quality standards according to the specifications and requirements set forth by our customers.
- 1.5 A copy of this manual shall be issued to all department managers, sales representatives and manufacturers for De Boer & Van Hout as a required reference.
- 1.6 Revisions to our policy will be issued when deemed necessary and shall be recorded and authorized by the responsible person in the organization. All revisions shall be numbered, dated and indicated clearly as to ensure compliance.

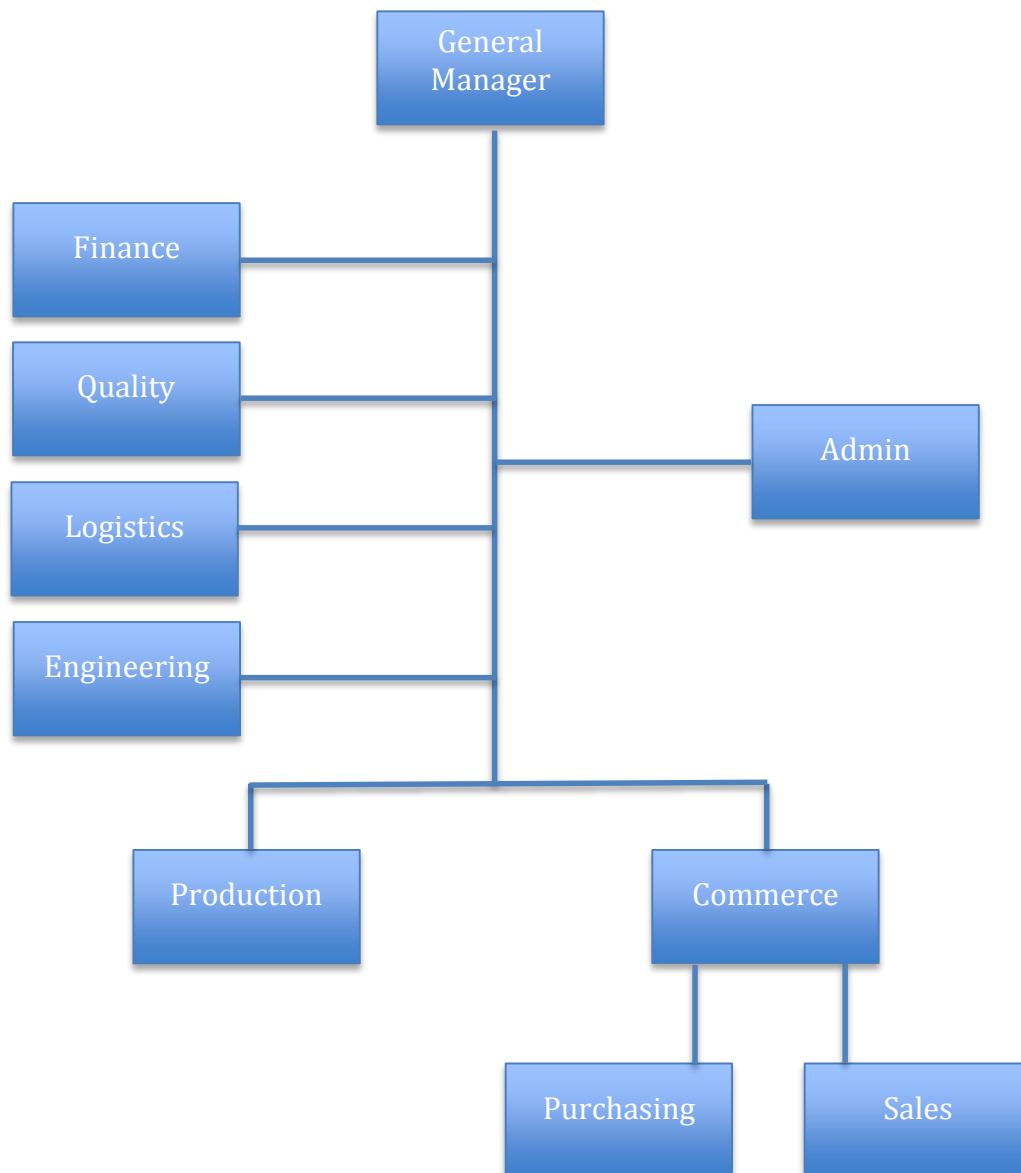
2. Authority for implementation

The general management of De Boer & Van Hout authorizes the policies and procedures contained in this quality assurance manual.

The general manager and operations manager delegate to the quality control supervisor the authority to establish, to document and to administer the necessary guidelines, requirements and controls to effectively implement the statement of objective.

The quality control supervisor shall have the responsibility and authority to assume compliance to this manual.

3. Organizational structure



Finance, Quality, Logistics, Engineering and Admin are staff functions; Production and Commerce are line functions.

4. Sales responsibility

- 4.1 The correct interpretation of customer needs and specifications, whether verbal or written cannot be overemphasized. The sales order is the foundation for the complex chain of events leading up to shipment of a finished quality product. De Boer & Van Hout apply product intake procedures that our sales staff shall follow to discuss and note all-important specifics on product quality and customer expectations and knowledge of the product. This form is crucial to understand the customer's requirements and have the De Boer & Van Hout's operations realize them.
- 4.2 All sales orders and specifications must be routed through the general manager's office for approval. The general manager will require written customer acceptance of particular specifications prior to the sales order being finalized for all first time orders of new products. The purpose of the contract review is to verify that the customer's requirements are adequately defined and documented and have been understood.
- 4.3 On all first time orders customers will be required to fill out part information sheets that details all critical information for that parts such as tolerance, radius, finish, packaging and any other pertinent facts.
- 4.4 Upon acceptance of a sales order, delivery will be based on current backlog at suppliers and time needed to order materials and produce the goods. The production manager shall be consulted regarding unusual customer request and / or specifications before a delivery day is scheduled.
- 4.5 Upon acceptance of the purchase order based on the information above, samples will be provided for all first time parts. These samples will need written acceptance confirmation by the customer prior to production starting.
- 4.6 Copies of the sales order along with other important information are kept on file in the office. Records of all review activities are maintained as evidence.

5. Engineering blueprint control

- 5.1 When necessary the general manager, the operations manager or the production manager shall request additional information from the client's engineering department on the parts or product drawings to make sure that they are of an acceptable quality for reproduction or legibility necessary to complete a sales order based on a specific customer contract.
- 5.2 Any special and pertinent information necessary to the production of a customer's part or product, such as special processes, dimensional requirements, special materials or specific blueprint requirements will be kept as a matter of record in the general manager's, production manager's and quality manager's offices. This information must be reviewed and confirmed prior to acceptance of the order.
- 5.3 It will be the responsibility of the customer to supply De Boer & Van Hout with the issuance and maintenance of up-to-date drawings and specifications and other engineering data. It will be De Boer & Van Hout's responsibility to make sure that information is properly utilized and channeled to the parties involved prior to production.
- 5.4 The operations & production manager are responsible for ensuring that all obsolete data are destroyed and that a complete file with the new information is always on hand and stored and filed appropriately as a hard copy and digitally.
- 5.5 When drawings are revised they must be confirmed and signed off by the customer, thus signifying an up-to-date version.
- 5.6 It shall be the responsibility of the engineering department and production management to ensure all manufacturing data is kept clean and legible.

6. Purchasing department / materials management

- 6.1 De Boer & Van Hout assesses its subcontractors and purchases only from those that can satisfy the company's quality requirements. Purchasing documents clearly and completely describe ordered products including quality requirements.
- 6.2 The purchasing department prepares all purchasing documents. The documents clearly and completely describe ordered products. They include precise identification of the products, reference applicable standards and state quality requirements. The production manager checks the documents and gets them signed off by the general manager prior to release to the supplier.
- 6.3 The company defines subcontractors as vendors who deliver their standard products, as vendors who design and / or manufacture products from the company's drawings or specifications, or vendors who perform processing operations.
- 6.4 All certificates for raw materials will be forwarded to the quality control department for auditing and approval prior to being entered in the applicable customer's permanent file.
- 6.5 For all raw materials and outside processes only those sources, which have been approved by the quality control department as having an adequate quality assurance program or an alternate program to insure a quality products will be used.
- 6.6 Quality performance of all subcontractors is monitored. Those showing inadequate performance are asked to implement corrective actions and are discontinued if there is no improvement or desire to improve.
- 6.7 The production manager is responsible for ensuring that the production that takes place, takes place under desirable conditions and is fulfilled using the specified materials.
- 6.8 The purchasing manager is responsible for ensuring there are multiple selected suppliers for the products productions or for the used materials as to provide De Boer & Van Hout with the flexibility to ensure delivery to its clients in case one of De Boer & Van Hout suppliers fails to deliver.

7. Production responsibility

- 7.1 It is the prime responsibility of the production manager to coordinate all efforts in manufacturing a part or product to all confirmed specifications and customer requirements.
- 7.2 Strict adherence to product specifications and drawings is mandatory in all manufacturing operations
- 7.3 All work orders must be accompanied by quality control approved specification forms and related paperwork necessary to assure a part or product is manufactured to a customer's requirements and guidelines.
- 7.4 No one is allowed to use a drawing which has not been confirmed by the general manager or has been signed off by the customer.
- 7.5 No production or quality assurance personnel are allowed to undertake any job without clearly understanding the work to be performed.
- 7.6 All materials and parts, which are produced by De Boer & Van Hout, must be clearly identified at all times.
- 7.7 The production manager shall take all necessary steps to meet the scheduled production dates, and will keep track so any deviation of the planned schedule will be timely communicated to the customer.
- 7.8 If any person notices any discrepancy on a work order, drawing or product specification the production, operations manager or general managers are to be notified.
- 7.9 It's crucial the production manager makes sure the quality control supervisors use the quality assurance tools it has to its disposal to assure products are produced according to the set specifications (QA forms & PPAP).

8. Quality control responsibilities

- 8.1 The quality control supervisor is responsible for planning; initiating, coordinating & implementing the procedures set out by the general management of the company.
- 8.2 The quality control supervisor shall interface between De Boer & Van Hout's management and the manufacturers to solve quality related problems that may occur.
- 8.3 The quality control department is responsible for maintaining accurate and complete inspection records, documentation and specifications necessary for a complete quality program.
- 8.4 The quality control department shall create reports and record their inspection findings as to create a clear and concise basis on which management can act.
- 8.5 The quality control department shall provide or aide with the inspection of all tooling, materials and procedures.
- 8.6 To optimize unrestricted performance the quality control personnel shall be directly responsible to the general management of De Boer & Van Hout.
- 8.7 The quality control personnel shall strictly use the forms and procedures set by general management to perform their quality assurance tasks before, during and after production.

9. Receiving inspection (prior to inspection)

- 9.1 All raw materials used for production shall be inspected when received by the quality department. It is of critical importance the material used is the material specified in the agreed upon specifications.
- 9.2 Raw materials can only be used in production after De Boer & Van Hout's production manager's signs off on the authenticity of the received materials and their compliance with the set specifications in the order or contract.
- 9.3 If requested, raw materials shall be tested independently in accordance with procedures agreed with the customer.

10. In-process inspection

- 10.1 To assure that the proper quality level and contractual obligations are met, all parts, processes and work-affecting items are subject to inspection.
- 10.2 It is the production managers' responsibility to establish inspection points wherever it is necessary to guarantee the De Boer & Van Hout quality assurance policy.
- 10.3 The preparation, maintenance of the compliance with work instructions shall be monitored by the production manager.
- 10.4 Any tooling or fixtures being used to produce customer parts is subject to periodic inspection.
- 10.5 The quality control personnel should inspect the first item produced and confirm it is according to customer requirements before other items are produced, his findings are to be reported to the production and operations managers.
- 10.6 After first article approval it is the De Boer & Van Hout's quality supervisor's responsibility to ensure the same quality level is kept during production.
- 10.7 The quality control department will execute specific inspection procedures set by the production and operations managers.
- 10.8 Discrepancies that recur either with vendor's production parts or materials supplied to De Boer & Van Hout shall trigger an evaluation and corrective actions plan. If the supplier doesn't sufficiently adhere to these corrective actions the working relationship shall be "reassessed".

11. Pre-shipment inspection

- 11.1 Prior to the shipment of an order, all customer product will be subjected to a pre-shipping inspection on a selected lot of samples. This inspection will be done according to a set AQL standard. The QA personnel should present a full report of the findings to the production manager.
- 11.2 The quality control inspector will ensure that parts are packaged or palletized properly according to the customer requirements and that all outside labels or tags list necessary and pertinent information, which will be confirmed by the customer prior to the order being placed.
- 11.3 If the quality control personnel find that any set specifications or product requirements are not met they should report their findings to the operations managers directly and make sure the goods are stored until further notice.

12. Material review

- 12.1 The purpose of the material review is to determine the future use of any nonconforming raw materials or parts.
- 12.2 In the case a nonconforming material (material other than specified) is received or produced by mistake or intentionally. These findings should be communicated to the production, operations and general management of De Boer & Van Hout who will decide which further steps to take.
- 12.3 If the discrepancy in question is in violation of a customer's requirement the customer must approve the decision of the review board and the decision must be in writing.
- 12.4 Until any such decision is made the parts or material will be on "hold" at the manufacturer's storage facility or at De Boer & Van Hout's storage facility.
- 12.5 Quality control personnel shall have the responsibility to stop production when the supplier takes unsatisfactory corrective action measures.
- 12.6 De Boer & Van Hout shall not delegate material control activities to sub-tier suppliers or service companies without customer approval.
- 12.7 Disposition of customer owned parts must be approved by the customer.
- 12.8 Production & operations management may conduct a periodic audit of the quality control program without prior notice. This all to ensure the set procedures are being followed and improvement is taking place.

13. Internal audit

- 13.1 Production & operation management shall conduct a periodic internal audit of the quality assurance program without prior notice. This all to ensure the set procedures are being followed and improvement is taking place.
- 13.2 Adequacy of procedures related to quality assurance and the QA/QI department shall be audited by an impartial team of members of De Boer & Van Hout management.

14. Corrective and preventive action

- 14.1 Corrective action is taken to help assure nonconformance's are resolved and permanent solutions are implemented Corrective actions are issued recorded and verified in accordance with documented procedures such as our QA files.
- 14.2 Preventive action is taken to assist management in continuous improvement efforts. Preventative actions are issued, recorded and verified in accordance with documented procedures.
- 14.3 Everyone in the organization is responsible for instituting, monitoring, or requesting corrective / preventive actions. Problems are evaluated for potential impact on production processes, safety, quality, performance, reliability, and customer satisfaction. Sources of data and information used in the evaluation may come from quality control, manufacturing operations or customer feedback.
- 14.4 After the cause of the problem has been identified, measures are taken to prevent its recurrence. Nonconforming items are properly disposed of or corrected. The effects of these measures are audited to assure the desired goals are met and the permanent changes are in place, documented and communicated.