

Quality Management – Hand Book

Sensolute GmbH

Hermann-von-Helmholtz-Platz 1
76344 Eggenstein-Leopoldshafen

This QM Handbook remains the property of Sensolute GmbH and may not be reproduced or passed on to third parties for inspection without the permission of the management. It is protected by copyright. Copies distributed to employees must be returned on leaving the company.

Contents:

1	Policy statement	3
2	Company structure	4
2.1	Presentation of the company	4
2.2	Scope	5
2.3	Organigram	5
2.4	Business process overview	6
3	Quality policy and quality targets	7
4	Index of QM documents	8

1 Policy Statement

To fulfil contractual customer requirements as well as for the planning, implementation, monitoring and improvement of all operations relevant to quality and for increased customer satisfaction, Sensolute GmbH maintains a quality management system in accordance with:

DIN EN ISO 9001:2008

- The QM documentation, which consists of this QM hand book and the documents cited within, such as process instructions, is binding for all employees of Sensolute GmbH.
- Thereby the quality policy serves as binding guidelines for all internal and external employees in terms of quality-aware, customer-orientated and responsible action.
- The quality management representative (QMR), as representative of top management, has the task of guaranteeing that the required processes in the QM system are adhered to; regularly reporting on the efficiency of the QM system and necessary improvements, (e.g. by carrying out internal audits) and promoting awareness of fulfilling customer requirements within the company. For this task, he shall receive the support of the management as well as of all employees in the company.

2 Company structure

2.1 Presentation of the company

Sensolute GmbH is an innovative microelectronics company which centres its thoughts and actions on the needs of its customers.

Established in 2006 as a spin-off of the Karlsruhe-based Institute of Technology, Sensolute uses state of the art manufacturing equipment at its Eggenstein-Leopoldshafen premises to develop and produce micro vibration and tilt sensors as well as sensor systems with integrated signal evaluation. As well as these sensor components, our services also range from technical support for customers in electronic development and creation of sample circuit boards, to the mass production of complete consumer electronics.

Our business is determined by the following **company guidelines**:

1. Tasks and targets

As a system provider of microelectronic components we develop innovative product solutions, which technologically occupy a leading position on the world market.

We recognise, elevate and fulfil the wishes of our international customers.

We depend on the skill, commitment, and creativity of our employees as well as advanced and environmentally friendly technology in order to be one of the leading providers in our market segment.

Through clearly defined targets and monitoring of target achievements as well as through the implementation of consistent improvement processes, we want to extend our leading market position further.

2. Customers

Satisfied customers are the measure of our business, they determine our future.

We earn customer satisfaction through:

- cooperation in a spirit of partnership and trust
- needs-based development and finding solutions to problems
- constant exchange of experience with customers
- reliable, problem-free delivery and competent service

3. Employees

Skill, commitment and creativity of our employees are the most important elements behind the success of our company. We help our employees to improve their performance through training and further training; we provide safety at work and a performance - related salary. We provide a good working environment, in that we trust our employees, we treat them properly, communicate with them openly, are tolerant of errors and promote independent working.

4. Quality

We want satisfied customers who can count on the quality of our products and services. We aim to achieve this by placing the customer's needs at the centre of our thoughts and actions and by constantly implementing improvement processes as well as corrective measures for rectifying detected sources of faults.

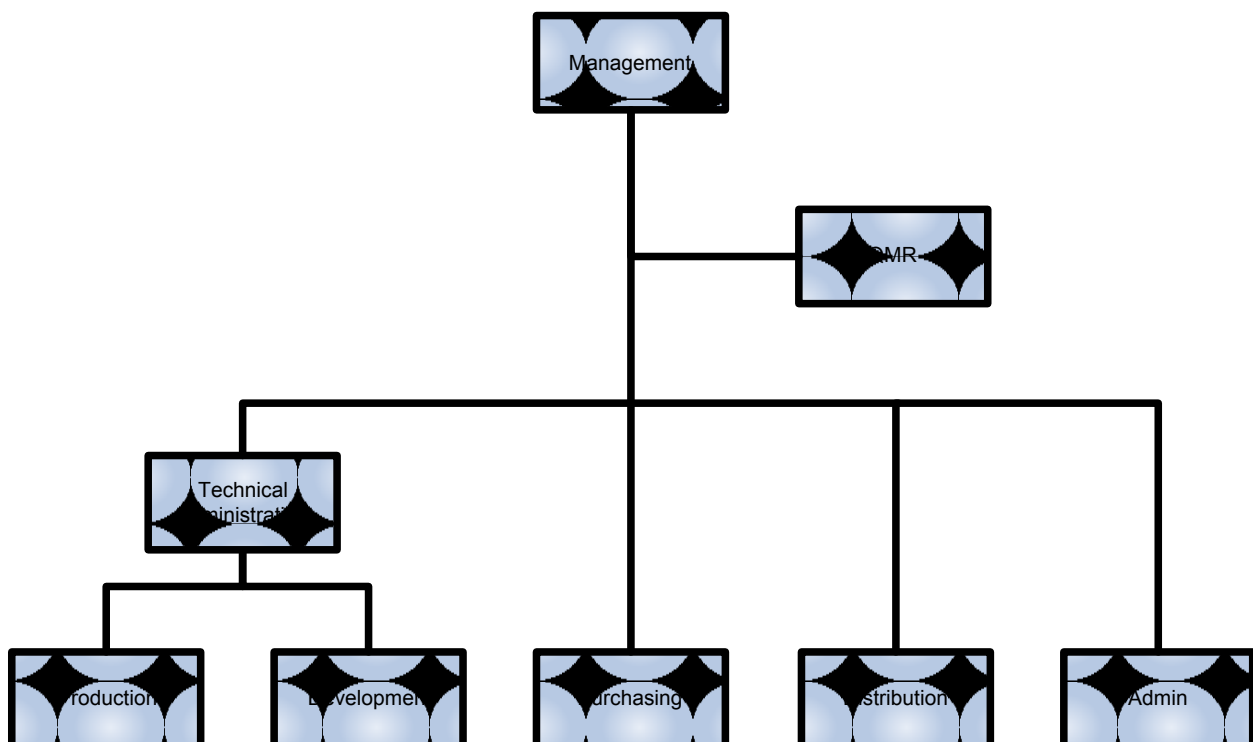
2.2 Scope

Sensolute GmbH is active in the following business fields at its Eggenstein-Leopoldshafen premises:

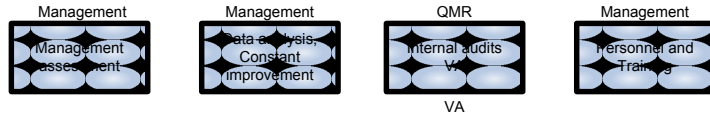
Development, production and distribution of sensors and sensor systems

2.3 Organigram

Sensolute GmbH is currently organised as follows:



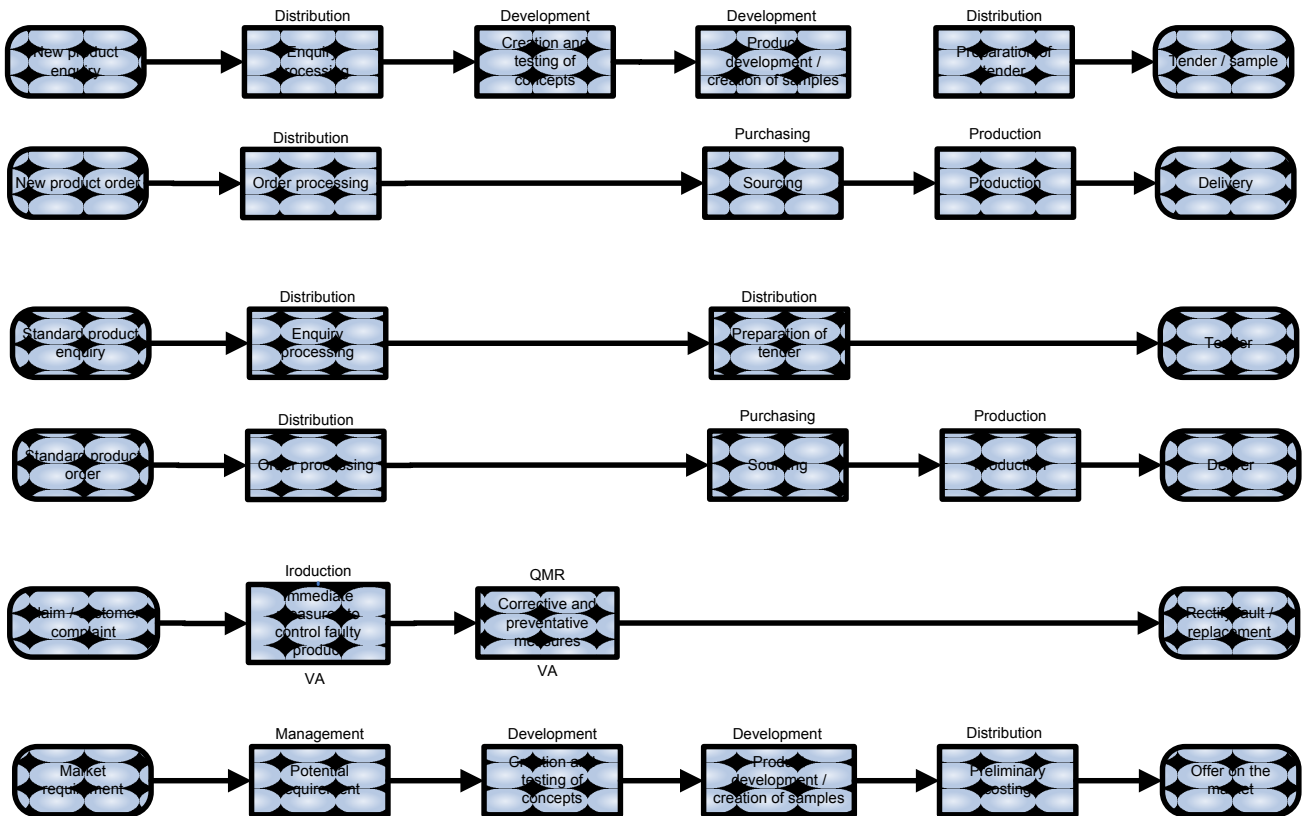
2.4 Business process overview



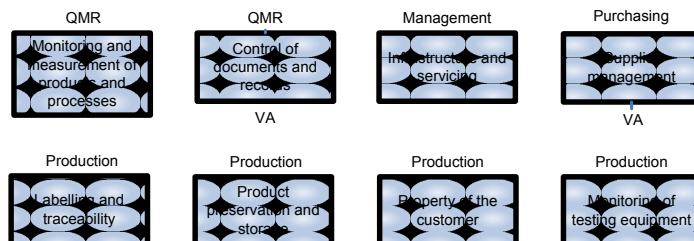
Core processes:

Customer input

Customer output



Supporting processes:



3 Quality policy and quality targets

The quality policy is an integrated component of the Sensolute GmbH company policy with the objective of recognising and fulfilling the expectations of all internal and external parties sharing our aspirations, as well as constantly increasing the degree to which quality targets are fulfilled.

Parties sharing our aspirations	Expectations	Quality targets
Customers, Suppliers	<ul style="list-style-type: none"> • satisfactory quality of our products and services • on-going business relationship 	<ul style="list-style-type: none"> • increase of customer satisfaction by preventing errors and by optimising order processing • improvement of business processes (e.g. order processing and control)
Employees	<ul style="list-style-type: none"> • job and career satisfaction 	<ul style="list-style-type: none"> • optimisation of information flow • improvement of employee qualifications
Management	<ul style="list-style-type: none"> • satisfactory business performance 	<ul style="list-style-type: none"> • optimisation of order-related cost and time management • constant improvement in organisation • increase of market acceptance and attainment of competitive advantages

The degree to which quality targets are fulfilled is measured by defining suitable key performance indicators and is increased by evaluating them as well as through the introduction of improvement measures.

Sensolute GmbH management is committed to constantly improving the QM system, increasing the degree to which quality targets are fulfilled and thereby fulfilling the expectations of internal and external parties sharing the same aspirations.

4 Index of QM documents

QM - hand book:

Description	Revision status	Release date
Quality management - hand book	R 02	22.07.2011

Process instructions:

Description	Revision status	Release date
Control of documents and records	R 02	18.07.2011
Supplier management	R 02	18.07.2011
Internal quality audits	R 02	18.07.2011
Control of faulty products	R 02	18.07.2011
Corrective and preventative measures	R 02	18.07.2011
Manufacture and testing of wafers	R 02	18.07.2011

Working instructions:

Description	Revision status	Release date
Needle tester	R 02	08.06.2011
Semi-finished product cleaning	R 02	07.02.2011
Sensor separation	R 02	07.02.2011
Packaging	R 02	07.02.2011
Taping sensors	R 02	07.02.2011
Visual inspection	R 02	07.02.2011
Sensor cleaning	R 02	07.02.2011
Pick and Placer	R 02	07.02.2011
Wafer coding	R 02	07.02.2011
Soldering evaluation	R 02	07.02.2011

Control plan:

Description	Revision status	Release date
Micro Vibrations Sensor	R 00	30.03.2011

Forms:

Description	Revision status	Release date
Internal	R 02	07.02.2011
Training plan	R 02	07.02.2011
Certificate of training	R 02	07.02.2011
Supplier assessment	R 02	07.02.2011
Complaint report	R 02	07.02.2011
Rejection slip	R 02	07.02.2011
Quality report (German)	R 02	07.02.2011
Quality report (English)	R 02	07.02.2011
Internal product overview	R 02	07.02.2011
Test report	R 02	07.02.2011
Test plan finishing	R 02	07.02.2011
Test equipment spec sheet	R 02	07.02.2011
Work instructions	R 02	07.02.2011
Development report	R 02	07.02.2011
Process documentation	R 02	04.08.2010
Control plan	R 00	10.03.2011