

Robotics and Automation at a glance

The sector – the association – the suppliers



About the sector*

Sector turnover: 15.8 bn EUR

Employees: > 60.000

Export ratio: > 60%

Robotics – innovation driver and core element of automation

The fascination of robots remains unbroken. In the course of its success story our notion of a robot has changed dramatically. Today's robotics industry features a high degree of innovation, a strong market growth and rapid technological developments. Industrial robots have become an indispensable tool in manufacturing. Increasingly, professional service robots are also coming into focus.

As a core element of automation, robots take center stage in strategic business decision-making. And against the background of digitalisation and the future of work, they will play a central role, for example when it comes to human-machine interaction.

Integrated Assembly Solutions – much more than the sum of its parts

Out of millions of components, Integrated Assembly Solutions (IAS) creates new products every day. A variety of processes such as as-

sembling, handling, joining, forming, measuring, testing, dosing or labelling are important here.

The sector's enterprises design and build the components and systems needed for these tasks – in order to come to smart, thought-through and therefore outstanding solutions.

Machine Vision – when machines see and comprehend

Cameras generate images that are automatically analysed by software. Machine vision systems perform quality tests, guide machines, control processes, identify components, read codes and deliver valuable data for optimizing production.

Machine vision is constantly capturing new fields of application – also beyond the arena of manufacturing – always striving for higher quality, efficiency and product safety.

* Forecast 2018



About VDMA Robotics + Automation

VDMA Robotics + Automation (VDMA R+A) represents one of the most dynamic and fastest-growing sectors of the machinery industry. Our approximately 300 member companies are active in three highly innovative areas:

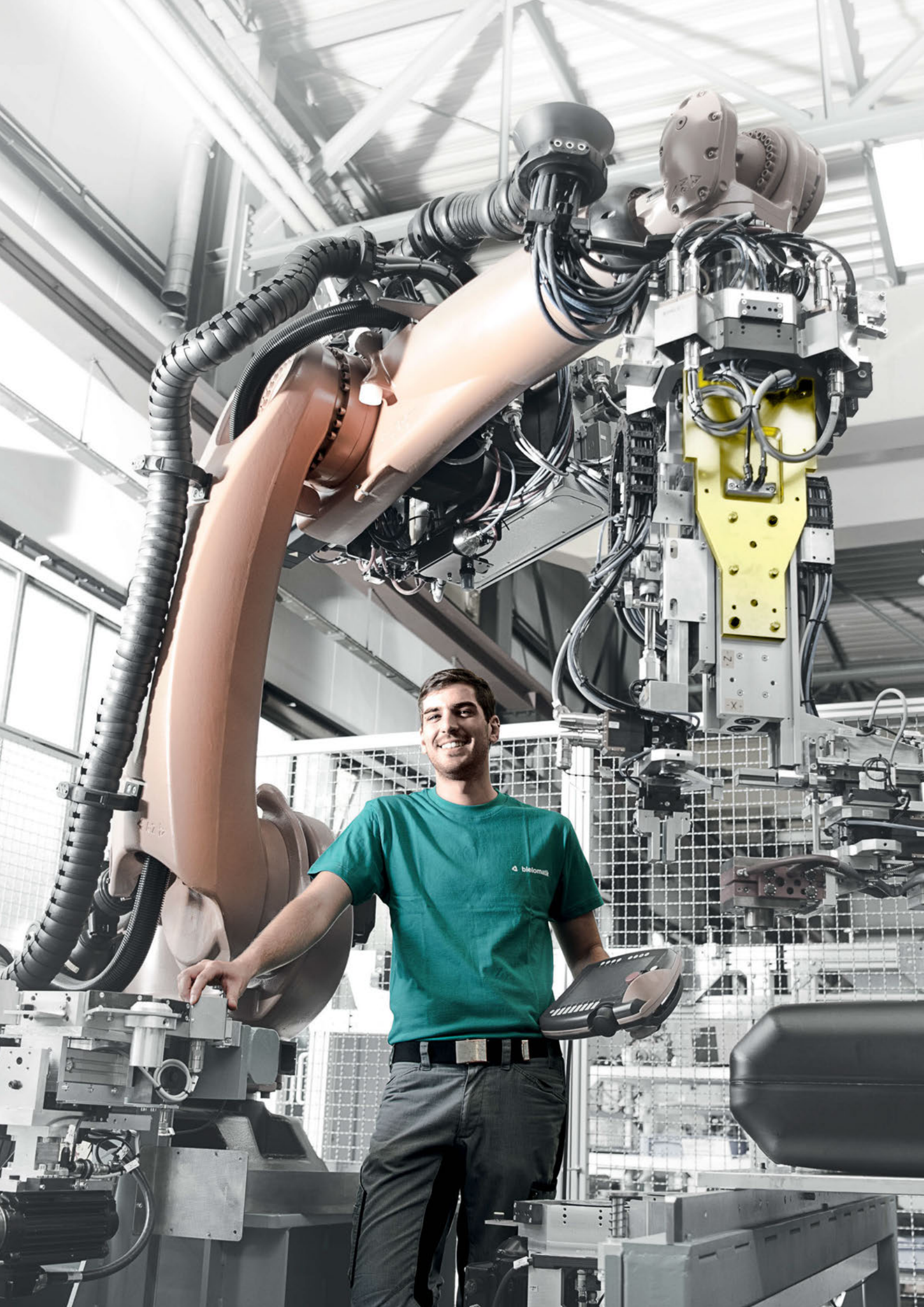
- Robotics
- Integrated Assembly Solutions
- Machine Vision

For each of these key technologies, the VDMA has created a specialized group, each with its own board of directors, work programme and activities. This is how we drive sector-specific topics forward. Overarching topics are dealt with at the level of the association. We use valuable synergies and shape the future – together with the member companies. Because our members are in the driver's seat.

VDMA Robotics + Automation: a strong network

- **Over 300 members**
- **12 employees at headquarters in Frankfurt**
- **2 employees in the VDMA offices in India and China**

Together we are pacemakers for the digitalization of production.



Our key topics

Shaping the future

We work together with our members on the topics of the future. Digitalization and machine learning, Industry 4.0 or the Internet of Things, machine-to-machine communication, human-robot collaboration, the future of work, embedded vision, electric cars and battery production: We are at the forefront of developments.

Knowing markets

Statistics are our core business. From data directly provided by our members we create market reports which are an indispensable tool for strategic corporate decisions. When required, we conduct special studies that investigate opportunities and challenges. In addition, we offer regular information services on selected industries and world regions.

Tapping into new markets

We support our members in market development worldwide - through trade fairs, marketing tools, our offices abroad, with advice and activities. We are the conceptual sponsor of the leading international trade fairs automatica and VISION.

Europe and the world

To remain at the forefront as Europeans, we must drive ahead innovation and technological progress. To this end, we cultivate cross-border cooperation, also with associations from all over the world. Especially important: our offices abroad, e.g. in Brussels, Shanghai and Mumbai.

Taking a stand

Our technologies are changing the world. For the better. We are constantly promoting this in the public debate about the effects of new technologies and the future of work. We show what our industry is achieving and why it is an attractive employer.

Setting high standards

Standards are the turbocharger for our industry. From safety to the simple communication in the smart factory of the future: Together with our members we develop the necessary specifications, guidelines and standards.

Networking for members

We bring people together, with the goal of generating ideas, transferring knowledge and driving projects and common issues forward. Together. Our events offer high networking quality and innovative formats - in which our participants are actively involved.

Why automate?

Competitiveness

Automation is an essential key to success - especially for manufacturing companies in Europe. Only with automation we are able to sustainably secure our competitiveness today, to prevent an exodus of key technologies, to generate qualified jobs and to capture new markets.

Product quality

Automation ensures consistently high quality with 100% accuracy, infallible quality checks and complete traceability. Without a high level of automation, a wide range of complex products would not be possible.

Better working conditions

Automation can relieve people of monotonous, physically demanding or even dangerous tasks. A perfect human-machine interaction results in more advanced and safe workplaces. This leaves employees time to concentrate on creative and value-adding activities.

Sustainability

The world's population is growing rapidly – therefore it is necessary to use resources efficiently. An intelligently automated production can make a decisive contribution to minimizing our consumption of energy and natural resources.

Prosperity

Automation is the basis for our prosperity and makes sure products remain affordable.



VDMA Robotics + Automation: our members

Our members' mission is to optimize production. They produce pioneering key technologies and innovative solutions for smart automation.

Their product range comprises components and systems from the fields of Robotics, Integrated Assembly Solutions (formerly assembly and handling technology) and Machine Vision. The members of VDMA Robotics + Automation design and build everything that is required

for a smart and automated production: components, hardware and software, the necessary engineering, integration, as well as services. Their products and expertise are in high demand: worldwide, and in every industry. Always striving for high-quality and safe products, for securing competitiveness and workplaces, for improving working conditions, and so much more.

Be smart! Automate & optimize your production.

**Discover solutions of robotics
and automation products and solutions**

VDMA R+A list of members

VDMA R+A Sourcing Service

<http://rua.vdma.org>

VDMA

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