

Overview of product groups

info@automatica-munich.com
Messe München GmbH, Am Messesee 2, 81829 München, Germany

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

Product groups

- | | | |
|---|--|--|
| 1 Assembly and handling technology | 1.4 Equipment for storage | 1.8.6 Punching units |
| 1.1 Assembly stations and systems | 1.4.1 Storage boxes | 1.8.7 Welding units |
| 1.1.1 Assembly stations and systems, linear transfer | 1.4.2 Hoppers | 1.8.8 Soldering units |
| 1.1.2 Assembly stations and systems, rotary transfer | 1.4.3 Magazines | 1.8.9 Dosing, gluing, application, coating and sealing units |
| 1.1.3 Assembly systems (continuous motion) | 1.4.4 Pallet systems and palletizing units | 1.8.10 Clinching units |
| 1.1.4 Modular assembly platforms | 1.5 Equipment for organizing, sorting and feeding | 1.9 Marking equipment |
| 1.1.5 Assembly stations, manually fed | 1.5.1 Separating equipment | 1.9.1 Printing systems |
| 1.1.6 Assembly systems for pliable parts | 1.5.2 Disentangling equipment (separators) | 1.9.2 Embossing and engraving systems |
| 1.2 Assembly systems for specific fields of application | 1.5.3 Sorting equipment | 1.9.3 Laser marking systems |
| 1.2.1 Assembly systems for medical/pharmaceutical applications | 1.5.4 Vibrating feeders, rotary | 1.9.4 Labeling systems |
| 1.2.2 Assembly systems for food industry applications | 1.5.5 Vibrating feeders, linear | 1.10 Test and measuring systems |
| 1.2.3 Assembly systems for explosive areas | 1.5.6 Step feeders | 1.10.1 Test equipment for materials, components and structures |
| 1.2.4 Assembly systems for ESD areas | 1.5.7 Hopper elevators (inclined feeders) | 1.10.2 Test equipment for functional and durability testing |
| 1.2.5 Assembly systems for electrical engineering and electronics | 1.5.8 Centrifugal feeders | 1.10.3 Test equipment for electronics |
| 1.2.6 Assembly systems for clean rooms | 1.5.9 Flexible feeding systems | 1.10.4 Weighing devices |
| 1.2.7 Assembly systems for micro technology | 1.6 Equipment for linking and transport | 1.10.5 Measuring devices |
| 1.2.8 Packaging machines | 1.6.1 Chain conveyors | 1.11 Basis and construction elements |
| 1.2.9 Assembly systems for the production of photovoltaics | 1.6.2 Belt conveyors | 1.11.1 Levelling elements |
| 1.2.10 Assembly systems for composites | 1.6.3 Magnetic conveyors (linear motors) | 1.11.2 Profiles |
| 1.2.11 Assembly systems for battery production | 1.6.4 Roller conveyors | 1.11.3 Connectors |
| 1.3 Special-purpose mechanical engineering | 1.6.5 Rotary indexing tables | 1.11.4 Joints |
| | 1.6.6 Belt feed unit | 1.11.5 Surface elements |
| | 1.6.7 Workpiece carrier systems | 1.12 Manual workplace systems |
| | 1.6.8 Elevators | 1.12.1 Manual handling manipulators |
| | 1.6.9 Lifting and tilting units | 1.12.2 Assembly cells |
| | 1.6.10 Vacuum lifting devices | 1.12.3 Individual assembly work places |
| | 1.7 Components for linking and transportation equipment | 1.12.4 Assembly tools |
| | 1.8 Equipment for fastening and joining | 1.12.5 Assembly assistance systems |
| | 1.8.1 Screw driving units, manually operated | 1.13 Work station equipment |
| | 1.8.2 Screw driving units, automatically operated | 1.14 Oils, greases and lubricants |
| | 1.8.3 Screw driving units, stationary | 1.15 Surface treatment |
| | 1.8.4 Riveting units | |
| | 1.8.5 Presses | |

Product groups (Continuation)

info@automatica-munich.com

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

<p>2 Industrial robotics</p> <p>2.1 Industrial robots, listed by design type</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>2.2 Industrial robots for human-robot collaboration</p> <p>2.3 Components for robot systems</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>2.4 Industrial robots for specific fields of application</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 & 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>2.5 System integrators</p> <p>3 Professional service robotics</p> <p>3.1 Service robots, listed by design type</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>3.2 Key technologies and components for service robotics</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>3.3 Service robots for specific fields of application</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>4 Machine vision</p> <p>4.1 Systems</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>4.2 Components for machine vision</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>4.3 Specific fields of application</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>4.4 Augmented reality systems</p>
---	--	--

Product groups (Continuation)

info@automatica-munich.com

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

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

Product groups (Continuation)

info@automatica-munich.com

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

7.8	Ultrasonic sensors/switches	10	Electrical engineering	12	Software and cloud computing
7.9	Identification sensor technology (RFID)	10.1	Industrial enclosures, control cabinets and equipment	12.1	Software for robotics, assembly and handling technology
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	Control technology and industrial communications	10.2.4	Cable sets	12.1.5	Software for process control systems
8.1	Control technology	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	Electrical components for controls	12.1.9	Software for digital twins
8.1.4	CNC systems	10.4	Cable protection systems	12.2	Software for machine vision
8.1.5	Industrial PCs	10.5	Cable and tube bushings	12.2.1	Application-specific software
8.1.6	CPU cards	10.6	Ventilation and cooling	12.2.2	Software libraries
8.2	Industrial communications	11	Fluid technology	12.2.3	Freely configurable software
8.2.1	Bus systems	11.1	Pneumatics	12.3	Software and systems for the smart factory
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	Smart factory services
8.2.10	Network technology	11.1.9	Screwed and other compressed air connections	12.4.1	System development and integration
9	Safety components	11.1.10	Silencers for compressed air	12.4.2	Developing apps, smart factory software and systems
9.1	Mechanical and electro-mechanical safety devices	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	AI
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	Safety-related control systems	11.1.16	Ventilation technology and extraction systems		
9.3	Safety-related sensor technology	11.1.17	Components for ventilation technology and extraction systems		
9.4	Safety-related communications technology	11.1.18	Vacuum technology		
9.5	Safety-related drive technology	11.2	Hydraulics		
9.6	Safety-related components for the networked factory	11.3	Sealing technology		
9.7	Software solutions for security management and security monitoring				

Product groups (Continuation)

info@automatica-munich.com

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

12.6	Cloud computing	14	Research and technology
12.6.1	Cloud-based infrastructure services (IaaS)	14.1	Research in the field of industrial automation
12.6.2	Cloud-based platform services (PaaS)	14.2	Research in the field of industrial robotics
12.6.3	Cloud-based software services (SaaS)	14.3	Research in the field of service robotics
12.7	Systems and solutions for big data applications	14.4	Research in the field of machine and plant construction
12.7.1	Big data platforms	14.5	Research in the field of mobility
12.7.2	Big data software and analytics	14.6	Research in the field of electrical engineering
12.7.3	ManufacturingX	14.7	Research in the field of optical technologies
12.8	System integration and consulting for cloud computing and big data	14.8	Research in the field of medical technology
13	Services and service providers	14.9	Research in the field of environment and renewable energies
13.1	Services	14.10	Research in the field of lightweight construction
13.1.1	General contractors	14.11	Research in the field of battery technology
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		
13.2	Service providers		
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