

Automation Consumer Goods Logistics

THE KNOW-HOW FACTORY



www.zimmer-group.com

THE KNOW-HOW FACTORY

ZIMMER GROUP COMMITTED TO OUR CUSTOMERS

WITH THE AMBITION TO DELIVER TO OUR CUSTOMERS THE BEST TECHNOLOGY FOR FASTEST INTEGRATION AND COMMISSIONING, HIGHEST PRODUCT AVAILABILITY AND OPTIMIZED PRODUCTIVITY, WE BRING THE BEST FROM THE WORLD OF MECHANICS AND THE LATEST TECHNOLOGY FROM THE IOT TOGETHER. FOR YOUR UNCOMPROMISING SUCCESS.

With the digitization of its systems, the Zimmer Group is world leader in technology when it comes to combining the reliability and experience of 25 years and 9,000 successful system solutions with the efficiency and flexibility of digitization.

Industry 4.0 is of the utmost importance for production and production. That is why the Zimmer Group is committed to continuously developing sustainable application solutions for all industries. Automation concepts from the Zimmer Group offer precise and efficient solutions for optimized production rates and the highest quality standards, no matter whether for the engineering of manual, semi-automatic or fully automated production and assembly lines.

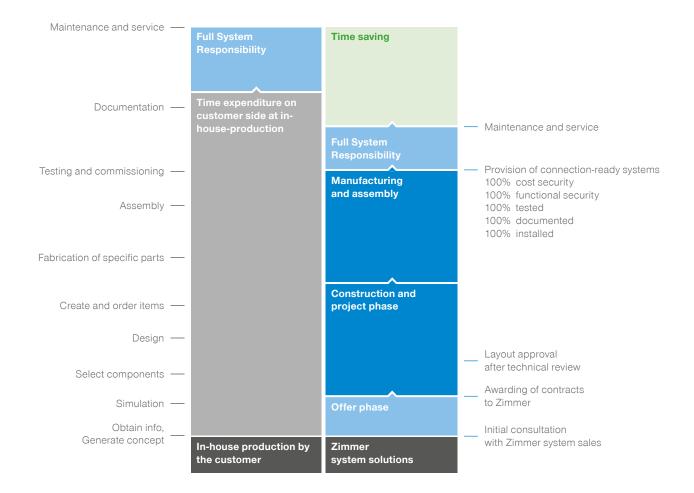
Here you will find numerous examples of customer projects from all sectors, types of processing and products. Choose the perfect system solution for your application, choose the optimal way to success with the Know-How Factory.



ZIMMER GROUP SYSTEM TECHNOLOGY

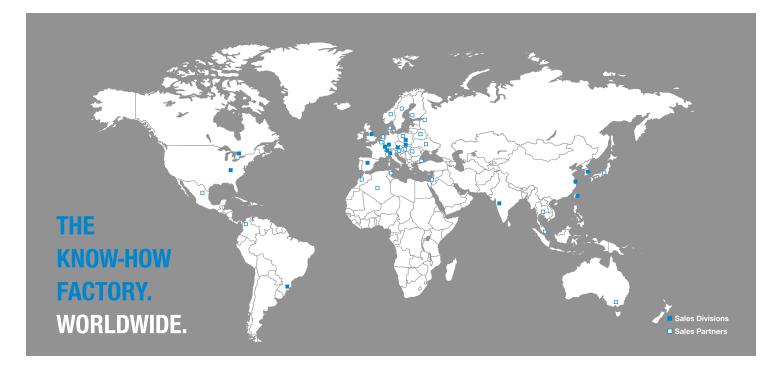
ZIMMER GROUP IS ONE OF THE LEADING SPECIALISTS IN THE AREA OF SYSTEMS SOLUTIONS IN THE WORLD. WE OFFER YOU SOPHISTICATED SYSTEM SOLUTIONS FOR ALMOST EVERY TASK, IN VIRTUALLY ALL INDUSTRIES AND APPLICATIONS. IT DOESN'T MATTER IF IT IS A SIMPLE GRIPPER AND HANDLING SOLUTIONS OR A COMPLEX SYSTEM SOLUTION.

As an industry partner with many years of experience, we are intimately familiar with the requirements of modern production systems, whether in mechanical engineering, the automotive and supplier industries, foundries or in the electronics, plastics or the consumer goods sectors. Zimmer system solutions allow us to equip any make of robot optimally and significantly increase the functionality and efficiency of your robots. The extensive expert solutions of our System Technology department, with their experienced team of project engineers, designers and manufacturers, has been valued by our customers for 30 years. Our systems are the result of a close collaboration with end customers and integrators built on trust. Zimmer System Technology has specially tailored production and assembly areas with a high degree of production depth. This means that we can guarantee flexible, quick implementation of your project at any time. The Zimmer Group has traditionally worked for a series of core industries that have benefited from our extensive experience and recognized development expertise for decades. We would be happy to speak with you about specific applications in new growth industries. We are well equipped for the development of new concepts. Together, we will be able to find the right solutions.



4 www.zimmer-group.com > All Information just a click away

CLOSE TO YOU WORLDWIDE



THE SERVICE OF THE ZIMMER GROUP – PROFESSIONAL, RELIABLE AND EFFECTIVE. YOU CAN COUNT ON OUR SUPPORT WORLDWIDE! FROM COMMISSIONING, MAINTENANCE AND REPAIR, TO MODERNIZATION, WE ACCOMPANY THE LIFECYCLE OF YOUR SYSTEM COMPETENTLY AND RELIABLY.

Trust in the service of the Zimmer Group for the permanent availability and productivity of your system. We see service as an essential component of a long-term partnership. You can always access the know-how and experience of our technical support staff. Innovative service products help diagnoses and troubleshooting quickly and efficiently. They facilitate the exchange of information and ensure that each fault message can be analyzed and remedied in a targeted manner and in a short time. And often without an on-site intervention – because three quarters of all cases can be solved by remote diagnosis and teleservice. With regular maintenance you ensure an optimal operating condition over the entire lifetime. We support you with our many years of experience and tailored to your product and your application maintenance. With interference -free production equipment you avoid unwanted incidents and can thus keep the high quality level of your production in the long term. Original Zimmer spare parts and consumables are optimally matched to your systems and meet the highest quality standards. Our worldwide logistics network ensures that the required parts are within your shortest possible time.



Gripping system for engine blocks with servo motorized A-axis 🔺



SYSTEM TECHNOLOGY MOBILITY

Automotive Industry

Increasingly dynamic production processes in today's automotive industry require ever greater flexibility from the production and manufacturing facilities. Growing model diversity and shorter product life cycles require gripper systems that automatically adapt to the new conditions when a variant is changed and that can be quickly updated or replaced when a model is changed. With our extensive portfolio, we are able to satisfy the demand for the handling of all parts of the Powertrain such as camshafts, crankshafts, cylinder blocks and cylinder heads, as well as gearboxes and chassis parts as well as tires, wheels and rims.

From casting to final assembly

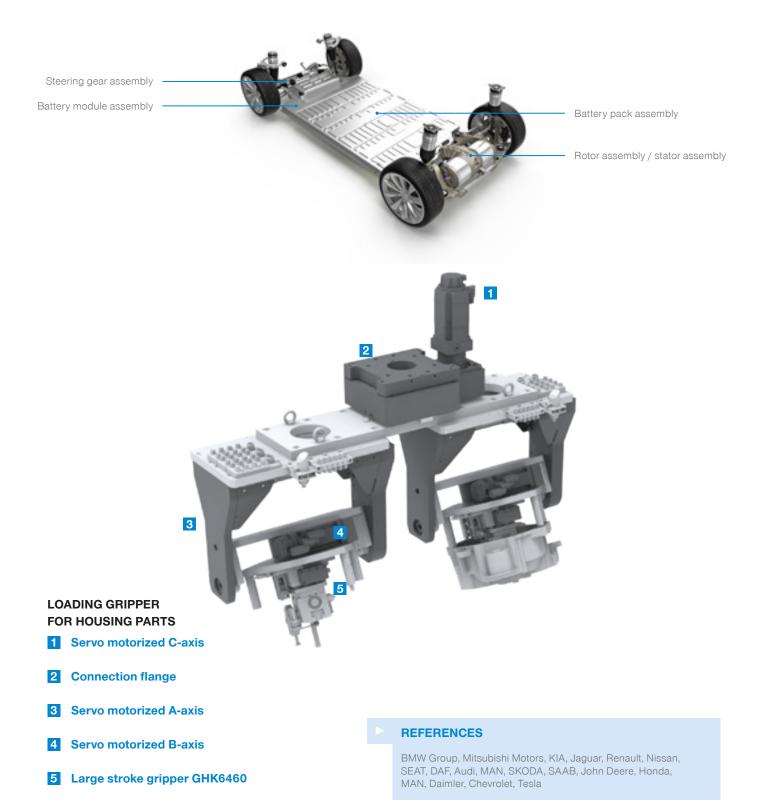
The specialists of the Zimmer Group master all the disciplines of automation with their enormous knowledge and experience gained over the years: from sand core handling in the foundry, die casting, casting cleaning, high pressure deburring or forging to the machining and assembly of complex components – in assemblies or directly in the vehicle.

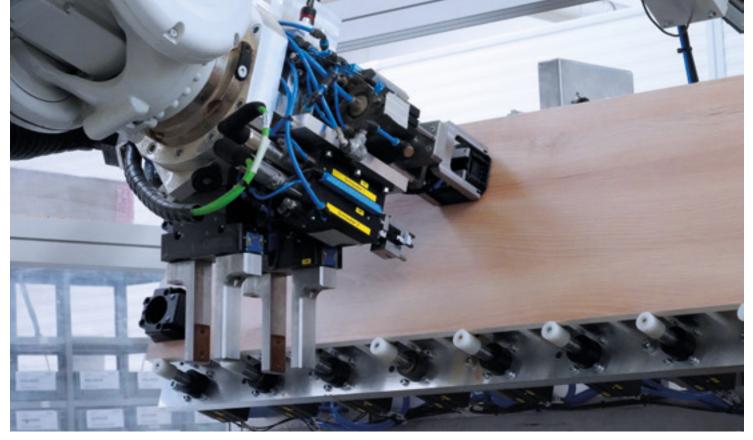
Today's automation no longer has anything to do with pure robotics. Nowadays, modern systems communicate with the worker over the Internet, changing devices and tools fully automatically every second.

Whether turning, grinding, milling or honing – automation plays an ever-increasing role. It is increasingly integrated into the machine design. With its system solutions, the Zimmer Group offers a space-saving design for automation on the machine or for accommodation in the workroom. Of course, taking into account the respective environmental conditions, e.g. a sealing of all components against chips, dust and moisture. For many decades, our systems have been proving their worth at the leading automobile manufacturers in daily use worldwide.

E-Mobility

The production of electric vehicles places new demands on production technology. An economical production of battery cells and packages is an important factor for this market to grow successfully. A high level of automation, such as that already found today in engine production, is essential for this. The race for the best production technology has already begun. The Zimmer Group is the development and system partner of many well-known premium manufacturers in battery manufacturing, module assembly and electric motor manufacturing.





Robot processing cell for cabinet floors 🔺



SYSTEM TECHNOLOGY AUTOMATION

Solutions for the capital goods industry

Mechanical engineering is subject to intense competitive pressure worldwide. With our technical competence and many years of experience, we, the Zimmer Group, have been supporting our customers in the field of automation and machinery and plant engineering with innovative solutions for 25 years and provide the necessary unique selling points. Our product portfolio ranges from the individual component via the mechatronic function module to the complete robot-based machining or assembly cell. Today, the use of industrial robots in the automotive industry represents a decisive productivity factor. For the increasing use of robotics in other industries (mechanical engineering, electronics, foundry technology, textiles, etc.), the Zimmer Group offers innovative, application-optimized end-of-arm products. Our intelligent solutions for end-of-arm tooling make a decisive contribution to further increasing productivity (eg multifunctional drill head, fittings mounting unit). Especially in the age of Industry 4.0, our mechatronic solutions and the complete spectrum of accompanying digital services offer outstanding differentiation possibilities.





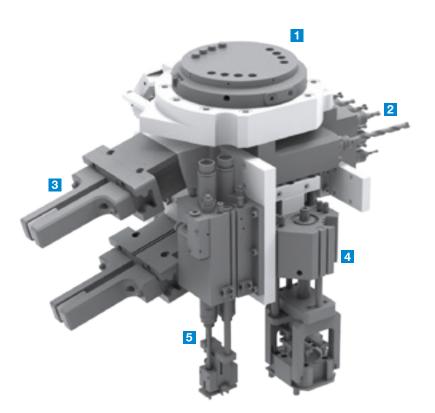
Schmidt GROUPE, Schüller Möbelwerk

Innovative machine concepts

Based on a virtual image, the Digital Twin, we design and realize complete manufacturing and assembly cells with maximum flexibility. The basis for these innovative machine concepts is a highly flexible, scalable transport module for workpiece transport. Individually and independently controllable transport units (shuttles) make a rigid coupling of the transport by a conveyor belt unnecessary. Depending on the requirements, an extremely agile and highly dynamic transport cycle without length limitation can be set up with any number of shuttles.

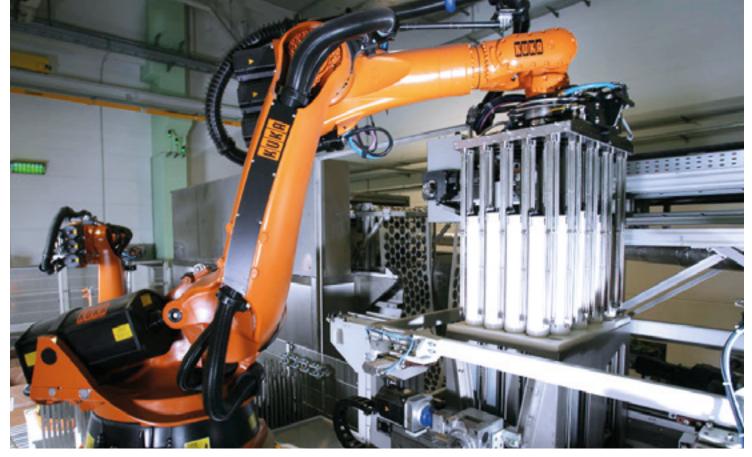


Transport system with circulating shuttles



MULTIFUNCTION DRILL HEAD

- 1 Connection flange to robot
- 2 Drilling gear for vertival and horizontal drillings
- **3** Workpiece gripper for cabinet floors
- **4** Fitting mounting unit for plinth
- 5 Fitting unit hinge mounting plates



Yogurt cup gripper in use 🔺

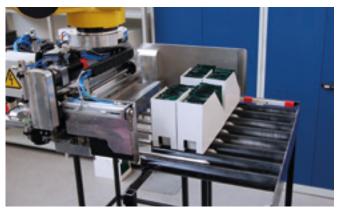


SYSTEM TECHNOLOGY CONSUMER GOODS

Consumer Goods Industry

The Zimmer Group is one of the most dedicated pioneers of digitization. We have extensive experience and capabilities in the field of end-of-arm systems, automation cells and the intelligent integration of handling systems in the field of consumer goods. More than 6000 implemented system solutions - from bottle or beverage crate handling to the stacking of cream cheese packaging - guarantee cost and functional reliability for the customer.

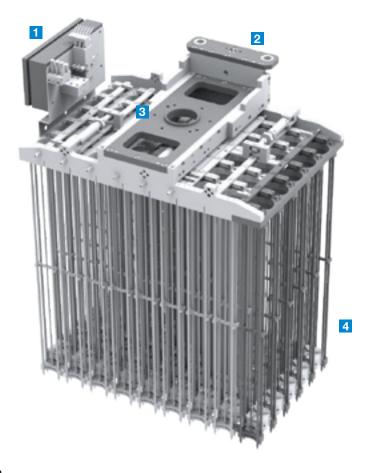
The competence of the Zimmer Group ranges from conception to worldwide service. System solutions from the Zimmer Group are efficient in design and in operation. Helping to shape the factory of the future with intelligent production processes and warehouse management is our goal! Here, a seamless transition with maximum efficiency from production to the end consumer is our central focus.



Cardboard gripper for chocolate bars

For the end user

Whether electronics, personal care or food and beverage, whether primary, secondary or separate requirements, The Zimmer Group develops automation solutions that meet the requirements of optimized flow of goods and warehouse management systems. Our experience in the field of system solutions is your benefit for a technological advantage in the market.



YOGURT CUP GRIPPER



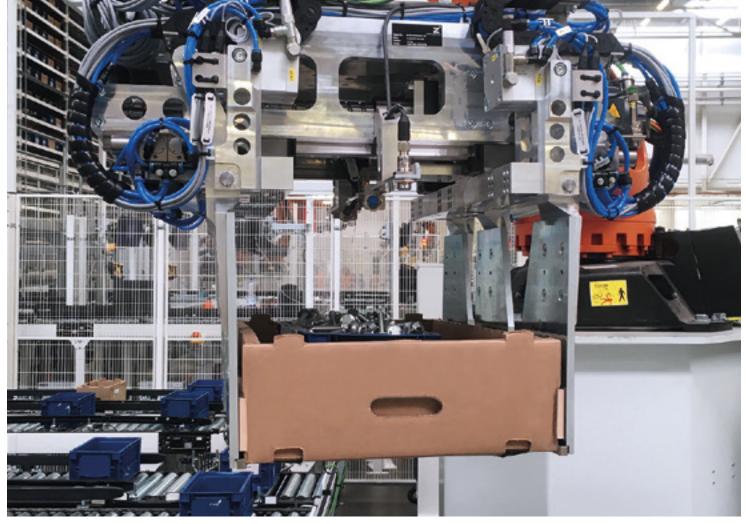
from robot

3 Connection flange to robot

4 Stacked storage magazine for empty yogurt cups

REFERENCES

Müller Milch, Nestlé, Dr. Oetker, Mondelēz



Outbound gripper with gripped cardboard



SYSTEM TECHNOLOGY LOGISTICS

The future of logistics is today

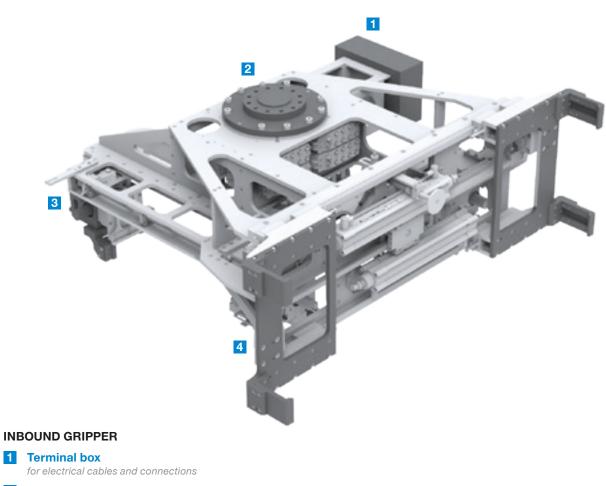
The digital advancement of the industry changes the markets and poses completely new challenges for global logistics. Depending on the sector or company, specific solutions and innovative approaches are needed: efficient intralogistics, the vision of the smart warehouse or flexible distribution centers worldwide. The product portfolio of Zimmer Group System Technology presents itself as varied as the challenges.

It ranges from system integration for conveyor and storage systems, palletizing and depalletizing technology to combined individualized hardware and software solutions for uncomplicated integration into existing or planned logistics infrastructures, in order to guarantee optimal and trouble-free material flow. Perfect logistics will be the unique selling proposition for any company worldwide in the future for long-term market success.



Inbound gripper

As one of the world's leading system suppliers, the Zimmer Group has been relying on the Digital Twin, an applicationoriented AI, and other digital services for several years, both during configuration and development, as well as during commissioning and production-accompanying. On request, a dedicated system-related HMI is also possible. We are a technological leader in order to be the partner of choice for digital warehousing and digital logistics tomorrow.



2 Connection flange to robot

3 Small load carrier gripper Zimmer standard gripper type GH6240-B

4 Pallet gripper

REFERENCES

Körber, Dematic, Adidas, Zalando

digitalZ DIGITAL SERVICES

Digital Services for your success

With the simulation solution "virtualZ" all project phases can be simulated and optimized close to reality.

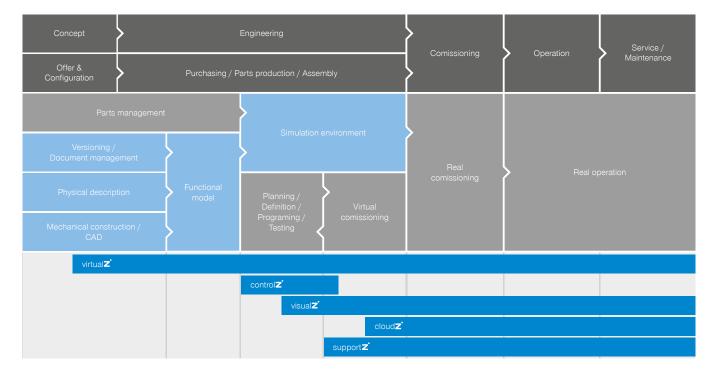
The cloud-based full-service solution "cloudZ" is based on a standard IO-Link component in combination with an OPC UA server running as a process on a PLC. With multiple leading cloud providers, vertical communication from the component to the cloud and from the cloud to the component is possible.

With "controlZ", regardless of the robot manufacturer used, the robot application including the end-of-arm tools can be created and put into operation with neutral programming tools, such as, for example, Drag & Bot.

"VisualZ" offers its own special and user-friendly user interface for mechatronic components and cells in order to facilitate installation of the components, e.g. to simplify in the robot control.



With "supportZ" it is easily possible to provide worldwide service modules to every customer for fast and stress-free implementation and commissioning in almost all common PLC systems.



digitalZ - Covering the entire lifecycle

ZIMMER GROUP THE FULL PRODUCT LINE



HANDLING TECHNOLOGY

MORE THAN 30 YEARS OF EXPERIENCE AND INDUS-TRY KNOWLEDGE: OUR PNEUMATIC, HYDRAULIC AND ELECTRICAL HANDLING COMPONENTS AND SYSTEMS ARE GLOBAL LEADERS.

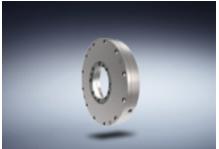




DAMPING TECHNOLOGY

INDUSTRIAL DAMPING TECHNOLOGY AND SOFT CLOSE PRODUCTS EXEMPLIFY THE INNOVATION AND PIONEERING SPIRIT OF THE KNOW-HOW FACTORY.





LINEAR TECHNOLOGY

WE DEVELOP LINEAR COMPONENTS AND SYSTEMS THAT ARE INDIVIDUALLY ADAPTED TO OUR CUSTO-MERS' NEEDS.







PROCESS TECHNOLOGY

MAXIMUM EFFICIENCY IS ESSENTIAL FOR SYSTEMS AND COMPONENTS USED IN PROCESS TECHNOLOGY. HIGH-LEVEL CUSTOM SOLUTIONS ARE OUR TRADE-MARK.







MACHINE TECHNOLOGY

ZIMMER GROUP DEVELOPS INNOVATIVE METAL, WOOD AND COMPOSITE MATERIAL PROCESSING TOOL SYSTEMS FOR ALL INDUSTRIES. NUMEROUS CUSTOMERS CHOOSE US AS THEIR SYSTEMS AND INNOVATION PARTNER.





SYSTEM TECHNOLOGY

ZIMMER GROUP IS ONE OF THE LEADING SPECIALISTS IN THE DEVELOPMENT OF CUSTOMIZED SYSTEM SOLUTIONS WORLDWIDE.