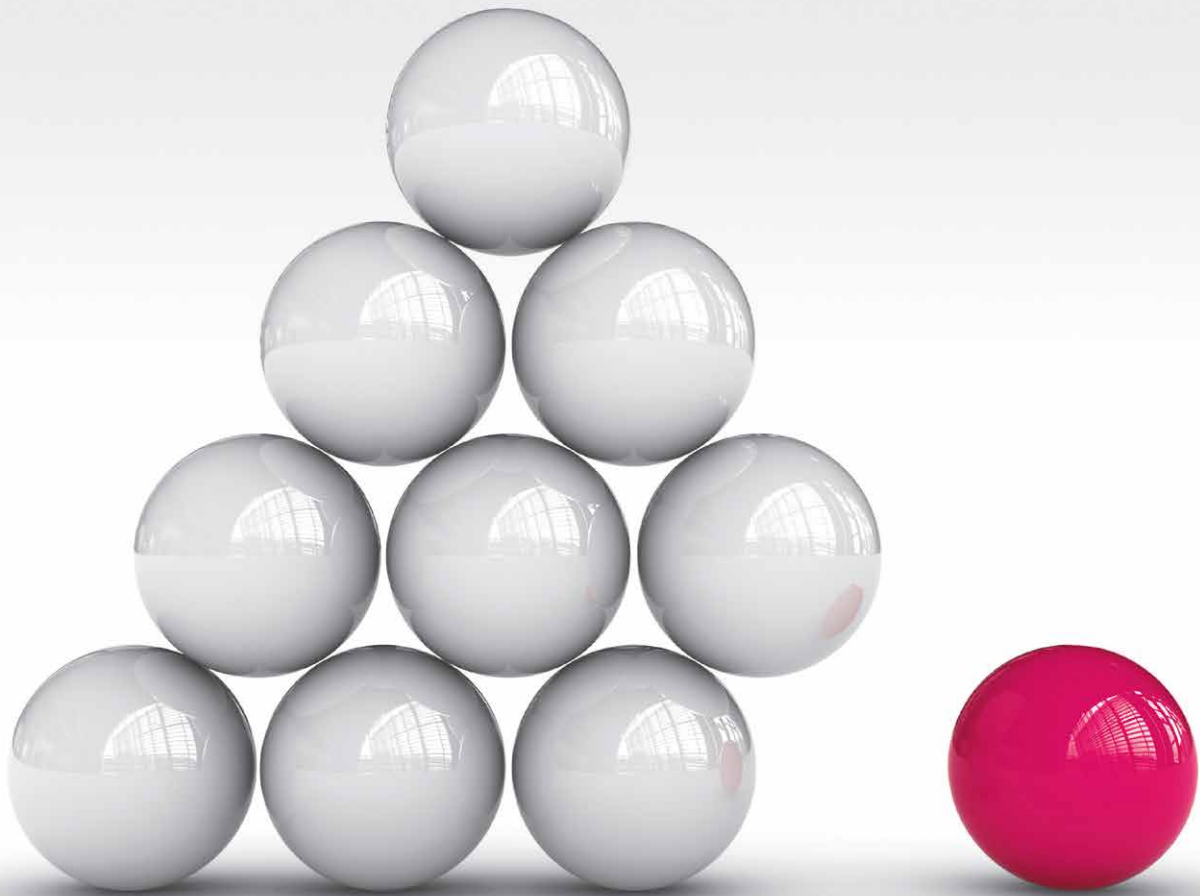


# Measure – Test – Automate:

We ensure the Quality of your Products



Ziemann & Urban GmbH

Prüf- und Automatisierungstechnik



# Perfection

Partner to Leading Industrial Companies in our Role as Testing and Inspection Specialist for Over 25 years

With Ziemann & Urban GmbH you get a partner who provides you with individual solutions combined with experience, innovation and flexibility. The following pages will give you an overview of our range of experience and an idea of what you can expect from Ziemann & Urban GmbH. We are looking forward to your request.

## Customized and Reliable

Ziemann & Urban GmbH has evolved from an engineering office for image processing to an established provider of turnkey solutions for test automation and quality assurance. Small to medium sized companies and global corporations alike rely on our testing and measurement technology, which is always custom-developed but, however, is always based on our many years of experience and defined quality standards. You therefore receive a solution that is tailored to your needs, certain in the knowledge that the success of the underlying concept has already been proven in numerous other customer installations.

## Ziemann & Urban at a Glance:

- We specialize in complex tasks
- Our solutions are used in a variety of industries, but in particular the automotive, plastics, semiconductor and medical engineering sectors
- All testing and measuring methods from a single source
- In-house development and production
- Your OEM partner: our products as part of your solution
- 40 employees in areas including design, software and electronics development, production and service
- Certified to ISO9001:2015



# Innovation

Custom made Turnkey Solutions for Industrial Quality Assurance and Test Automation

Increasing automation while at the same time boosting process and product quality – the demands of industry increase from year to year. In addition, compliance with legal requirements, such as the traceability of products and their components, makes the visualization and documentation of production processes indispensable.

## Peak Quality Thanks to Image Processing Systems Developed In-house

For over 25 years, we have been developing our own image processing systems that are used with tremendous success in all manner of environments. This software expertise holds one of the keys to the flexibility and quality of our solutions, characteristics that our customers have confirmed.

## The Intelligent Combination of Various Measuring Techniques

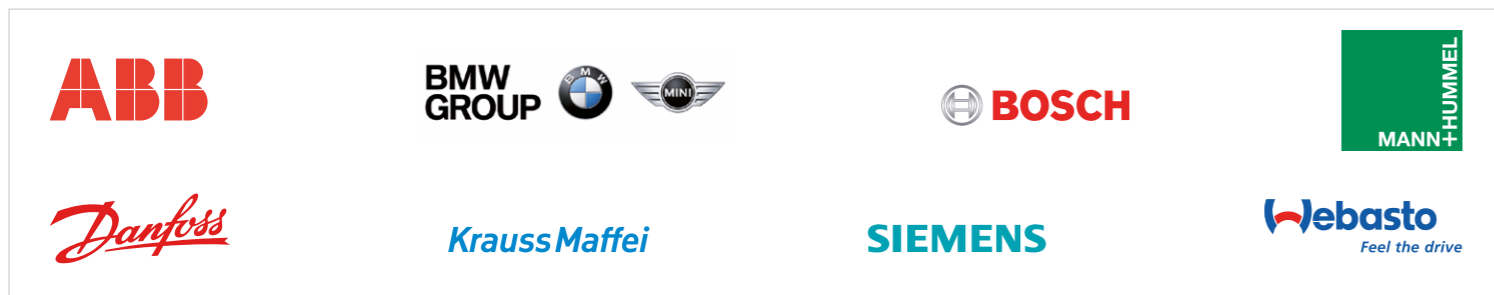
For some processes, quality control takes the form of optical, electrical, sensor-based, acoustic or tactile measurements. The ability to measure different physical parameters using the various techniques required to do so, inspect them, document them and visualize them is what sets our solutions apart from the others.

## Turnkey Solutions for your Complex Requirements

Whether you are an OEM client wanting to integrate our products yourself into a wider solution, or whether you want us to provide the entire solution for you: we can take care of every stage of development, design and production (in collaboration with highly skilled partner companies).

## Support for our Products' Lifecycles

Even once our products are yours, we remain by your side as your partner. We can monitor our systems via remote connections, for example, and adapt them as required. And of course, we also have a highly skilled service team that can be on site when you need us.







# Automotive

Faster Test and Handling Processes Combined with Enhanced Manufacturing and Product Quality – Everything for the Car of the Future

## Individual, Flexible, Integrated

The automotive industry is altering in a way which will fundamentally change cars. Of course, the processes it uses will have to change too, bringing more flexibility to the individual steps without losing sight of the overall picture. In this context, we provide solutions which can test, measure, visualize and document under virtually all conditions.

## Combination of Different Measurement Technologies

Monitoring production using sensors, visualizing individual operations / results or checking the product position in the production process – in the automotive industry, various measuring technologies almost always have to be combined. In this way, Ziemann & Urban makes possible precision and time savings you would never have thought possible in your production environment.

## Our AUTOMOTIVE Expertise at a Glance:

- High-precision 100% measurement and testing of components / assemblies in rough industrial environments and under production conditions
- 2D/3D measurement in production environments
- 2D/3D position detection for robot positioning
- 100% check of components of relevance to safety with database (requirement to document for traceability)
- Final check of complex electromechanical assemblies with function test and adjustment gauge
- Assembly inspection of mechanical components
- From low-cost and flexible manual test station to fully automatic assembly
- Test and packaging facilities
- Testing interior assemblies (door panels, side panels, dashboards, etc.) for complete and correct assembly including light test / light measurement for ambient and contour lighting
- Testing of exterior assemblies (bumpers, convertible roofs, etc.) incl. sensors (PDC, ultrasound, radar, bus modules LIN / CAN)



# Plastics

We are Helping the Plastics Industry Remain a Key Industry in Germany

## 100% Control for Large Volumes – in Real Time

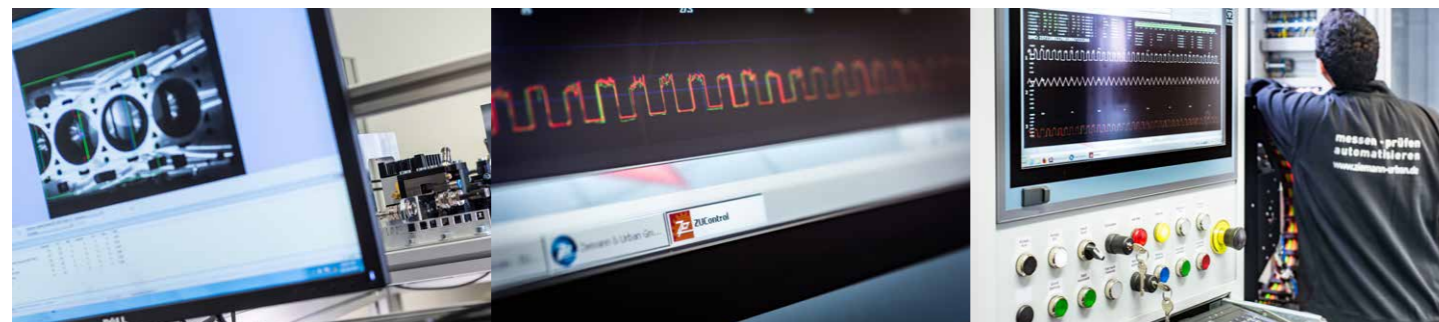
Innovation and speed are key parameters in the plastics market. The industry needs scalable systems for optical checks inspection and measurement visualization which enable large quantities as well as rapid product changes. And which provide correct results regardless of the production environment.

## Integration in Existing Solutions

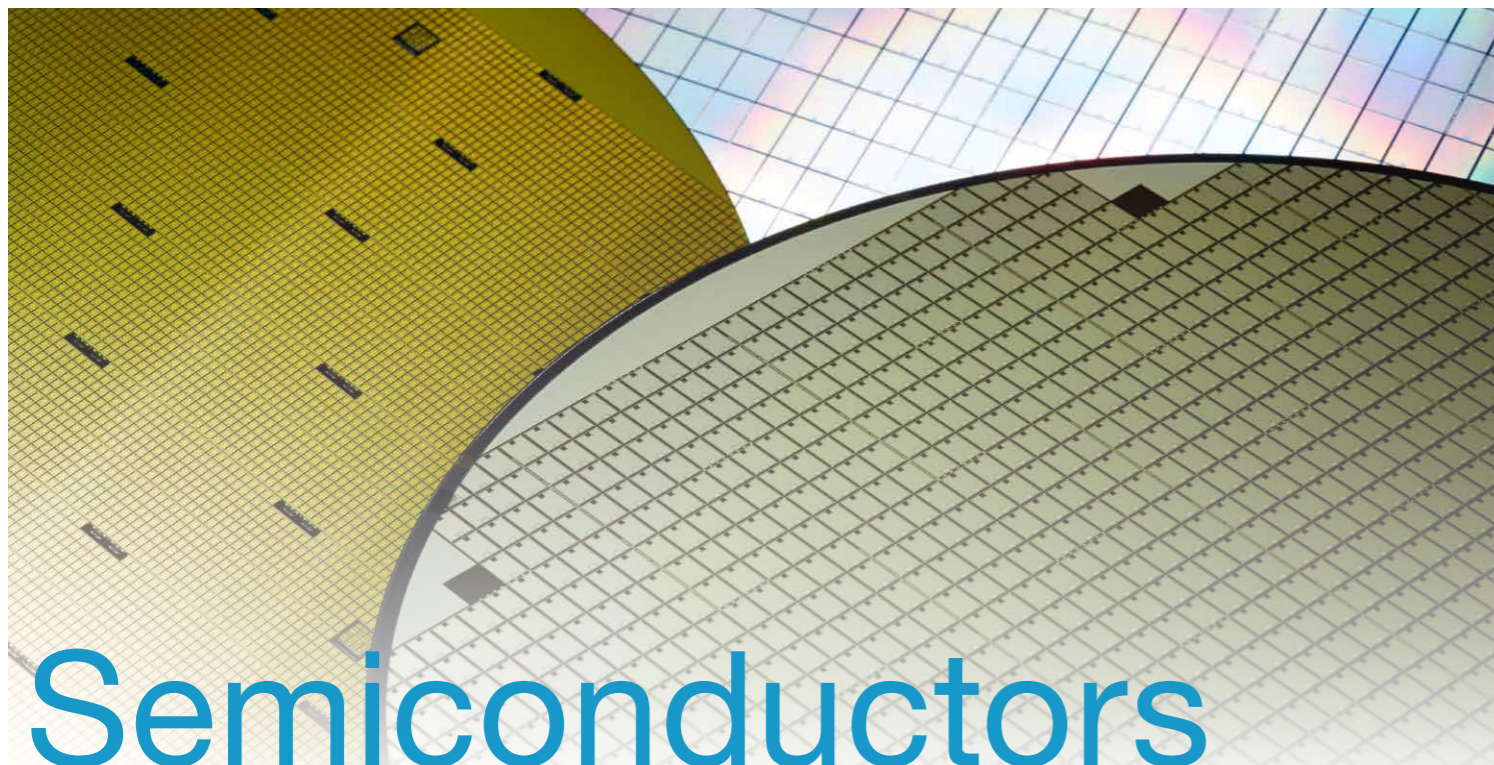
As an engineer, you can expect your partners individual components to fit perfectly into your overall concept. Our years of experience in working with prime contractors guarantees you perfect integration – and thereby safeguards your levels of quality.

## Our PLASTICS Expertise at a Glance:

- From low-cost inline image processing with intelligent cameras to highly complex multi-camera systems
- Just-in-time monitoring of production-critical product parameters
- Position detection in flexible robot cells (“bin-picking”)
- Measurement and checking of inserts after insert injection molding
- Checking the injection molding process for multi-component parts
- Completeness check of foamed seals
- Squirt check for critical plastic parts
- 100% inspection of connectors (raster dimensions, coding, swash circumferences, contamination, insert moldings, assembly checks etc.)
- Flexible manual test stations with rapidly interchangeable holders for several component types
- Inline integration in your production line







# Semiconductors

## Mighty but not Small: Prospects for the German Semiconductor Industry

### The Roots of Ziemann & Urban

Before founding the company, the owners worked in the semiconductor industry and the experience they gained there is built into solutions for this sector. Even though rapid development of the global semiconductor industry has radically altered the market, we still believe that there are plenty of opportunities for semiconductors made in Germany and we provide high quality products and solutions, especially for assembly. These cover quality assurance, print inspection, lead inspection, positioning, electrical tests and much more.

### The “Flexible Chip Mounter” from Z&U for Small Series and Laboratories

As well as solutions for special processes such as optical inspection and measurement of semiconductor chips before and during a pick & place process, we also provide standard solutions.

For example, the “Flexible Chip Mounter” FCM 4080, a well proven reliable system for a wide range of customers in the semiconductor industry.

The FCM is an efficient, robust, flexible and low-cost alternative for companies with small to mid-sized production volumes.

### Our SEMICONDUCTOR Expertise at a Glance:

- Pick & place processes for semiconductor chips and SMD components
- Dispensing and sealing processes for semiconductor assembly
- Systems for checking quality and measurement on semiconductor chips and wafers
- Optical and electrical classification of semiconductor chips in the wafer
- Reel-to-reel component inspection in the blister tape
- Solar cell inspection
- Alignment of components using image processing for subsequent processing
- Bond pad checks for damage and dirt
- Gluing and aligning of power electronics including application of adhesive
- Assembly equipment with position corrections



# Medical Technology

## Our Aim for the Medical Technology Industry: More Innovations for Improved Quality and Health

### Perfect Quality inspection of Production Stages and Products

The medical technology sector has an excellent reputation for its ability to innovate and its large product ranges. We therefore need to continually develop our solutions to satisfy the sector's ever more stringent requirements.

This includes, for example, ensuring the traceability of the entire production process in accordance with the strict requirements of the FDA etc.

### Not just Clean, but Immaculate...

Satisfying the requirements of medical technology companies for maximum freedom from particles in the particle free micro clean room of a machine requires completely different concepts and designs from those in say measurement systems for the automotive industry. Our years of knowledge of this industry and close collaboration with system manufacturers working in the medical technology industry guarantee high-quality solutions.

### Our MEDICAL TECHNOLOGY Expertise at a Glance:

- Quality control
- Production control
- 100% inspection of single-use products with very high quality requirements in the medical sector
- Cavity-oriented analysis of results for detecting wear on the molding tool
- Image processing-supported assembly of biological diagnostic reaction vessels bins
- 100% check for well strips
- 100% check for micro plates with up to 1596 cavities
- 100% check of pipettes, cannulas and dental tools
- Detailed visualization and statistical evaluation (conformity with ISO, FDA, GMP and GAMP)



[www.ziemann-urban.de](http://www.ziemann-urban.de)

**Ziemann & Urban GmbH**  
**Prüf- und Automatisierungstechnik**

Am Bleichbach 28  
D-85452 Moosinning  
Germany

Tel.: +49 8123 93 68 8 - 0  
Fax: +49 8123 93 68 8 - 27  
E-Mail: [info@ziemann-urban.de](mailto:info@ziemann-urban.de)

