

Tool changers | Swivels | Swivel tool changers | Hose packages | Valve units | Grippers | Tool systems | Tool stands





We fit them all

Robot System Products is a global leader in high-performance industrial robot accessories, providing tool changers, swivels, hose packages, valve units and complete packages to dress robots for different applications.

The company was established as an independent business in 2003 as a management buyout from ABB Robotics. Our growth has been remarkable. Starting with an initial four-person team, RSP has flourished to more than 50 direct employees in Sweden and Germany. With our worldwide family of distribution partners, our products service the local and global needs in over 20 countries.

Grounded by our roots in robotic peripheral research and development, our expertise is to provide tested and field proven robotic system solutions that improve robot flexibility, utilization, and uptime. From our position at the forefront of the latest robot models and advances, we offer a full line of documented plug & play robot dress solutions, as well as individual peripheral items that work with all major robot brands and models.



WE OFFER:

- Tool changers
- Swivels
- Swivel tool changers
- Tool systems
- Hose packages
- Valve units
- Tool parking systems
- Grippers

TrueConnect[™] Our patented locking device



With a tool changer, your robot has the possibility to perform a wide range of tasks. TrueConnectTM is our patented locking device, featured in all our tool changers. The docking of your tool is made faster, stronger, and simpler. It repeatedly ensures a secure docking of the tool, thanks to the unique locking mechanism.

Features

- Up to 1 500 kg load capacity
- High torque thanks to the robust design
- Accurate repeatability over time
- Fast locking cycle < 0.3 s
- Lifetime warranty on the locking mechanism

The principle is a uniform distribution of load, obtained by pressing the locking balls into spherical groves in the tool attachment. This design is proven to withstand the heavy weights of industrial work, having a coupling that is stronger than the bolts used for attachment. The locking cycle is completed in under 0.3 seconds. A quick locking cycle can save you valuable production time and improve the productivity of your robots.

Tool changers with TrueConnect™ do not require exact alignment before docking into different tools. It gives you a positional flexibility, as the mechanism itself enables exact alignment repeatability. Make your robot versatile and flexible with tool changers from Robot System Products. Locked and secured by TrueConnect™.









Tool changers – TC

Wide range with smooth operation

Tool changers from Robot System Products are built to ensure reliable and smooth operation, being compact with low weight and height and incorporating many safety features. We have a wide range of automatic tool changers with a load capacity of up to 1 500 kg. Manual tool changers also available.

Our tool changers allow robots to handle and switch between multiple tools. Depending on model and options, electrical signals, weld and servo power, data, water, compressed air and vacuum are transferred from the robot side to the tool. Specific models for automotive body shop applications are available.



Tool changer families

Compact



- Compact design
- Internal signal transmission
- Minimum wear of the contact surfaces
- Optimized for material handling and tough environments

Modular



- Modular design
- Easy to customize
- External signals
- Wide range of media modules

ModuFlex

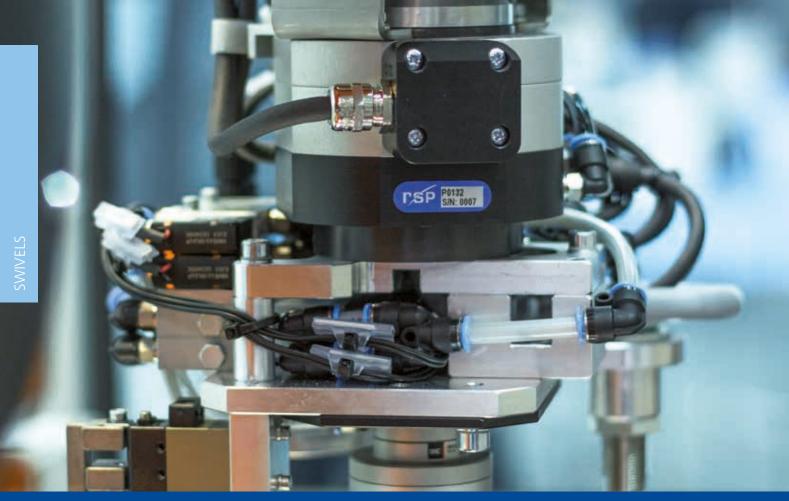


- Modular design
- Easy to customize
- External signals
- Wider range of media modules
- Safety features
- Designed to meet body shop application demands

MQC



- Self-centering design
- Simple fastening few bolts
- Quick and simple mounting/dismounting

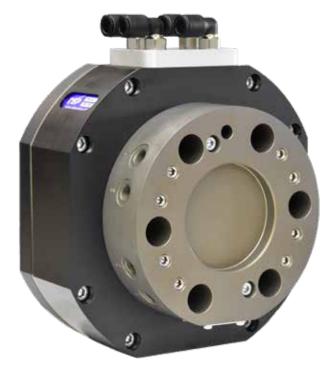


Swivels – S

Maximize robot uptime

With RSP swivels, the axis 6 can rotate freely. Wear on the hose package decreases, while uptime and productivity are increased. If the swivels are used with our hose packages, axis 4 and 5 are also able to rotate unimpeded. The full working range of the robot can be utilized. RSP has developed our own patented slip ring solution for maximized reliability. We provide swivels for robot payloads up to 350 kg.

- Allows continuous rotation of axis 6
- Reduces hose package interference
- Increases mobility
- Maximizes the hose package lifetime



Swivel transferable media



- Compressed air
- Vacuum
- Electric signals
- Servo motor power and feedback
- Cooling water
- Weld power

With swivel

Without swivel



Axis 6 is allowed to rotate freely. Wear on the hose package is drastically decreased.

Cable wear increases, with the risk to cause unpredictable downtime and production losses.



Swivel tool changers – STC

The best of both worlds

The most compact Swivel tool changer solution on the market comes from Robot System Products. A Swivel tool changer is a unity of the advantages with our Swivels and Tool changers. It is an RSP-unique product which combines media transfer, free axis 6 rotation, and the tool changer technology into one compact unit. Allowing free rotation of axis 6, it maximizes the hose package lifetime and enables increased mobility and flexibility. It also simplifies the integration and programming of the system.

TRANSFERABLE MEDIA

- Compressed air
- Electric signals
- Servo motor power and feedback
- Cooling water
- Weld power



The most compact solution on the market

Thanks to the compactness, the unit has only little influence on the robot load capacity. The swivel tool changers from RSP comes in a range for robot payload from 20 kg to 350 kg. For tool changer applications where hose package problems occur, the unit can easily be replaced with a swivel tool changer, as for the tool attachments use the same system. Special versions for spot welding and arc welding applications are available.



- Increased mobility
- Reduced hose package interference
- Maximizes hose package lifetime
- Allows continuous rotation of axis 6
- Locked with TrueConnect[™]

With swivel tool changer

Without swivel tool changer





Maximize your hose package lifetime with CiRo



Cables and hoses are often the main factors limiting robot movement, frequently causing unpredictable production stops. At the same time, there is significant demand for a compact cell layout and flexible production. CiRo is a cost-effective solution to achieve the flexibility of internal cabling. Hoses and cables for air, signals, and power can be selected according to the requirements of the application. Axis 6 can rotate with extended freedom.

- Up to ± 250° rotation
- Cables and hoses can be selected freely to suit any application
- Extended hose package lifetime
- Quick and easy installation
- High reliability
- Makes offline programing easy and realistic





Hose packages

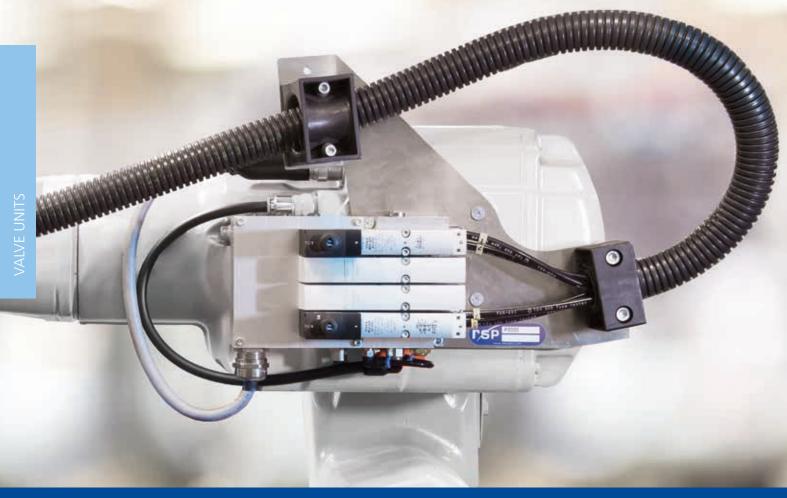
A proven package to protect your cables and hoses

Protect your cables and hoses with a hose package from Robot System Products. A bolt-on product with fast installation time, that allows the engineer to focus on the complete application and not on choosing various parts for the hose package. In our product range today, packages for more than 100 different robot models are available. Thanks to our assortment of various standard components, new models can be easily developed.

- Quick and easy installation
- Proven technology
- Modular design
- Bundles and protects hoses and cables
- Reduces downtime
- Large variety to choose from



We also supply various components making it possible to design your own hose package solution. Hose clamps, guides, brackets and protection hoses.



Valve units

Complete valve units, for simple installation

Air and electrical connections are combined into one compact unit controlling the end of arm tooling. Robot interface connection for fast installation and setup. When using our valve units together with our tool changers, the air supply to the tooling is automatically shut off during tool changes. Sensor interfaces, field buses, and vacuum modules are available options.

- Plug & Play modules
- Reduced installation time
- Designed for robot mount
- Standard (ISO) valve interface
- Integrated electrical connection box
- Optional tool changing function
- Optional fieldbus interface
- Optional vacuum module

Small



Small extended



Large





Tool systems

The complete plug-and-play tool system, dress for success

The RSP tool system is a complete model specific dressing for a robot. A combination of articles from our product palette creates a plug-and-play unit that ensures quick and easy installation, minimal maintenance and high uptime. This complete upper arm dress pack is fully documented along with predefined models for programming and simulation, which allows the engineer to save valuable design time. Spend time on the application, not on selecting parts for the robot.

A TOOL SYSTEM INCLUDES

- Head unit: Swivel / Swivel tool changer / CiRo
- Hose package
- Valve unit
- Robot interface connection
- Signal cable
- Hoses





Tool parking system

Easy parking for your robot application

The Tool parking system TPS400 is a complete unit for robotic use that enables parking of the tool between tool changes. It is easy to install, with a reliable design and multiple options available. The different components of the Tool parking system can be ordered for retrofitting to create a custom tool parking station. The parking system simplifies the docking process thanks to the self-aligning tri-point hanger. It has an effective dust protection which minimizes repair and maintenance and ensures higher uptime.

- Available in 3 different heights (1000, 1200, 1500 mm)
- For single or double tool parking slots
- Available for Compact and Moduflex series tool changers
- Sensors for tool parking status
- Extension kits available for larger tools





Grippers to complete your robot

As a partner with the Italian supplier Omil, we have grippers for all kinds of applications. Our collaboration with Omil means we can offer parallel long stroke grippers, two finger parallel grippers and three finger grippers. There is also a wide range of options available: protective covers, finger blanks, grip force retainers and sensors to open/close the gripper. This wide program of grippers and accessories completes our assortment, making us a main supplier for robotic accessories.

FOR ANY APPLICATION

- 2-finger parallel grippers
- 3-finger self-centering grippers
- 4-finger selc-centering grippers
- Angular grippers
- Radial grippers



- **Open/Close sensors**
- **Grip force retainer**

IMPROVING ROBOT FLEXIBILITY

