Automation for small and mid-sized series
Pallet, jig, fixture and workpiece handling
Greater autonomy - The day has 24 hours
with pallet system

An automatic production cell can generate revenue round the clock, seven days a week. Why be satisfied with 40 productive machine-hours a week when the same machine can achieve over 100 additional hours a week? Or more! Use every hour of the day and night for production.

with pallet system + automation

Absolutely real flexibility

The flexibility is characterised by the fact that the robot is able to substitute jigs, fixtures and workpieces without time loss. Consequently, ultra-small series, mixed with larger production batches, can be passed through in one machine tool without additional effort.

The WSM CellManagement software maintains your overview, is able to manage the tool data for all orders and saves the machining data for statistical evaluations. Additional processes such as part cleaning or gauging can be integrated with no problems.

Configuration example of a cell:

- Multi-function gripper
- Direct workpiece handling
- Pallet and jig/fixture handling
- Series-part feed
- Palletisation
- Flexible magazines
- Optical part recognition
- CellManagement software
**Multi-function gripper**

The multi-function gripper has a universal design so as to perform as many substitution and change functions as possible. The gripper is adapted in accordance with requirements.

**Part recognition by vision**

A camera-based part recognition system takes the place of complex and expensive positioning devices and thus enhances flexibility and quality of the process to be monitored.

- Supplies position data of an object
- Allows visual inspection
- Offers maximum flexibility
- Enhances quality

**Parts and chucks**

The parts to be machined may have an extremely wide variety of shapes and geometries. The chucks of System 3R are universal and can be easily matched to the clamping requirements of the parts. The costs of the direct chucks have been kept low intentionally thanks to the modular design.

**Clamping systems GPS 70 & GPS 120**

Chucks are available in various sizes. The clamping system GPS 70 with integrated slide at the centre allows the COCN nippers to be actuated, external/internal clamping via one function.

The GPS 120 features 4 additional media supplies and is able to control up to 7 functions by the collet chuck. Pneumatic elements (Twist-Lock, centric clamp, three-jaw chuck and vacuum clamping plates etc.) are substituted and activated automatically.

The GPS clamping system is fully sealed and, without clamping spigot, prepared for automation. Macro and MacroMagnum can also be used without problems in this process.
WSM CellManagement gives full control and process safety

An automated process may look complex. But, with WSM CellManagement, the process is visualised, process safety is fully ensured and control of production in the cell is recorded statistically (yield and error logs etc.).

A process chain comprises a large amount of information which is spread all over the workshop. It’s WorkShopManager’s job to keep track of all this information, and to coordinate the various operations.

- Administers order, drawing and component data in accordance with the individual workshop’s requirements.
- Transfers complete, ready-to-run machining programs to the machine.

WorkShopManager is a family of software which can be combined in different configurations to suit the needs of every user. Always with the focus on productivity and flexibility.

Other automation solutions from System 3R

Our services: From the concept phase to the turn-key system – consultancy – engineering – creation of layouts – installation/training – after-sales service

Other clamping solutions from System 3R

Macro
54 x 54 mm

GPS70
Ø70 mm

GPS120
Ø120 mm

MacroMagnum
Ø156 mm

GPS240/Dynafix
□240 / □280 mm

Delphin