

# SAMSYS<sup>+</sup>

Innovativ. Intelligent. Präzise.



## SAMSYS ROBOTIC & COBOTIC

The intelligent way to automate your production processes

## THE COMPANY

SAMSYS GmbH – The Pioneer in Short Bar Loaders and Feeders.

SAMSYS is a dynamic company, full of new ideas and high-quality products. Today's SAMSYS GmbH was originally founded by the Swiss company SAMSYS SA (then: SAMECA SA) and has extensive experience in the area of bar feeders and loading magazines.

SAMSYS products are known for their reliability. For this reason, SAMSYS is preferred by manufacturers of the highest quality precision-turned parts. Our customers demand a high degree of automation in their machinery as well as economically efficient production processes. SAMSYS bar feeders will increase your company's productivity, which will in turn lower your unit cost. „We help making our customers more competitive!“ , Jo Braun, CEO

## SAMSYS COBOTS AND ROBOTS - THE WAY TO AUTOMATION

The term Cobot comes from the combination of the English words „collaboration“ and „robot“ and describes robots that are designed for direct interaction with humans. Collaborative robots have paved the way to the automation of CNC machines and production processes for small and medium-sized manufacturers thanks to greater flexibility, higher production output and improved quality. The company Samsys therefore offers a wide range of cobots and robots from renowned manufacturers for the automation and optimization of standard industrial processes.

From stationary solutions for fully automatic shift operation and production of small to large series, to versatile and lightweight robots and gripping tools - Samsys offers the right products for every requirement. Since robots are becoming more and more widespread and easier to implement, gripping tools in particular have become an important element in the adaptation of collaborative and lightweight industrial robots to a wide range of applications. Samsys GmbH is a certified contractual partner to the robot gripper tools of the company OnRobot. These can be easily combined and used with the products of the manufacturers listed below.

## WE OFFER ROBOTS AND ROBOTICS OF THE FOLLOWING MANUFACTURERS



CERTIFIED SYSTEM INTEGRATOR OF



CERTIFIED PARTNER OF



OUR STRONG SERVICE PARTNER

Alzeyer  
Werkzeugmaschinen  
Service GmbH



	ProFeeder Table	ProFeeder Light	ProFeeder	ProFeeder Q
Return of investment*	6 - 8 months	6 - 8 months	Less then 1 year	1,5-2 years
Operation of part trays	Manual change of part trays	Manual change of part trays	Changing the Mover	Fully automated
Number of part tray	-	1	1 per mover	1 per mover
Part tray / Part size	900 x 860 slot table	1x 600 x 400 mm	1x 600 x 400 mm	4x 600 x 400 mm
Number of Movers	-	-	2	2
Production	Test/demo	An „extra hand“	2-shift operation	Fully automated 4-shift operation
L x W x H	900 x 860 x 925 mm	900 x 860 x 925 mm	900 x 860 x 925 mm	1885 x 742 x 968 mm
Max. Tragkraft Roboter	16 kg	16 kg	16 kg	16 kg
Material	Powder coated steel	Powder coated steel	Powder coated steel	Powder coated steel

\*Experience values. Actual value may vary.

The SAMSYS ProFeeder X and ProFeeder Q enable unmanned night shifts.



## Robot cell

The robot cell is the basic module of ProFeeder and provides a framework for the robot's location and it contains both the processed and unprocessed parts, either as a holder for the parts tray (ProFeeder Light) or as a station for the mover (ProFeeder and ProFeeder Multi).

The compact and mobile robot cell design offers maximum flexibility in the production. The robot can due to the design be placed on all three sides. The compact design ensures easy access to the production machines.



## Part trays

The parts trays have interchangeable perforated plates, they can accommodate all item types and can be replaced by thin plate feeding for edge bending. The parts trays are easy to replace on both the basic module of ProFeeder Light and the mover.



## Mover

The mover is used to transport the parts trays to and from the ProFeeder, it is easy to lead the mover into the robot cell even when all four parts trays are full. The parts trays are automatically centred in the robot cell. When upgrading from ProFeeder to ProFeeder Multi the mover is upgraded with an elevation- and displacement module.

# ProFeeder

The intelligent way to automate your CNC machine

The ProFeeder is the perfect stationary solution for fully automatic 4-shift operation and production of small and large series.

## ProFeeder X

The ProFeeder X is designed for large production. It is delivered with 2, 3 or 10 trays options ideally to decrease cycle time resulting in fast production. Robot arms can be mounted in all 4 different angles allowing its ultimate flexibility. The ProFeeder X is a modern, robust robotic cell that is designed for handling a wide range of different types of production.

### Benefits

- Placement during non-productive time, while the system is running
- Drawer pull-out by robot
- Handling of workpieces from a few grams up to several kilograms
- Developed for large and medium series
- Placement for KTS boxes
- Scalable tray systems and easy machine coupling

## ProFeeder Q

In comparison to the ProFeeder X, the workpieces are placed on a mover with 4 drawers. After the mover has been processed, the mover is manually and pneumatically unlocked and can now be exchanged for another loaded mover or reloaded in the cell. By positioning the robot on one of the three closed sides of the cell, it can be positioned flexibly on different CNC machines.

### Benefits

- Processing of various workpieces.
- Storage compartments are adjustable in height
- Easy programming of the robot thanks to UR software
- Lifetime of your CNC machines is reduced
- Suitable for small, medium and large series





## ProFeeder Table

Makes it fast and flexible to get started with robot automation. The table is suitable for placing measuring instruments or devices.



## ProFeeder Light

The ProFeeder Light robot cell consists of a basic module with 1 flexible manual removable parts tray designed for handling various types of parts.



## ProFeeder

The ProFeeder robot cell consists of 1 basic module, 2 movers with 2 flexible part trays. The part trays are automatically entered, and are designed to accommodate all part types.



## ProFeeder Compact

The ProFeeder Compact is a robust machine with compact dimensions that can be easily moved around production. With the ProFeeder Compact, existing installations can easily be extended with this storage system. Together with the EasyPedestal, several ProFeeder Compact can be used by one robot.

# EasyPalletizer

The mobile and multifunctional palletising robot

**EasyRobotics**  
- we move your parts

The EasyPalletizer is a mobile palletizing robot that is easy to program and operate. It can be equipped with a robotarm from several manufacturers. The EasyPalletizer consists of a Europallet sized console consisting of compartment for: robot controller, cables, hosts and lifting module. The Easy Palletizer is designed solid with 300 KG of total weight without robot and lifter mounted. It is available in 3 versions depending on the height of the load: With lift module, with fixed base (height 855 mm) or without base. Each side of the EasyPalletizer consists of a docking system for pallets that measure the placement of the pallets. For that it uses 4 pressure sensors on each side. Once all pallets have been placed correctly, palletising begins.



## Benefits of the Samsys EasyPalletizer

- ▶ Floor level palletizing,
- ▶ Unload/load transfer systems
- ▶ Dual palletizing system
- ▶ Automatic & unmanned loading of pallets
- ▶ Precision and operation speed
- ▶ Movable palletizing cell with fast mechanical setup with a pallet jack.



## ER1000 Pallet Station

The ER1000 station is designed to lift and deliver pallets up to 1000 KG supporting MIR 500/1000

- Faster & Predictable Operation - The ER1000 is a drive through station which means the MIR500 /MIR 1000 access the station without reversing from delivery points resulting in a faster and predictable operation in the system.
- One control unit - ER1000 dispenser can be extended to consist of two stations for delivery and pickup station with only one control unit in the center. The communication protocol is based on the latest OPC-UA between MIR 500 and MIR 1000 to the station.



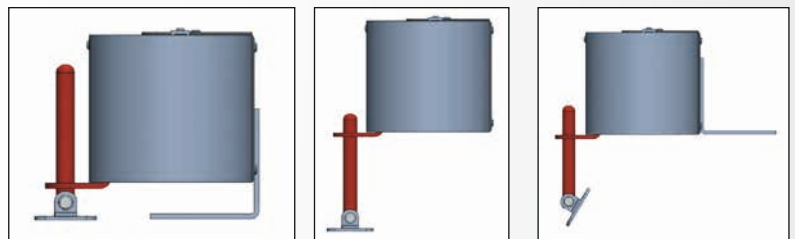
## ER5

ER5 mobile cobot platform is a compact mobile workstation for a safe collaboration with robot arms. ER5 is used in fully or partly automated production environments that demand enhanced flexibility and fast integration. The ER5 is developed with respect to secure robot arms and to its maximal mobility. The mobile cobot platform can be favorably introduced for the automation of production where for example processing machines are closely together and where there is not enough room for the ProFeeder robot cell.



## ER200

The ER200 is used in fully or partly automated production environments which demand enhanced flexibility and fast integration. The ER200 is developed in respect of maximum mobility. ER200 is a solid, mobile and compact working station to be mounted and integrated into MIR Robots, enhancing the collaboration between UR and MIR Robot collaboration advantages.



## EasyDoor

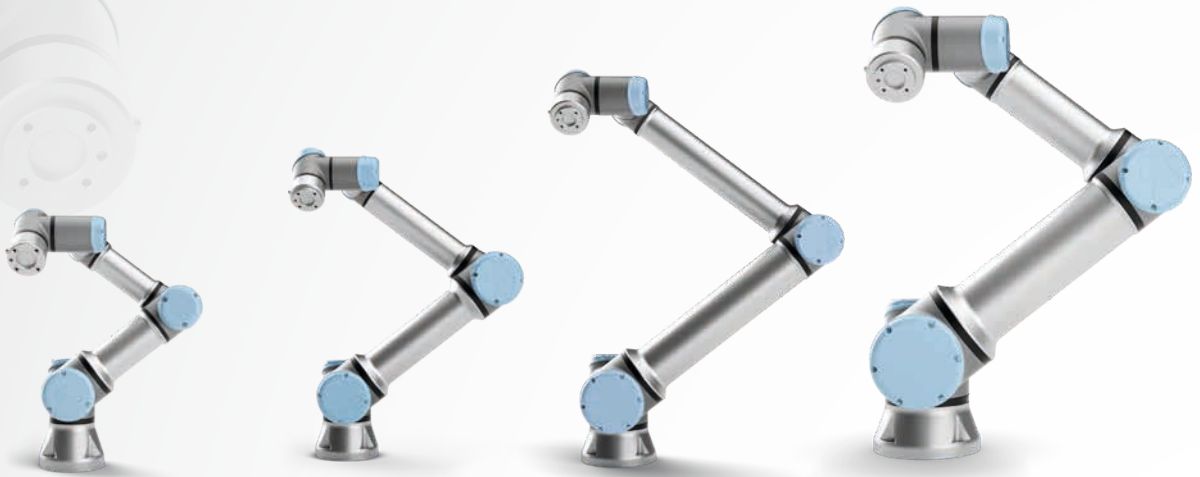
EasyDoor from EasyRobotics is built upon proven components from Siemens. It is a flexible automatic door opener for a variety of applications in the CNC machining industry. The EasyDoor system can be applied to single door opening. The solution is applicable to doors weighing up to 180 KG. Setup is easily performed during installation giving ramp up and down settings to the motor automatically. The EasyDoor system meets performance level "d" of the safety standard for machine doors EN ISO13849 Part 1. The solution features integration to a high-level controller through simple connection. It supports Profinet, Profibus and digital input/output. The installation of the system is made easy by automatic calibration to the application under supervision of an operator. It takes only a few seconds to do autodetection of the travel distance and door end positions very precisely. With the very easy and fast programming feature, EasyDoor is extremely flexible for different door applications. Commissioning of EasyDoor delivered by EasyRobotics is minimal. EasyDoor is a very robust, industrial and high performing product created through the integration of a mature and standardized product from Siemens.



UNIVERSAL ROBOTS

# Universal Robots e-Series

Extremely flexible, lightweight and designed for a wide range of applications.



	UR3e	UR5e	UR10e	UR16e
<b>Reach</b>	500 mm	850 mm	1300 mm	900 mm
<b>Payload</b>	3 kg	5 kg	10 kg	16 kg
<b>Footprint</b>	Ø 128 mm	Ø 149 mm	Ø 190 mm	Ø 190 mm
<b>Weight</b>	11.2 kg	20.6 kg	33.5 kg	33.1 kg

## UR3e

The Universal Robots UR3e is an ultra-lightweight, compact collaborative industrial robot, ideal for table-top applications. Its small footprint makes it ideal to be built directly inside machinery or in other tight workspaces. This cobot weighs only 24.3 lbs (11 kg), but has a payload of 6.6 lbs (3 kg). Its ±360-degree rotation on all wrist joints, and infinite rotation on the end joint, makes it well-suited for light assembly and screwdriving applications.

## UR10e

The Universal Robots UR10e is an extremely versatile collaborative industrial robot arm with its high payload (10kg) and long reach capability. Its 1300mm reach spans wide workspaces without compromising precision or payload performance. UR10e addresses a wide range of applications in machine tending, palletizing, and packaging.

## UR5e

The Universal Robots UR5e is a lightweight industrial collaborative robot built for medium-duty applications (up to 5 kg). This general purpose robot was built with versatility and adaptability in mind. The UR5e is designed for seamless integration into a wide range of applications.

## UR16e

The Universal Robots UR16e delivers an impressive 16kg (35.3 lbs.) of payload within a small footprint, and is ideal for use in heavy machine tending, material handling, packaging, and screw and nut driving applications. This powerhouse robot allows for heavier end of arm tooling and multi-part handling, and is especially useful for achieving shorter cycle times.

## Nachi MZ Series

The fastest lightweight robot in the world!

**SAMSYS** will assist you with the size selection - Depending on your needs.



	MZ03 EL	MZ04	MZ 07 (07P)	MZ07 L	MZ12
<b>Weight</b>	39,0 kg	26,0 kg	30,0 kg	32,0 kg	150,0 kg
<b>Payload</b>	3,5 kg	4,0 kg	7,0 kg	7,0 kg	12,0 kg
<b>Max. Reach</b>	1102 mm	541 mm	723 mm	912 mm	1454 mm
<b>Footprint</b>	Ø 190 mm	Ø 150 mm	Ø 190 mm	Ø 190 mm	Ø 283 mm
<b>Protection rating</b>	IP67	IP54 (IP 67)	IP 67	IP 67	IP 67
<b>Power consumption</b>	Ca. 400 Watt	Ca. 400 Watt	Ca. 400 Watt	Ca. 400 Watt	Ca. 400 Watt
<b>Number of joints</b>	6 (5)				

### Nachi MZ Series

NACHI offers a comprehensive range of universal, flexibly applicable industrial robots. They are featured by compact design combined with wide working envelope. To ensure collision-free operation in tight spaces, their cables and hoses are run internally, and they are equipped with hollow wrists. Thanks to high track speeds, they work extremely productively. Their high repeatability permits precise handling and exact positioning of the most

varied components during loading/unloading of machine tools, when working with drills, end mills, and deburring tools, as well as when packaging products.

#### Fields of application:

- ▶ Loading and unloading of machine tools
- ▶ Linking of workstations

### Benefits of the Nachi MZ 03EL / 04 / 07 / 07L / 12

- » Fastest movement speed
- » Smart cable routing
- » Compact and flexible installation
- » Easy programming
- » Multipurpose usage
- » Software Built-In PLC
- » High accuracy: 0.02 / 0.03 / 0.04 mm



## ADD INTELLIGENCE TO COLLABORATIVE PROCESSES

OnRobot products open new possibilities for automating tasks that you never thought possible. Our cutting edge gripping and sensing systems for industrial automation let you easily design truly collaborative applications that enable your workforce to work side-by-side with collaborative robots on assembly, surface finishing, pick and place, machine tending or testing.

### Robotic arm grippers, sensors and tool changers for your factory automation needs

Collaborative robots, also known as “cobots”, and light industrial robots are widespread today because of the rise of versatile tools, such as robot arm grippers, sensors, and quick changers. By combining your robot with the right end effector, you empower its ability to handle complex processes in safe collaboration with human employees.

Collaborative technologies are known for bringing business benefits to small and medium companies, including:

#### Reduced deployment time

Collaborative robots and end effectors are designed with easy programming in mind, so even employees without technical experience can learn how to use and adapt the robot in little to no time. This flexibility grants manufacturers the freedom and flexibility to experiment with applications in preparation for potential new needs.

#### Flexible production

Having to fabricate unique tools for specific manufacturing tasks is a costly and disadvantageous affair. In contrast, EoAT can be easily deployed to handle different tasks and processes and seamlessly integrated into different production environments.

#### Higher ROI

Flexible end effectors allow robots to complete repetitive tasks with more consistency and precision than human workers, leading to faster ROI for manufacturers. While the robots handle the dull, dirty and dangerous tasks, the employees can take on higher-level tasks better suited for a human mind.

### Compatible with every robot brand

All grippers, force/torque sensors and tool changers are compatible with robots from Doosan, TM Robot, Yaskawa, Universal Robots, KUKA, Fanuc, Kawasaki Robotics, Hanwha, and Nachi. Because our products are compatible with the major robot brands, you can easily get started with maximizing utilization of your robots. If your robot is from another brand, that doesn't mean the grippers won't be compatible with it. Contact us to discuss which solution seems most feasible for you.

# robot Gripper

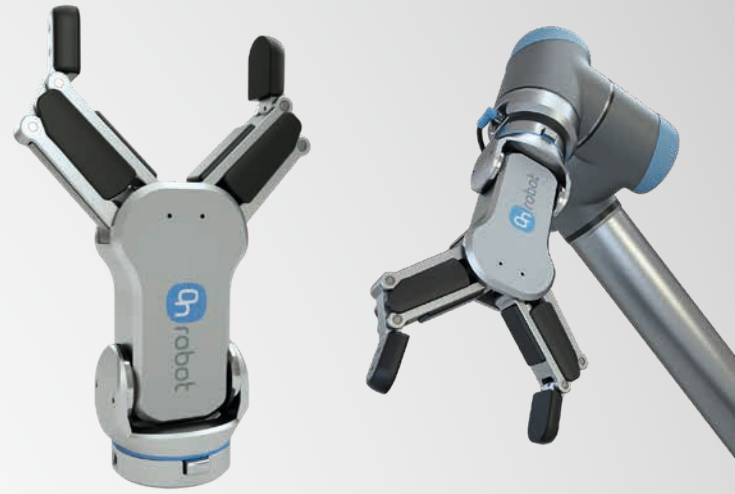


## OnRobot RG2 Gripper

The RG2 - 2kg payload robot arm gripper is a flexible collaborative gripper with built-in Quick Changer up to 110mm stroke. It provides intelligence, fast deployment, easy customization and programming. The outstanding software features through our one system solution decreasing engineering and manufacturing time significantly. The RG2 gripper is a tool for wide range of applications. Customized fingertips provide great gripping flexibility, customers can use one tool for different parts of the production process maximizing robot utilization. The RG2 works seamlessly with our Dual Quick Changer and any of our other grippers to help you maximize utilization of your robots. RG2 is TÜV certified, comes standard with safety shields.

## OnRobot RG2-FT Gripper

The RG2-FT is a state-of-the-art gripper with added sensing and intelligence. It has built-in force/torque and proximity sensor providing very precise automation. This enables true collaboration with human operators, supporting them like a co-worker would. Insertion processes can be achieved faster and more precise. This gripper can easily insert pins for instance, where humans would struggle. Due to the advanced sensor technology, during assembly the gripper gives the robot the ability to feel when the part has been mounted correctly. RG2-FT offers high productivity, fast deployment saving engineering hours on integration.



## OnRobot RG6 Gripper

The RG6 – 6kg payload robot arm gripper is a flexible collaborative gripper with built-in Quick Changer, up to 150mm stroke. It provides intelligence, fast deployment, easy customization and programming. The outstanding software features that come with the product enable intelligent applications. The RG6 gripper is a tool for wide range of applications. Customized fingertips provide extensive gripping flexibility, customers can use one tool for different parts of the production process maximizing robot utilization. The RG6 works seamlessly with our Dual Quick Changer and any of our other grippers to help you maximize utilization of your robots. RG6 is TÜV certified, comes standard with safety shields.



## ONROBOT GECKO SINGLE PAD GRIPPER



The Gecko Single Pad (SP) Gripper brings the innovative Gecko adhesive gripper technology to small-footprint applications that were previously impossible to automate. The gecko-inspired adhesive technology offers precise, no-mark gripping, even for perforated items such as circuit boards or for shiny surfaces, without the cleaning process. Named after their payload in kilos, the three different Gecko Single Pad grippers (SP1, SP3 and SP5) work with leading small robots and cobots. The compact, single-pad design allows easy workpiece accessibility, even in tight spaces. With no electronics or air supply needed, the Gecko SP is a cost-effective, true plug-and-play solution. Seamless integration with the robot of your choice.

## ONROBOT 3FG15 THREE FINGER GRIPPER



The 3FG15 is ideal for gripping a wide range of cylindrical objects in machine-tending applications such as CNC lathe machines. The gripper's design automatically centers workpieces, resulting in fast deployment with a strong, stable grip and precise placement. With a payload of up to 15kg, the 3FG15 competes with larger, bulkier, and much less flexible finger grippers. Like all OnRobot grippers, the 3FG15 offers seamless integration with the robots of your choice.

## ONROBOT SOFT GRIPPER



The OnRobot Soft Gripper is able to pick a wide array of irregular shapes and delicate items, making it ideal for pick-and-place applications in food and beverage production, as well as manufacturing or packaging. The gripper is available with three interchangeable silicon-molded cups. From eggs to fruit, to bottles or cans, food and beverage automation just got easier. Like all OnRobot grippers, the Soft Gripper offers seamless integration with the robot of your choice. The Soft Gripper operates without an external air supply, for no additional costs or complexity, and none of the dust or noise generated by traditional vacuum grippers.

## ONROBOT EYES



The OnRobot Eyes makes it easy and affordable to deploy vision for almost any collaborative application. Eyes is ideal for sorting a variety of objects, CNC machine tending with metal parts that are defined by outer shape, and many other pick-and-place applications where orientation is important.



## ONROBOT VG10 ELECTRIC VACUUM GRIPPER

Since the VG10 doesn't require a compressor or air supply, it's compact and easy to move around, bringing flexibility to your production line and saving maintenance cost. It has flexible arms and adjustable vacuum enabling the VG10 to handle a variety of objects in many different sizes. It's a dual gripper - you can control the right and left sides of the vacuum gripper independently of one another, further increasing efficiency on your production line. Seamless integration with the robot of your choice. The gripper comes with dual grip functionality, tool changer and a variety of typical vacuum cups. Additionally, there are many third party vacuum cups available on the market to fit every application.



## ONROBOT VGC10 ELECTRIC VACUUM GRIPPER

The VGC10 electrical compact vacuum gripper has unlimited customization possibilities. It has changeable suction cup options too for nearly any application need. Smaller than the VG10, the VGC10 can fit into tight environments to extend your automation possibilities. And at half the weight of the VG10 but with the same payload, the VGC10 can lift small, odd-shaped, and heavy objects even with a smaller robot arm. The VGC10 features two independently controlled air channels that allow it to act as a dual gripper with pick-up and release in the same action, further increasing efficiency and reducing cycle time. With no compressor or air supply needed, this compact electrical gripper is easy to move, and simple programming makes it quick and easy to redeploy for greater production flexibility. Seamless integration with the robot of your choice.



## HEX FORCE/TORQUE SENSOR

OnRobot 6-axis force torque sensors provide accurate force and torque measurements along all 6 axes. This gives you precise control when it comes to difficult assembly, polishing, sanding or deburring jobs. Additionally, the HEX software includes path recording, force control and special features for insertion tasks. This means reduced integration time for your production line. Our sensors are designed to fit most of the current industrial robot arms. Common applications are polishing, sanding, deburring, grinding and assembly, but it can also be used for teach-in and crash detection. Currently available models: HEX-E /High Precision, HEX-H /Low Deformation, HEX-E QC, HEX-H QC

# ROBOTIQ Gripper

Designed for collaborative robots



## Robotiq 2F-85 and 2F-140 Grippers

Together with the 2F-140, the 2F-85 is the world's best-selling gripper for collaborative robots. Its Plug + Play integration quickly adapts to parts of different shapes and sizes. The patented finger design allows parallel inner and outer gripping and a unique cylindrical grip. The gripper also features an easy-to-use interface for all adaptive gripper models as well as automatic part recognition and position feedback. The high payload and clamping load as well as the easy programming via a dedicated URCap make Robotiq grippers essential for modern production.



## Robotiq Hand-E Adaptive Gripper

Hand-E's high accuracy and 50 mm parallel stroke make it perfect for precision assembly tasks, while its sealed design ensures reliability in the toughest manufacturing conditions—including CNC machining. Hand-E's design adheres to ISO/TS 15066 standard best practices, with maximum force, rounded edges, self-locking functionalities, and other features making it the gripper for collaborative robots.



## Robotiq 3-Finger Adaptive Robot Gripper

The 3-Finger Adaptive Gripper is ideal for advanced manufacturing and robotic research. It adapts to the object's shape for a solid grip, so you can focus on the task and not the grasping. The gripper is the best option for maximum versatility and flexibility. It picks up any object of any shape.



## **SAMSYS GmbH - Service & Support**

### **Spare parts**

Our products don't require any special maintenance. Nevertheless, if you have any specific technical problems or if you need the appropriate replacement part, our competent service team can quickly help you via telephone or e-mail. This applies both to Samsys and Sameca products. Samsys offers a variety of spare and wear parts, which can be delivered by our logistics partners just in time.

### **Customer Service**

Our telephone customer service is available weekdays from 8:00am - 05:00pm available for free. For questions, changing of requests, appointments or emergencies, we are here for you.

### **Schulung & Weiterbildung**

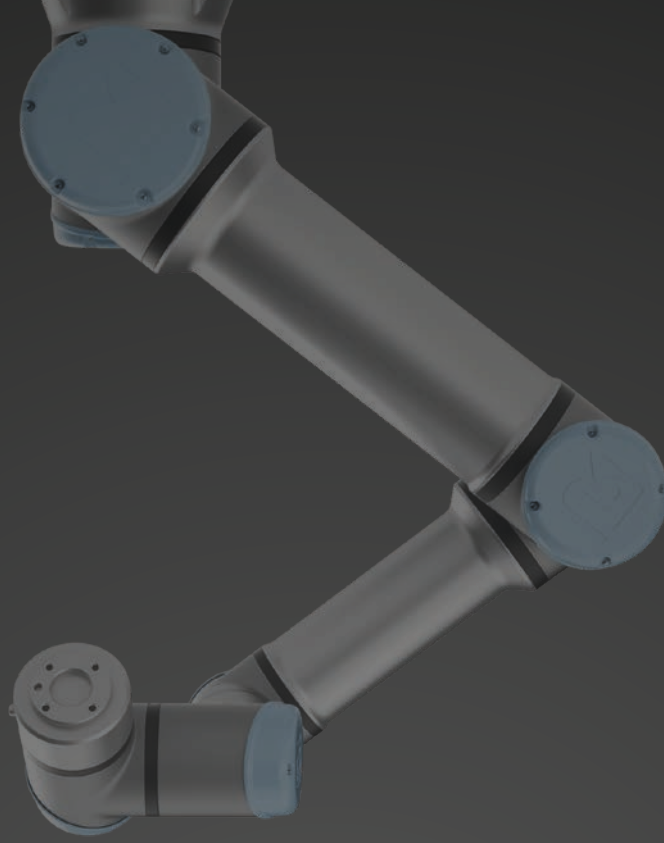
We are offering efficient trainings, which are targeted at operation, efficiency and profitability of our products - also at your site. Learn more about the options for bar machining, trends and possible solutions for your specific needs. Our professional training team is at your disposal for this purpose.

For more information on our service & support services, please contact:

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