



MEMBER OF THE NYNOMIC GROUP

# Efficient OEM

Our methods for your product





# The Company



## **Our business model: Efficient and flexible**

Our goal is to be the partner our customers want to seek out every time they face challenges that can be resolved using optical methods or automation. We succeed in rapidly developing competitive and compliant series products for our customers and transferring them to our production facility in Wedel, near Hamburg. Products suit us best when they are complex, whether due to their intended use with its regulatory consequences, the technologies to be used or other constraints under which the product has to function.

We are part of NYNOMIC AG. All 10 sister companies in the Group are united by their enthusiasm for photonics. We work closely together on many projects and inspire each other. This way, we always achieve the best solution between the priorities of time-to-market, competitiveness and quality.

**FOUNDING**  
**1995**

**EMPLOYEES**  
**> 100**

**LOCATION**  
**Wedel, Germany**





# OEM is out core competence

## Technology

- The entire spectrum of photonic innovations
- Robotics, automation, control, software
- Portfolio of components for laboratory automation



## Development

- Creative and agile in concept development
- Efficient in product development
- Life-cycle management
- Obsolescence management

## Production

- Flexible, batch-controlled series production based on LEAN and SIX SIGMA principles
- Short production times
- Fast and efficient transition to series production



## Logistics

- A modern ERP system for fast order processing and end-to-end traceability
- Warehousing and materials management
- Supplier management and qualification



## Regulatory affairs

- Unambiguous product conformity
- Medical devices, in-vitro diagnostics
- Automotive, semiconductor
- Agriculture, railway, VdS



## Service

- In-house and on-site
- Remote maintenance and telephone support
- All service levels available
- EPA and separate disinfection area

## Quality

- State-of-the-art quality assurance system
- Quality assurance focussed on development, production and logistics
- ISO 13485, ISO 9001



# The Development

## Technologies

Leave the beaten track, create own innovations: our interdisciplinary team works according to this principle. Our team is made up of highly qualified engineers who are specialists in optical technology and micro-electronics among other things, as well as automation technology, e.g. in the area of laboratory automation. This wide range of expertise means that we can react flexibly at any time to even the most demanding customer requirements.

## Quality Management in Development

Almost all errors can be avoided even before the first product is manufactured. This is why quality assurance in the development at m-u-t together with change management constitute an independent team within our organisation.

## KEY QUALITY GOALS

### In our Product Development

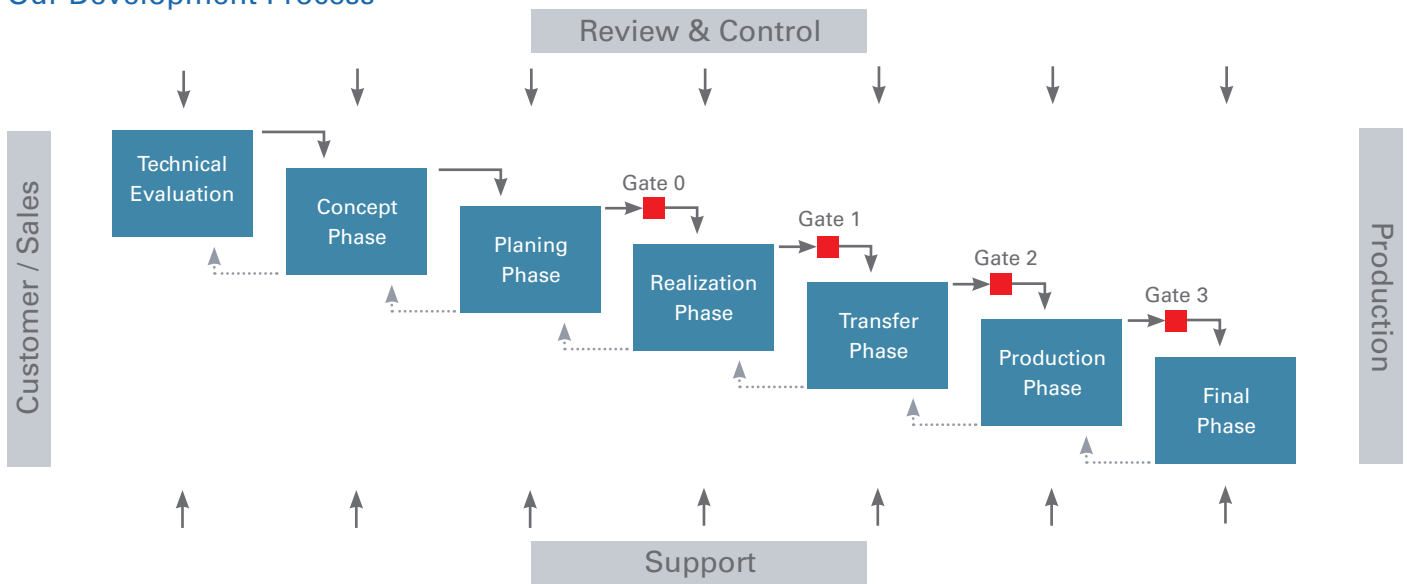
- Solution-focussed, qualified customer support.
- Guaranteed conformity of the products developed with customer requirements.
- Clearly defined, documented development results of efficient design quality.
- Qualified and committed staff who are highly motivated to meet customer requirements.



# PROCESSES

## PROCESSES/WORKING METHODS

### Our Development Process

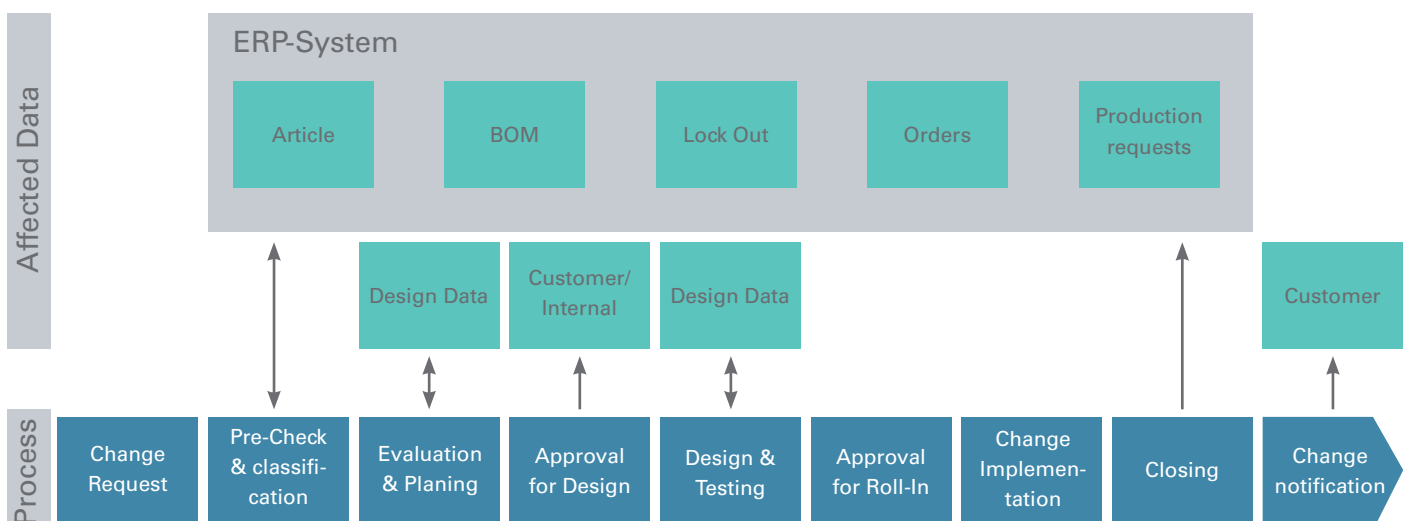


We work according to the classic waterfall model with clearly defined milestones and gates, such as the 'Product Freeze' (Gate 1). We sometimes also use agile methods in the creative concept phase. By involving all stakeholders, we ensure that the product quality meets the customer's requirements. The input provided by Materials Management, Service and, of course, Production is vital for achieving an excellent development result. This approach is reflected above all in our review and approval processes. Following the 'Specification Freeze'

(Gate 0), the next step is to implement the planning with just one goal: deliver your new product to you in series!

The second key process for us is the change process. Product improvements and any necessary changes arising from changes in standards or discontinued components are processed through the change process. All the stakeholders meet on a weekly basis at the changeboard to discuss the status of changes and make decisions for efficiently processing them.

### Our Change Process





# The Production



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## The m-u-t production system

As a reliable OEM partner, we are largely responsible for the quality of the product handed over to the customer. We therefore strive to respond flexibly to the diversity of customer requirements and markets in order to deliver an optimum product quality in compliance with the respective requirements (MDR, IVDR, automotive, etc.). We give our best every day!

Our requirements-oriented, flexible and efficient workstations therefore form an important component of production, enabling us to react quickly to any changes required, such as changes to the number of units.

## High level of professionalism of our employees

All the employees in Production have appropriate vocational train-

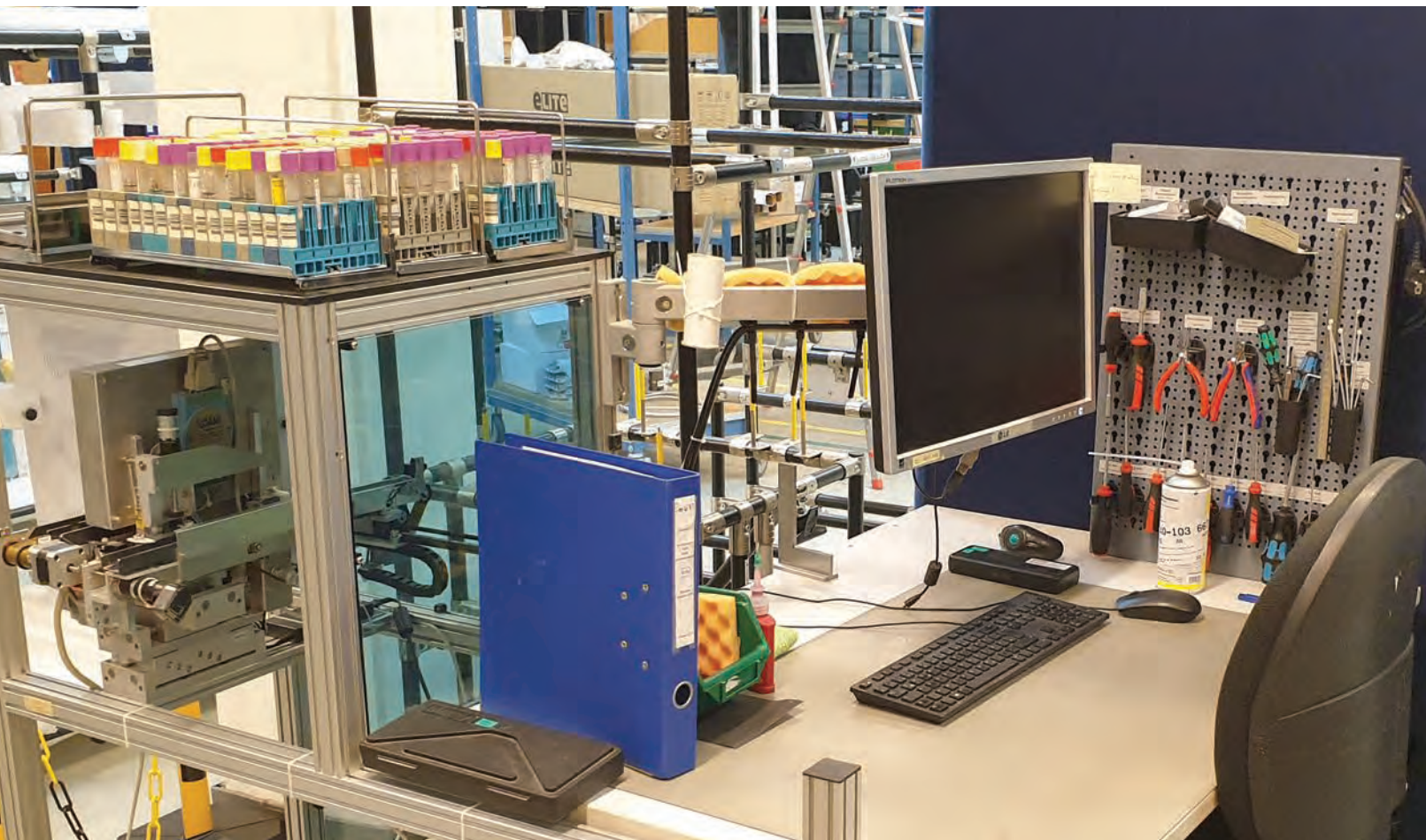
ing, e.g. as electronics technicians or mechatronics engineers. Ongoing training and qualification forms part of our commitment to continuous improvement.

## Service

Our Service department is set up to maintain and repair our products and will also deal with complaints in exceptional cases. We can also make service calls in the field. Usually the service organisation of our customer is responsible for 1st level support and gets a training by m-u-t. The m-u-t Service is usually only used at higher service levels.

## m-u-t Production:

**EFFICIENT, FLEXIBLE &  
CUSTOMER FOCUSED!**



# SERIES TRANSFER

ALSO FOR THIRD-PARTY PRODUCTS

Our production engineers are integrated into the product development process right from the start. We therefore achieve optimum manufacturability in the sense of high efficiency in the subsequent series production as early as in the product design stage. Moreover, the right tools for preventing design errors can also be incorporated at an early stage.

We also enjoy working across departments when building prototypes, even often hand in hand with our customer's employees.



Our Quality Management is firmly interlinked with our Production. This allows queries or problems to be addressed at any time. In addition, spot checks are carried out based on a fixed algorithm. Our pledge:

**NO PRODUCT LEAVES OUR PRODUCTION SITE UNTESTED!**

We are an approved supplier of global companies in the automotive, medical technology, agricultural and transportation sector. The entire company is certified according to ISO 9001 and ISO 13485. VDE, VdS, WEEE, CE UL, REACH, RohS and CM are certainly not foreign words to us.

**QUALITY**  
IN THE PRODUCTION



# Materials Management



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## Purchasing

Our Purchasing department takes care of supplying m-u-t with purchased parts. To this end, Strategic Purchasing first selects suppliers, negotiates the requisite conditions and provides support for the development projects.

Operational Purchasing sees to it that Production is optimally supplied based on this. Our co-workers in the various production areas ensure that the right goods are available for production in ample quantities and at the right time.

## Supplier Quality

We take care of the compliance with article specifications and processes in the area of purchasing, so that only goods of appropriate quality are included in our products and product standards are safeguarded.

We take over responsibility for supplier qualification, initial sampling, incoming goods inspection and

the sustainable processing of complaints so that downstream departments can work smoothly and with compliant goods.

## Sustainability of our suppliers

Our suppliers' compliance with the binding standards covering human rights, working conditions, environmental aspects and good corporate governance forms an essential basis for the Nynomic Group in terms of business relationships. Accordingly, a key supplier selection criterion for us is that suppliers comply with applicable laws and observe internationally recognised standards for environmental, social and corporate governance.

The Nynomic Group achieved a 'Very Good' in the sustainability rating.







# QUALITY MANAGEMENT

AT M-U-T

All staff are trained to understand that everyone is responsible for quality assurance in their own department or area. This general responsibility is supported by QM-experts for production, purchasing and development. We implement the specifications and quality policy/goals set by the management and support all the employees and the departmental management in issues relevant to quality.

The quality management is the first point of call for all questions relating to product quality, process quality and organisational quality. Detailed responsibilities are defined and can be explained on request. Recognised weaknesses or errors in the system that lead to inferior product quality, process quality or organisational quality are recorded and documented during regular QM meetings, actions in relation are delegated and then monitored until their effectiveness is verified.




Quality represents the fulfilment of customer requirements through our processes, products, systems and services that meet economic and ecological demands. We ensure the long-term satisfaction of our customers through outstanding quality. Quality always comes first, both in our thoughts and actions.


What certificates does m-u-t have?	ISO 9001 and ISO13485.
How often does m-u-t conduct internal audits?	Annually according to our audit plan.
How often does m-u-t conduct a management review?	Annually.
Does m-u-t have a continuous process of improvement in place?	Yes, based on three pillars: 1. the whole workforce can submit suggestions for improvement at any time. 2. The m-u-t change process systematically processes product changes and improvements. 3. Points which are irrelevant to the product are dealt with, for example, through a continuous improvement process (CIP).
Does m-u-t have a corrective and preventive process in place?	Yes. If systematic errors are suspected, results from internal audits and the management assessment as well as internal, customer and supplier complaints are processed as part of a corrective and preventive process. For example, an 8D report is used as a tool for this.
Does m-u-t have a disaster/emergency plan in place?	Yes.
How often do you back up your IT?	<ul style="list-style-type: none"> <li>Internally on a daily basis.</li> <li>Externally on a weekly basis by a service provider.</li> </ul>
How do you organise monitoring test equipment?	All testing and auxiliary equipment is classified, labelled and calibrated at fixed intervals.
Are processes checked and approved prior to implementation?	Yes, new processes or procedural instructions are presented to the management team for review prior to release in accordance with the PI document guidance following preparation and review. Processes only become effective following documented training.
How are trainings documented at m-u-t?	Form with proof of effectiveness review.
How do you rate your human resources capacities?	As part of the annual budget planning process for non-productive areas. Based on capacity utilisation in the area of production. Based on long-term project planning in the area of development.



# CERTIFICATES



## CERTIFICATE



This is to certify that the company



**m-u-t GmbH**  
 Am Marienhof 2  
 22880 Wedel  
 Germany

MEMBER OF THE NYNOMIC GROUP


has implemented and maintains a **Quality Management System**.

**Scope:**  
 Design and Development, Production and Distribution of mechanical and electrical components and Systems including associated Software for medical Technology and In Vitro Diagnostics

Through an audit, documented in a report, performed by DQS Medizinprodukte GmbH, it was verified that the management system fulfills the requirements of the following standard:

**ISO 13485 : 2016**

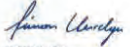
Certificate registration no.:	534921 MP2016SOC
Certificate unique ID	170774676
Effective date	2021-07-10
Expiry date	2024-07-09
Frankfurt am Main	2021-07-05



**DQS Medizinprodukte GmbH**





Sigrid Uhlmann  
Managing Director



Simon Kurling  
Product Manager

Accredited Body: DQS Medizinprodukte GmbH, August-Schanz-Str. 21, 60433 Frankfurt a. M., Germany



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 22880 Wedel  
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**Scope:**  
 Design and Development, Production, Distribution and Service of mechanical and electrical components and Systems including associated Software.

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

**ISO 9001 : 2015**

Certificate registration no.:	534921 QM15
Certificate unique ID	170774677
Effective date	2021-07-02
Expiry date	2024-07-01
Frankfurt am Main	2021-06-29





**DQS Medizinprodukte GmbH**



Sigrid Uhlmann  
Managing Director

August-Schanz-Straße 21, 60433 Frankfurt am Main,  
 Tel. +49 (0) 69 95427-300, [medical.dqs@dqs-med.de](mailto:medical.dqs@dqs-med.de)



## Fertigungsstätte für VdS-anerkannte Produkte

**Fertigungsstätte:**

m-u-t GmbH  
 Am Marienhof 2  
 DE-22880 Wedel

**VdS-Produktgruppe(n):**

- Brandmeldeanlagen

**Fertigungsspektrum / Gegenstand der Produktaudits:**

- Infrarot Kameraeinrichtung zur Temperaturüberwachung im Brandschutz, Typ IGNI5


Hiernit bescheinigt VdS Schadenverhütung die Durchführung von Maßnahmen zur Produktüberwachung in der genannten Fertigungsstätte.

Die Fertigungsstätte erfüllt die Anforderungen an die Fertigungsqualität gemäß den Richtlinien VdS 2344 und VdS 2841. Dies wird durch VdS Schadenverhütung regelmäßig begutachtet.

Das Intervall der Produktüberwachung ist in den Richtlinien VdS 2841 festgelegt.


Köln, den 08.07.2020

**i.A. Tobias Lin**



Produktüberwachung

**i.V. Peter Mathieu**



Produktauditor

## VDE Prüf- und Zertifizierungsinstitut

**GUTACHTEN MIT FERTIGUNGSÜBERWACHUNG**  
**CERTIFICATE OF CONFORMITY WITH FACTORY SURVEILLANCE**

**m-u-t GmbH**  
 Am Marienhof 2  
 22880 Wedel

ist berechtigt, für ihr Produkt /  
 is authorized to use for their product

**Meß- und Prüfgerät**  
**Measurement and test equipment**

die hier abgebildeten markenrechtlich geschützten Zeichen  
 für die ab Blatt 2 aufgeführten Typen zu benutzen /  
 the legally protected Marks as shown below for the types referred to on page 2 ff.



REG C769 oder/oder



oder/oder VDE-REG C769

Geprüft und zertifiziert nach /  
 Tested and certified according to

DIN EN 61010-1 (VDE 0411 Teil 1):2011-07, EN 61010-1:2010-10  
 IEC 61010-1:2010  
 IEC 61010-1:2010/AMD1:2016



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 VDE Testing and Certification Institute  
 Zertifizierungsstelle / Certification

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**Any questions?**  
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