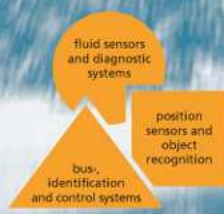




ifm electronic

# ifm quality and environmental management *Handout*

quality and environmental management  
[www.ifm.com](http://www.ifm.com)



ifm electronic - close to you!



Quality management  
of ifm electronic gmbh  
**ISO 9001**  
certified

## Certified quality management



### Marketing / Sales



certified since 1993



### Parent plant in Tettngang



All ifm production sites are certified to ISO 9001





## On the contents

Locations	1
Contents	2
Our company policy and its cornerstones	3
ifm's goals	4
Assessment of the goals	5
Overview of our organisation and processes	6
Insights into the implementation processes	7 - 9
Processes in the background	10
Environmental work	11 - 12

### ANNEX

Current certificate

Current process descriptions

Exclusions

checked / approved  
7 July 2011

Michael Wohlgemut, QR Tett nang

Dr. Thomas May, QR Essen



## Our company policy and its cornerstones

### Quality

- Demanding and encouraging the qualification of employees and personal responsibility
- Awareness of the employee being supplier and customer in the processes
- Employees' ability to reliably implement quality-related and efficiency-related thinking
- Continuous high expenditure for research and development shall give us a technological advantage
- Team spirit within the team and between the teams
- High product quality and accurate technical data are unimpeachable values of ifm

### Environment

- Promotion of decisions and conduct which are wise with respect to the environment and occupational safety
- Careful and economical handling of resources
- Long-lasting products
- Only use of manageable know-how to avoid environmental risks and health risks
- Adjustment of the technological development and production to the state of the art, environmental regulations and occupational safety regulations
- Active information policy towards customers, suppliers, authorities, the public

- Compliance with laws and regulations •
- Continuous improvement •

The Management

7 July 2011

Martin Buck

Michael Marhofer

Bernd Busch

Dr. Thomas May



## ifm's goals

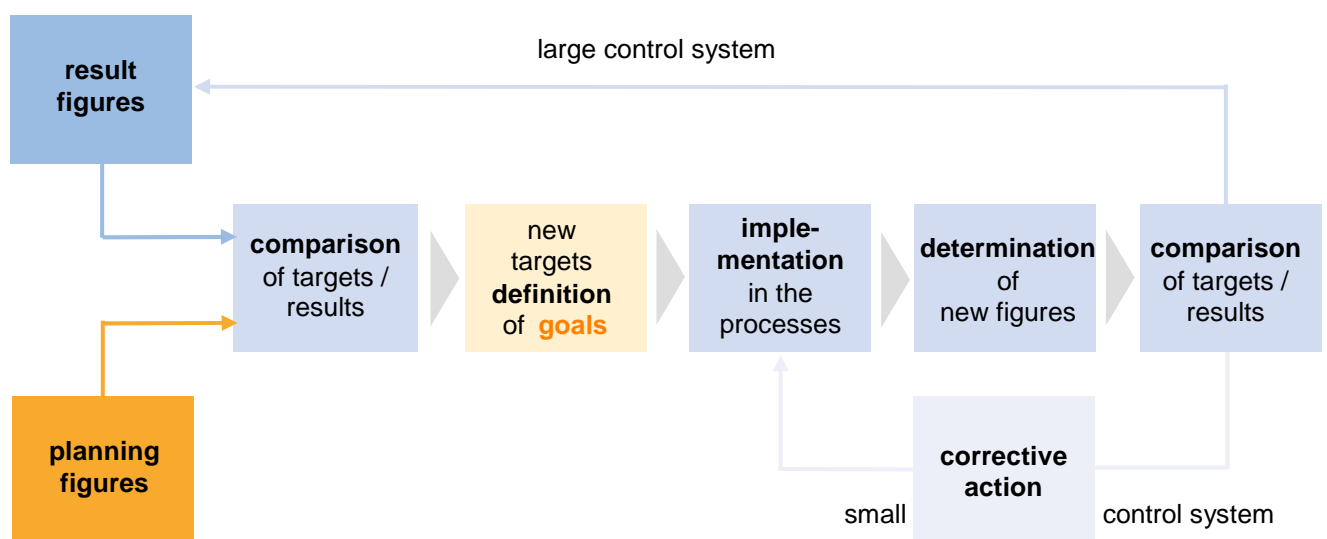
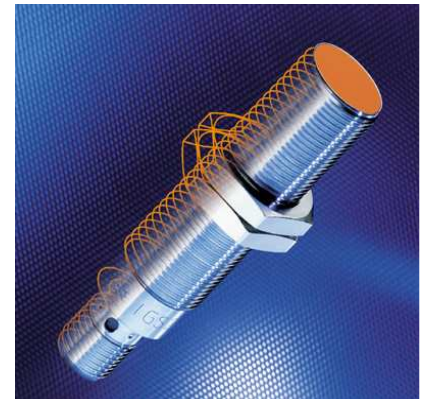
It is one of the goals of ifm to develop and offer products for applications which have large markets or lead to new markets worldwide. So we can develop processes which result in high-quality and long-lasting products – at competitive prices.

## Customer requests become ifm's goals ifm's goals – goals of the employees

ifm is permanently working on innovative solutions which it likes to communicate with the customer and the market. Strategic goals arise which are developed and bindingly fixed by the Management together with the operating sector managers.

Project or sector managers deduce concrete tasks from these goals which are responsibly implemented by the respective employees and teams.

Recurrent processes also have goals. These are defined and measured in figures. If necessary, goals are again deduced from these figures with the purpose of continuous improvement.





## Assessment of the goals

In addition to the monthly planning meetings of the executives a large review takes place once a year.

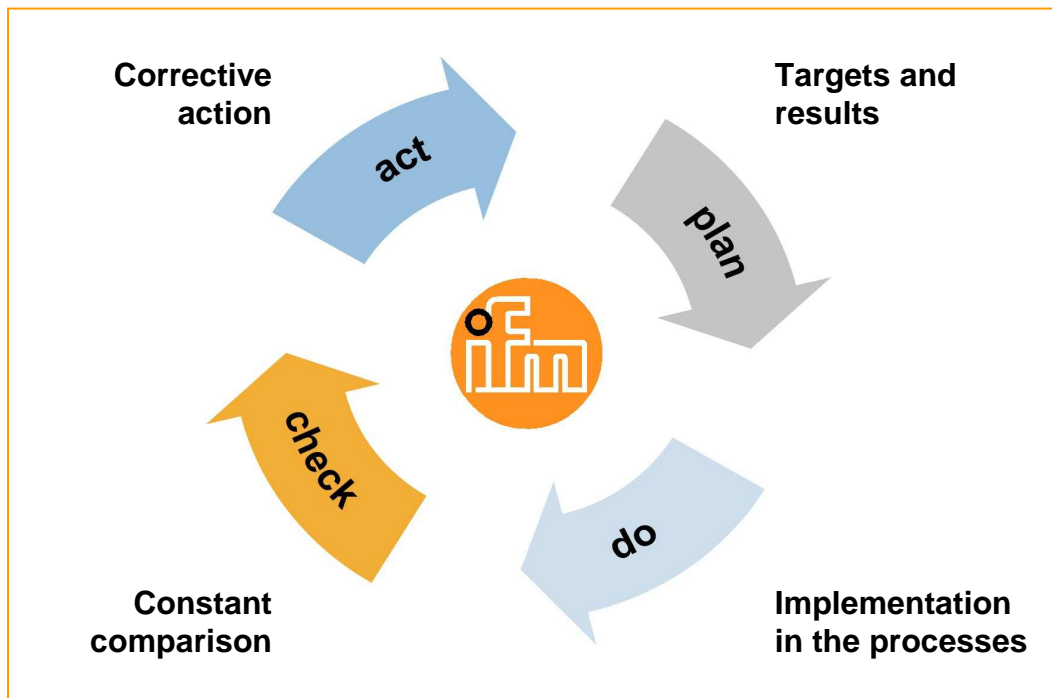
The assessment of the quality management is also carried out during this review by the management. The definitions of the goals are adjusted or complemented.

### Assessed

- results and efficiency of the audits carried out
- results from customer surveys
- figures on customer satisfaction
- figures on employee satisfaction
- figures from the processes
- measures taken after the last quality management assessment

### Our tools

- Data Warehouse
- BaaN / SAP
- CAQ
- Customer Service  
e.g. Lotus Notes  
databases





## Overview of our organisation

Central sectors	Company policy Financial policy		Administration		
	Sales Germany		Export Sales		
Product-oriented sectors	Marketing	↔	Marketing	↔	Marketing
	Product policy	↔	Product policy	↔	Product policy
	Position sensors and object recognition Development / Production		Fluid sensors and diagnostic systems Development / Production		Bus systems AS-interface, Control- & Identification systems Development / Production
	Component placement				
Service	Logistics (purchasing, order processing, production coordination, warehouse, environmental)				
	Human resources				
	Technology (quality management., production equipment, documentation, standardisation, patents)				
	IT (responsible for the definition of guidelines worldwide)				

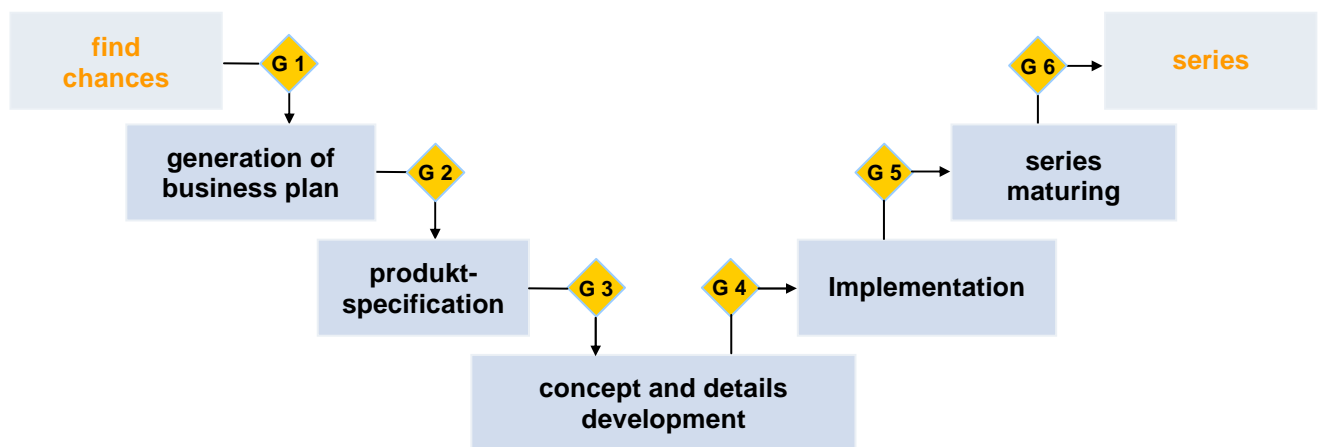
## Our processes

Customer	Management process 1	Management responsibility	Customer
	Management process 2	Resource management	
	Business process 1	ifm Innovation Process	
	Business process 2	Order processing	
	Support processes		

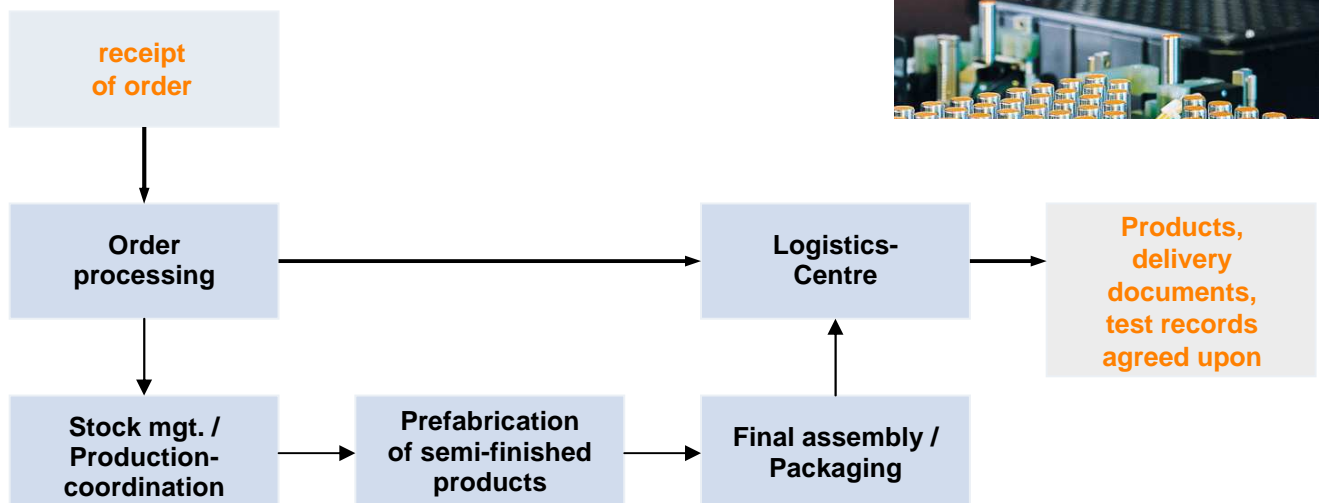


## Insights into the implementation processes

### ifm Innovation Process



### Order processing





## Insights into ifm Innovation Process

### Well considered start

We consider a II reasonable solution options before precisely planning a project. New technological approaches and processes must be technologically and ecologically manageable prior to implementation.

Furthermore the applicable laws, standards and regulations have already been taken into account at that time (e.g. CCC, cULus, CSA, KBA, ATEX, IEC-Ex, etc.).



### Planning and implementation

Quality planning includes the specific processes which are required to fulfil the customers' requirements and monitors them by means of defined quality gates.

In addition to state-of-the-art 3D CAD systems and rapid prototyping we are in close contact with our process-experienced partners in the fields of production equipment and production.

Databases allow access to the knowledge from the daily learning processes at any time, e.g. from corrective action, customer feedback or FMEA's.



### Always up to date with the users

During the development of the product in defined stages we are in close contact with representative users who are willing to test new developments or product optimisations at their facilities – e.g. in the field of mechanical engineering, in the food industry or in the automotive industry.

These simultaneous validation measures help us develop high-quality and robust products with a customer-friendly 'time to market'.





## Insights into order processing

### Quick order online

Approx. 70 branch offices and trade partners worldwide (7 branch offices in Germany) ensure constant proximity to our customers, via the internet even around the clock.

Computer-aided planning allows us to deliver 97% of all incoming orders at the requested date. Each ordered product which is available ex stock leaves our central warehouse in Essen-Steele on the same day – given that the order is placed before 14:00 h



### Reliable control of production processes

A continuously optimised mix of automation and manual mounting allows us to have a high production capacity while being flexible for small lots and customer specific variants.

The production documents ensure that the processes can be reproduced at any time. They can be accessed online and are always up to date.

Position monitoring during SMD placement based on trendsetting image processing technology replaces the complex control chart procedure.

State-of-the-art 'flying probe' in-process tests are part of a consistent test structure.



### Quickly and safely to the customer

Our innovative central warehouse, equipped with our own sensors and system components, ensures that your order is promptly and suitably packed for product transport so that the product reaches you in the quality it had when it passed our final tests.





## Processes in the background ...

We call them **'support processes'** because they comprehensively support our **'value added chain'**:

Internal audits, control of data and documents, tests, approvals – all these support processes have been part of our quality management system right from the beginning. We regularly check that they are precisely linked with the value adding processes. Also, each process is linked with the corresponding documents in databases which can be accessed from every PC at any time.

### Examples :

#### Procurement

We maintain longstanding and reliable partnerships with the majority of our suppliers.

As a prerequisite for a first delivery every supplier needs to successfully pass the initial sample inspection. During this inspection the environmental sustainability of the used materials is also taken into account.

A permanently high product quality is decisive for a long-term cooperation. Other decision criteria are adherence to deadlines and quantity stipulations, flexibility and the ability to improve.

Depending on the target product and customer we have precise agreements with our suppliers as regards having a certain management system.

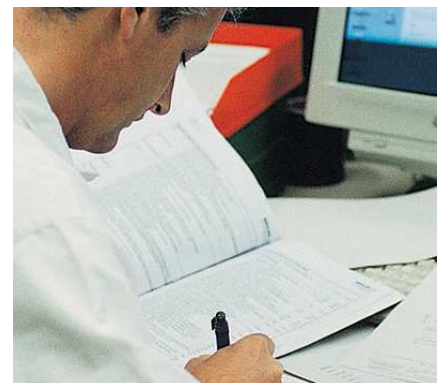
Almost all of our suppliers have introduced a quality management system which corresponds to the requirements.



#### Approvals

While the product is developed or modified the approval procedures to be taken into account are initiated so that at the time of marking the approval of the corresponding approval agency is available (e.g. CCC, cULus, CSA, KBA, ATEX, IEC-Ex, etc.).

The conditions of the approval agency concerning production are implemented in the production work schedule so that compliance with the requirements is ensured for the corresponding marking.



#### Continuous improvement

The employee is the key to our continuous improvement activities. Process results as well as customer feedback are analysed every day and suitable optimisation measures are taken in small and large control systems.

The team of our suggestion system is particularly pleased to honour value-adding ideas with a bonus.



## Environmental work which pays off :

'Growing successfully in security' – this ifm principle has also been influenced by our attitude towards the environment. Successful growth is only possible in the long term if we assume responsibility for the consequences of our actions : Think globally – act locally !

For ifm an increase in productivity does not at the same time mean an increasing consumption of environmental resources. And the fact that we have good ideas pays off for ifm .

An example : Although we have constantly increased our production quantities over the past 10 years we have been able to reduce our amounts of water and waste water by 80% !

The chronology of our environmental activities stretches over two decades – we have acted on the basis of our attitude and did not only react when legal provisions did not let us have the choice anyway.

Here are some milestones in chronological order :

- As early as 1984 waste separation in industrial and special waste
- Changeover to cadmium-free plastics
- Use of cables and housing parts made without CFC and cables without brominated flameproofing agents
- Creation of the department 'Occupational safety and environmental protection'
- Replacement of cleaning agents containing CFC and CHC
- Creation of a hazardous materials store and disposal centre
- Creation of a building services control system to monitor and control the use of resources
- Installation of state-of-the-art circulation systems for cooling water
- Creation of our first ecological balance sheet for the location Tettwang (corresponds to the environmental test to DIN EN ISO 14001)
- Appointment of an authorised person for waste
- Appointment of an authorised person for hazardous materials
- Commissioning of a waste water treatment system
- Introduction of an ifm-internal environmental management system

We help to save the valuable resources of our planet in our production processes and with our products in their applications.





## Water... we help to save it

Water extraction – water treatment – distribution – protection.

We are pleased to be able to offer you products which help to turn these sensible processes into safe processes.

You as the customer benefit from our more than 25 years of experience with the development and production of sensors, control systems and evaluation units – because applications in fluid media have special requirements towards tightness, mechanical stability, long-term stability and temperature fluctuations.

Due to the increasing demand for these products ifm has established the environmental technology department. There you will quickly find the answers to all your questions. Our acquired application know-how from many countries is available to you in this department.

For more detailed information please visit our environmental site on the internet

at [http://www.ifm.com/ifmuk/news/cnews\\_8EZESV.htm](http://www.ifm.com/ifmuk/news/cnews_8EZESV.htm)

We will also be pleased to send you our environmental information for customers.

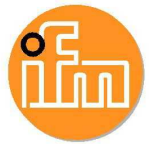




**ifm** - Quality management and environmental management



# Annex



# C E R T I F I C A T E

## DQS GmbH

Deutsche Gesellschaft zur Zertifizierung von Managementsystemen

hereby certifies that the company



### ifm electronic gmbh

Friedrichstraße 1  
45128 Essen  
Germany

for the scope

development, production and distribution of sensors,  
communication systems and controllers

has implemented and maintains a

### Quality Management System.

An audit, documented in a report, has verified that this  
quality management system fulfills the requirements  
of the following standard:

### ISO 9001:2008

November 2008 edition

### This quality management system fulfills the requirements set out by the international and German Road Traffic Regulations

including the type approval object group as listed in the appendix.

This certificate is valid until 2012-06-07

Certificate Registration No. 000697 QM08 ST

Frankfurt am Main 2009-11-05

Ass. iur. M. Drechsel

MANAGING DIRECTORS

Dipl.-Bw. J. Böge



D-60433 Frankfurt am Main, August-Schanz-Straße 21



TGA-ZM-02-90





**Appendix to Certificate Registration No.: 000697 QM08 ST**

**ifm electronic gmbh**

Friedrichstraße 1  
45128 Essen  
Germany

The international and German Road Traffic Law  
was audited regarding the following approval objects:

<b>Number</b>	<b>Applied scope validity of initial visit</b>
<b>22</b>	<b>Electronic Sub Assemblies</b>

This appendix is only valid in connection  
with the above-mentioned certificate.



Quality management and environmental management



## Exclusions

– none –