

# Overview of product groups

[info@automatica-munich.com](mailto:info@automatica-munich.com)

Messe München GmbH, Am Messesee 2, 81829 München, Germany

- |   |   |
|---|---|
| <b>1 Assembly and handling technology</b> | <b>8 Control technology and industrial communications</b> |
| <b>2 Industrial robotics</b>              | <b>9 Safety components</b>                                |
| <b>3 Professional service robotics</b>    | <b>10 Electrical engineering</b>                          |
| <b>4 Machine vision</b>                   | <b>11 Fluid technology</b>                                |
| <b>5 Clamping and gripping technology</b> | <b>12 Software and cloud computing</b>                    |
| <b>6 Drive technology</b>                 | <b>13 Services and service providers</b>                  |
| <b>7 Sensor technology</b>                | <b>14 Research and technology</b>                         |

## Product groups

- |  |  |   |   |
|--|--|---|---|
| <b>1 Assembly and handling technology</b>                      | <b>1.4 Equipment for storage</b>                               | 1.8.6                                       | Punching units  |
|  | 1.4.1  | 1.8.7                                       | Welding units   |
|  | 1.4.2  | 1.8.8                                       | Soldering units   |
| <b>1.1 Assembly stations and systems</b>                       | 1.4.3  | 1.8.9                                       | Dosing, gluing, application, coating and sealing units  |
| 1.1.1  | 1.4.4  | 1.8.10                                      | Clinching units   |
| 1.1.2  | <b>1.5 Equipment for organizing, sorting and feeding</b>       | <b>1.9 Marking equipment</b>                |   |
| 1.1.3  | 1.5.1  | 1.9.1                                       | Printing systems  |
| 1.1.4  | 1.5.2  | 1.9.2                                       | Embossing and engraving systems                         |
| 1.1.5  | 1.5.3  | 1.9.3                                       | Laser marking systems                                   |
| 1.1.6  | 1.5.4  | 1.9.4                                       | Labeling systems  |
| <b>1.2 Assembly systems for specific fields of application</b> | 1.5.5  | <b>1.10 Test and measuring systems</b>      |   |
| 1.2.1  | 1.5.6  | 1.10.1                                      | Test equipment for materials, components and structures |
| 1.2.2  | 1.5.7  | 1.10.2                                      | Test equipment for functional and durability testing    |
| 1.2.3  | 1.5.8  | 1.10.3                                      | Test equipment for electronics                          |
| 1.2.4  | 1.5.9  | 1.10.4                                      | Weighing devices  |
| 1.2.5  | <b>1.6 Equipment for linking and transport</b>                 | 1.10.5                                      | Measuring devices                                       |
| 1.2.6  | 1.6.1  | <b>1.11 Basis and construction elements</b> |   |
| 1.2.7  | 1.6.2  | 1.11.1                                      | Levelling elements                                      |
| 1.2.8  | 1.6.3  | 1.11.2                                      | Profiles  |
| 1.2.9  | 1.6.4  | 1.11.3                                      | Connectors  |
| 1.2.10   | 1.6.5  | 1.11.4                                      | Joints  |
| 1.2.11   | 1.6.6  | 1.11.5                                      | Surface elements  |
| <b>1.3 Special-purpose mechanical engineering</b>              | 1.6.7  | <b>1.12 Manual workplace systems</b>        |   |
|  | 1.6.8  | 1.12.1                                      | Manual handling manipulators                            |
|  | 1.6.9  | 1.12.2                                      | Assembly cells  |
|  | 1.6.10   | 1.12.3                                      | Individual assembly work places                         |
|  | <b>1.7 Components for linking and transportation equipment</b> | 1.12.4                                      | Assembly tools  |
|  | <b>1.8 Equipment for fastening and joining</b>                 | 1.12.5                                      | Assembly assistance systems                             |
|  | 1.8.1  | <b>1.13 Work station equipment</b>          |   |
|  | 1.8.2  | <b>1.14 Oils, greases and lubricants</b>    |   |
|  | 1.8.3  | <b>1.15 Surface treatment</b>               |   |
|  | 1.8.4  |   |   |
|  | 1.8.5  |   |   |

# Product groups (Continuation)

[info@automatica-munich.com](mailto:info@automatica-munich.com)

Messe München GmbH, Am Messesee 2, 81829 München, Germany

<p><b>2 Industrial robotics</b></p> <p><b>2.1 Industrial robots, listed by design type</b></p> <p>2.1.1 Linear robots, gantry robots, cartesian robots</p> <p>2.1.2 SCARA robots</p> <p>2.1.3 Articulated robots</p> <p>2.1.4 Parallel-link robots (e.g. delta robots, linapods, tripods, hexapods)</p> <p>2.1.5 Industrial robots, special design</p> <p><b>2.2 Industrial robots for human-robot collaboration</b></p> <p><b>2.3 Components for robot systems</b></p> <p>2.3.1 Jigs and fixtures</p> <p>2.3.2 Tool changing systems</p> <p>2.3.3 Robot measurement systems</p> <p>2.3.4 Peripherals for painting and coating</p> <p>2.3.5 Peripherals for dosing, gluing, application, coating and sealing</p> <p>2.3.6 Peripherals for welding</p> <p>2.3.7 Peripherals for processing</p> <p>2.3.8 Peripherals for cutting</p> <p>2.3.9 Peripherals for laser systems</p> <p>2.3.10 Peripherals for clean rooms</p> <p><b>2.4 Industrial robots for specific fields of application</b></p> <p>2.4.1 Industrial robots for painting and coating</p> <p>2.4.2 Industrial robots for sealing and gluing</p> <p>2.4.3 Industrial robots for welding</p> <p>2.4.4 Industrial robots for processing</p> <p>2.4.5 Industrial robots for cutting</p> <p>2.4.6 Industrial robots for laser applications</p> <p>2.4.7 Industrial robots for assembling</p> <p>2.4.8 Industrial robots for measuring and testing</p> <p>2.4.9 Industrial robots for palettising</p> <p>2.4.10 Industrial robots for pick &amp; place and packaging</p> <p>2.4.11 Industrial robots for loading/unloading machine tools</p> <p>2.4.12 Industrial robots for loading/unloading other machines</p> <p>2.4.13 Industrial robots for other handling tasks</p>	<p>2.4.14 Industrial robots for electrical engineering and electronics</p> <p>2.4.15 Industrial robots for food industry applications</p> <p>2.4.16 Industrial robots for clean rooms</p> <p>2.4.17 Industrial robots for laboratories</p> <p>2.4.18 Industrial robots for use in extreme conditions</p> <p>2.4.19 Industrial robots for battery production</p> <p><b>2.5 System integrators</b></p> <p><b>3 Professional service robotics</b></p> <p><b>3.1 Service robots, listed by design type</b></p> <p>3.1.1 Stationary robotic solutions</p> <p>3.1.2 Mobile robotic platforms</p> <p>3.1.3 Humanoid robots, walking robots</p> <p>3.1.4 Exoskeletons</p> <p>3.1.5 Drones</p> <p>3.1.6 Special designs (e.g. underwater robots)</p> <p><b>3.2 Key technologies and components for service robotics</b></p> <p>3.2.1 Perception</p> <p>3.2.2 Navigation</p> <p>3.2.3 Manipulation</p> <p>3.2.4 Human-machine interaction</p> <p><b>3.3 Service robots for specific fields of application</b></p> <p>3.3.1 Mobile manipulators</p> <p>3.3.2 Professional cleaning robots</p> <p>3.3.3 Service robots for inspection and maintenance</p> <p>3.3.4 Service robots for search, rescue and surveillance</p> <p>3.3.5 Service robots for retail applications</p> <p>3.3.6 Service robots for transportation and logistics</p> <p>3.3.7 Service robots in healthcare and laboratory technology</p> <p>3.3.8 Service robots for care and rehabilitation</p> <p>3.3.9 Service robots for hospitality and social interaction</p> <p>3.3.10 Service robots for agriculture and forestry</p> <p>3.3.11 Construction and demolition robots</p> <p>3.3.12 Other service robots for professional use</p>	<p><b>4 Machine vision</b></p> <p><b>4.1 Systems</b></p> <p>4.1.1 Application-specific machine vision systems</p> <p>4.1.2 Configurable machine vision systems</p> <p>4.1.3 Intelligent cameras</p> <p>4.1.4 Embedded vision systems</p> <p>4.1.5 Vision sensors</p> <p><b>4.2 Components for machine vision</b></p> <p>4.2.1 Optics and illuminations</p> <p>4.2.2 Laser</p> <p>4.2.3 Image sensors</p> <p>4.2.4 Optical sensors</p> <p>4.2.5 Cameras</p> <p>4.2.5.1 High speed cameras</p> <p>4.2.5.2 Infrared cameras</p> <p>4.2.5.3 Matrix cameras</p> <p>4.2.5.4 Line scan cameras</p> <p>4.2.5.5 X-ray cameras</p> <p>4.2.5.6 Hyperspectral cameras</p> <p>4.2.6 Frame grabbers</p> <p>4.2.7 Measuring systems</p> <p>4.2.8 Processors and computer components</p> <p>4.2.9 Software</p> <p>4.2.10 Other components for machine vision</p> <p><b>4.3 Specific fields of application</b></p> <p>4.3.1 Robot vision</p> <p>4.3.2 2D and 3D measurement and comparison</p> <p>4.3.3 Security systems</p> <p>4.3.4 Recognition of shapes and positions</p> <p>4.3.5 Identification systems and components</p> <p>4.3.6 Surface inspection and texture analysis</p> <p>4.3.7 X-ray inspection</p> <p>4.3.8 Completeness check</p> <p>4.3.9 Color inspection</p> <p>4.3.10 Quality inspection</p> <p>4.3.11 Optical code reading for 1D codes/barcodes and 2D codes</p> <p>4.3.12 Optical character recognition (OCR)</p> <p>4.3.13 Sequence analysis</p> <p>4.3.14 Print inspection</p> <p><b>4.4 Augmented reality systems</b></p>
---	--	--

## Product groups (Continuation)

info@automatica-munich.com

Messe München GmbH, Am Messesee 2, 81829 München, Germany

<b>5</b>	<b>Clamping and gripping technology</b>	<b>6.4</b>	<b>Stop devices</b>	<b>7</b>	<b>Sensor technology</b>
<b>5.1</b>	<b>Grippers</b>	6.4.1	Stop devices, mechanical	<b>7.1</b>	<b>Proximity switches</b>
5.1.1	Grippers, electrical	6.4.2	Stop devices, electrical	7.1.1	Proximity switches, inductive
5.1.2	Grippers, pneumatic	6.4.3	Stop devices, pneumatic	7.1.2	Proximity switches, capacitive
5.1.3	Grippers, hydraulic	6.4.4	Stop devices, hydraulic	7.1.3	Cylinder position switches
5.1.4	2-finger parallel grippers	6.4.5	Stop devices, magnetic	<b>7.2</b>	<b>Rotary encoders</b>
5.1.5	3-finger centric grippers	<b>6.5</b>	<b>Numeric controlled rotation axes</b>	7.2.1	Rotary encoders, absolute
5.1.6	Suction grippers	<b>6.6</b>	<b>Numeric controlled linear axes</b>	7.2.2	Rotary encoders, incremental
5.1.7	Foil gripper systems	6.6.1	Linear axes, pneumatically driven	7.2.3	Rotary encoders, multiturn
5.1.8	Needle grippers	6.6.2	Linear axes, electrically driven with toothed belt drive	<b>7.3</b>	<b>Limit switches</b>
5.1.9	Adhesion grippers	6.6.3	Linear axes, electrically driven with leadscrew drive	<b>7.4</b>	<b>Linear displacement transducers</b>
5.1.10	Revolving grippers	6.6.4	Linear axes, electrically driven with gear rack drive	7.4.1	Optical linear displacement transducers
5.1.11	Micro grippers	6.6.5	Linear axes, electrically driven with linear motor	7.4.2	Inductive linear displacement transducers
5.1.12	Carbon grippers	<b>6.7</b>	<b>Gear units</b>	7.4.3	Magnetostrictive linear displacement transducers
<b>5.2</b>	<b>Clamping devices</b>	6.7.1	Spur gear units	7.4.4	Potentiometric linear displacement transducers
5.2.1	Clamping devices, manual	6.7.2	Bevel gear units	7.4.5	Magnetic linear displacement transducers
5.2.2	Clamping devices, pneumatic	6.7.3	Worm gear units	7.4.6	LVDT
5.2.3	Clamping devices, electrical	6.7.4	Planetary gear units	<b>7.5</b>	<b>Sensors for distance and thickness</b>
5.2.4	Clamping devices, hydraulic	6.7.5	Variable speed gear units	7.5.1	Distance and thickness sensors, optical
<b>6</b>	<b>Drive technology</b>	6.7.6	Precision gear units	7.5.2	Distance and thickness sensors, inductive
<b>6.1</b>	<b>Bearings</b>	<b>6.8</b>	<b>Industrial motors, motor controls, motor protection devices</b>	7.5.3	Distance and thickness sensors, ultrasonic
6.1.1	Ball bearings	6.8.1	3-phase motors	7.5.4	Distance and thickness sensors, capacitive
6.1.2	Roller bearings	6.8.2	Direct current motors	7.5.5	Distance and thickness sensors, magnetic
6.1.3	Needle roller bearings	6.8.3	Energy-saving motors	<b>7.6</b>	<b>Force torque sensors</b>
6.1.4	Plain bearings	6.8.4	Geared electric motors	<b>7.7</b>	<b>Optoelectronic sensors</b>
6.1.5	Air bearings (radial)	6.8.5	Servo motors	7.7.1	Throughbeam photoelectric sensors
6.1.6	Magnetic bearings	6.8.6	Stepping motors	7.7.2	Retro-reflective photoelectric sensors
<b>6.2</b>	<b>Linear guides</b>	6.8.7	Frequency converters	7.7.3	Laser sensors
6.2.1	Sliding guides	6.8.8	Servo controllers	7.7.4	Diffuse reflection light scanner, energetic
6.2.2	Cam roller guides	6.8.9	Servo drive control units	7.7.5	Diffuse reflection light scanner with background suppression
6.2.3	Linear ball bearing guides	6.8.10	Motor protection devices	7.7.6	Fiber sensors/amplifiers
6.2.4	Profiled rail guides	6.8.11	Micro motors	7.7.7	Mark sensors
6.2.5	Cage rail guides	<b>6.9</b>	<b>Special drives</b>	7.7.8	Color sensors
6.2.6	Telescopic rail guides	6.9.1	Pneumatic motors	7.7.9	Luminescence scanners
6.2.7	Air bearings (axial)	6.9.2	Cylinders, electromechanical	7.7.10	Photoelectric fork sensors
<b>6.3</b>	<b>Linear motion drive elements and systems</b>	6.9.3	Pressure converters, pneumatic	7.7.11	Light grids
6.3.1	Acme screw drives	6.9.4	Air-oil actuators, pneumatic	7.7.12	Optical windows
6.3.2	Ball screw drives	6.9.5	Lifting columns, electromechanical		
6.3.3	Roller screw drives	6.9.6	Lifting elements, electromechanical		
6.3.4	Gear rack drives	6.9.7	Chain guides, electromechanical		
6.3.5	Toothed belt drives	6.9.8	Linear lifting magnets		
6.3.6	Linear motors	6.9.9	Linear interlocking magnets		
6.3.7	Chain drives	6.9.10	Swing drives, electromechanical		
6.3.8	Accessories for linear motion drive elements	6.9.11	Accessories for electromechanical actuators		
6.3.9	Worm gear screw jacks	6.9.12	Rotary modules, swivel modules (rotational motions)		
6.3.10	Positioning systems, pneumatic	6.9.13	Linear modules (linear motions)		
6.3.11	Micro-positioning systems	<b>6.10</b>	<b>Multi-axis systems</b>		
6.3.12	Feed units, pneumatic				
6.3.13	Stroke feed units, pneumatic				

# Product groups (Continuation)

[info@automatica-munich.com](mailto:info@automatica-munich.com)

Messe München GmbH, Am Messesee 2, 81829 München, Germany

7.8	Ultrasonic sensors/switches	10	<b>Electrical engineering</b>	12	<b>Software and cloud computing</b>
7.9	Identification sensor technology (RFID)	10.1	Industrial enclosures, control cabinets and equipment	12.1	<b>Software for robotics, assembly and handling technology</b>
7.10	Micro sensors	10.2	Industrial power supply and power distribution	12.1.1	Software for simulation
7.11	Pressure measurement devices	10.2.1	Switching power supplies	12.1.2	Software for robots and plant control systems
7.12	Pressure switches	10.2.2	Wiring systems, complete	12.1.3	Software for process-controlled programming and visualisation
7.13	Accessories (holders, cables)	10.2.3	Cables and wires	12.1.4	Software for numerical control systems
8	<b>Control technology and industrial communications</b>	10.2.4	Cable sets	12.1.5	Software for process control systems
8.1	<b>Control technology</b>	10.2.5	Cable clips	12.1.6	Software for remote diagnosis
8.1.1	Controls, electronic	10.2.6	Plug connections	12.1.7	Programming tools
8.1.2	Controls, mechanical (cam-controlled)	10.2.7	Cable and hose carrier systems	12.1.8	Software for quality inspection and documentation
8.1.3	Controls, pneumatic	10.3	<b>Electrical components for controls</b>	12.1.9	Software for digital twins
8.1.4	CNC systems	10.4	<b>Cable protection systems</b>	12.2	<b>Software for machine vision</b>
8.1.5	Industrial PCs	10.5	<b>Cable and tube bushings</b>	12.2.1	Application-specific software
8.1.6	CPU cards	10.6	<b>Ventilation and cooling</b>	12.2.2	Software libraries
8.2	<b>Industrial communications</b>	11	<b>Fluid technology</b>	12.2.3	Freely configurable software
8.2.1	Bus systems	11.1	<b>Pneumatics</b>	12.3	<b>Software and systems for the smart factory</b>
8.2.2	Bus terminals	11.1.1	Maintenance units for compressed air	12.3.1	Procurement, merchandise management, logistics and supply-chain management (SCM)
8.2.3	Fieldbus components	11.1.2	Valve islands	12.3.2	Enterprise resource planning (ERP) and manufacturing resource planning (MRP)
8.2.4	Display and operating equipment (HMI)	11.1.3	Compressed air filters	12.3.3	Maintenance and repair
8.2.5	Optical data transmission	11.1.4	Pressure regulators	12.3.4	Product lifecycle management (PLM)
8.2.6	Wireless data transmission	11.1.5	Compressed air lubricators	12.3.5	Production data acquisition (PDA), production data management (PDM), manufacturing execution (MES)
8.2.7	Wired data transmission	11.1.6	Compressed air dryers	12.3.6	Advanced planning and scheduling (APS), process simulation and optimization, and automated process control (APC)
8.2.8	Remote maintenance and diagnostic systems	11.1.7	Tube lines for compressed air	12.3.7	Operating systems and extensions for the smart factory
8.2.9	Virtual reality systems for industrial applications	11.1.8	Hose lines for compressed air	12.4	<b>Smart factory services</b>
8.2.10	Network technology	11.1.9	Screwed and other compressed air connections	12.4.1	System development and integration
9	<b>Safety components</b>	11.1.10	Silencers for compressed air	12.4.2	Developing apps, smart factory software and systems
9.1	<b>Mechanical and electro-mechanical safety devices</b>	11.1.11	Sealing devices for compressed air	12.4.3	IT services and outsourcing
9.1.1	Guards	11.1.12	Accessories for compressed air	12.5	<b>AI</b>
9.1.2	Doors and gates	11.1.13	Pneumatic measuring apparatus		
9.1.3	Anti-collision systems	11.1.14	Pressure switches, pneumatic		
9.1.4	Overload protection devices	11.1.15	Cylinders, pneumatic		
9.2	<b>Safety-related control systems</b>	11.1.16	Ventilation technology and extraction systems		
9.3	<b>Safety-related sensor technology</b>	11.1.17	Components for ventilation technology and extraction systems		
9.4	<b>Safety-related communications technology</b>	11.1.18	Vacuum technology		
9.5	<b>Safety-related drive technology</b>	11.2	<b>Hydraulics</b>		
9.6	<b>Safety-related components for the networked factory</b>	11.3	<b>Sealing technology</b>		
9.7	<b>Software solutions for security management and security monitoring</b>				

## Product groups (Continuation)

[info@automatica-munich.com](mailto:info@automatica-munich.com)

Messe München GmbH, Am Messesee 2, 81829 München, Germany

<b>12.6</b>	<b>Cloud computing</b>	<b>14</b>	<b>Research and technology</b>
12.6.1	Cloud-based infrastructure services (IaaS)	<b>14.1</b>	<b>Research in the field of industrial automation</b>
12.6.2	Cloud-based platform services (PaaS)	<b>14.2</b>	<b>Research in the field of industrial robotics</b>
12.6.3	Cloud-based software services (SaaS)	<b>14.3</b>	<b>Research in the field of service robotics</b>
<b>12.7</b>	<b>Systems and solutions for big data applications</b>	<b>14.4</b>	<b>Research in the field of machine and plant construction</b>
12.7.1	Big data platforms	<b>14.5</b>	<b>Research in the field of mobility</b>
12.7.2	Big data software and analytics	<b>14.6</b>	<b>Research in the field of electrical engineering</b>
12.7.3	ManufacturingX	<b>14.7</b>	<b>Research in the field of optical technologies</b>
<b>12.8</b>	<b>System integration and consulting for cloud computing and big data</b>	<b>14.8</b>	<b>Research in the field of medical technology</b>
<b>13</b>	<b>Services and service providers</b>	<b>14.9</b>	<b>Research in the field of environment and renewable energies</b>
<b>13.1</b>	<b>Services</b>	<b>14.10</b>	<b>Research in the field of lightweight construction</b>
13.1.1	General contractors	<b>14.11</b>	<b>Research in the field of battery technology</b>
13.1.2	Engineering, consultancy, planning		
13.1.3	Feasibility studies		
13.1.4	Simulations and industrial metaverse		
13.1.5	CAD/CAM services		
13.1.6	Optimization of existing systems		
13.1.7	Programming		
13.1.8	Robot calibrations		
13.1.9	Trainings		
13.1.10	Condition monitoring		
13.1.11	Predictive maintenance		
13.1.12	Retrofit		
13.1.13	Mechanical, electrical and fluid technology service		
13.1.14	Certifications, safety inspections		
13.1.15	Services for research and innovation		
13.1.16	Standardization		
<b>13.2</b>	<b>Service providers</b>		
13.2.1	Management consultancies		
13.2.2	Banks, financial and insurance institutions		
13.2.3	Trade associations		
13.2.4	Countries, cities, authorities		
13.2.5	Universities and universities of applied sciences		
13.2.6	Training institutions		
13.2.7	Publishers and publications		

Status: March 2024