

## WORKMASTER

is a flexible modular automation system consisting of a changing unit which changes large and small pallets between the magazines and up to four machines in the same production cell.

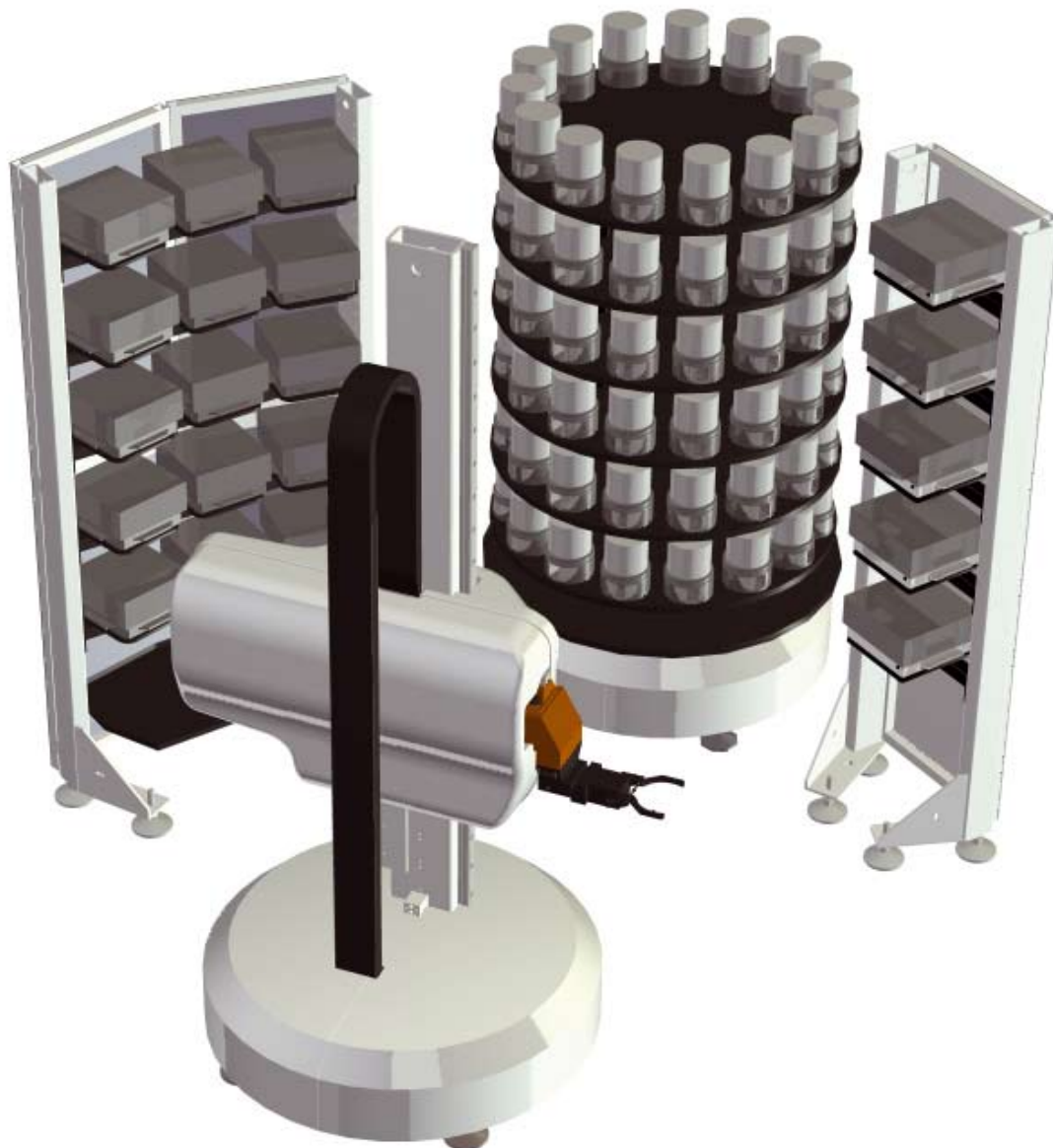
Several designs of magazine are available. The basic variants are modular racks or rotating magazines, where the shelves are matched to the pallet systems in System 3R's wide range of products.

Typical fields of application are:

- ▶ milling – changing of workpiece and cutting tool
- ▶ grinding – changing of workpieces
- ▶ die-sinking EDM – changing of workpieces and electrodes
- ▶ wire EDM – changing of workpieces

## TECHNICAL SPECIFICATION

- Transfer weight – pallet with workpiece 75 kg or 150 kg, electrodes 10 kg
- X-, Z- and C-axes – AC servomotor
- Max stroke, X-axis, 1250 mm
- Stroke, Z-axis – 1400 mm
- Rotation, C-axis, 300 degrees
- Power supply required: three-phase 400 V AC, 3.5 kVA
- Air pressure required –  $6 \pm 1$  bar, 150 l/min
- Interface - serial R232/422, M-function or parallel I/O



## MODULAR MAGAZINES GIVE FLEXIBILITY

The magazines are available in two basic designs – rack or rotary. In both cases they are matched to System 3R's pallet system. Each magazine unit consists of a number of shelves. The number is determined by the height of the workpieces in

question. Because of the modular design, you can start with fewer pallet positions. When the need arises, you can add one or more magazine units to increase the production capacity in step with the growth of your business.

### Half rack magazine

- Five levels
- Maximum load per level – 150 kg
- Maximum total load – 1200 kg
- ▶ Option – door for loading from behind
- ▶ Option – more shelves

| Tool system | Number of positions per shelf | Maximum dimensions workpiece |
|-------------|-------------------------------|------------------------------|
| GPS240      | 1                             | 450 x 450 mm                 |
| Dynafix     | 1                             | 450 x 450 mm                 |
| Delphin     | 1                             | 450 x 450 mm                 |
| MacroMagnum | 1                             | 200 x 200 / Ø200 mm          |



### Full rack magazine

- five levels (standard)
- Maximum load per level – 300 kg
- Maximum total load – 1200 kg
- ▶ Option – door for loading from behind
- ▶ Option – more shelves

| Tool system     | Number of positions per shelf | Maximum dimension workpiece |
|-----------------|-------------------------------|-----------------------------|
| MacroJunior     | 21                            | 45 x 45 / Ø45 mm            |
| Macro 54 och 70 | 12                            | 70 x 200 / Ø80 mm           |
| GPS70           | 12                            | 70 x 200 / Ø80 mm           |
| Macro Ø116      | 6                             | 150 x 150 / Ø160 mm         |
| GPS120          | 6                             | 150 x 150 / Ø160 mm         |
| MacroMagnum     | 5                             | 170 x 170 / Ø185 mm         |
| GPS240          | 3                             | 275 x 275 mm                |
| GPS240          | 2                             | 400 x 400 mm                |
| Dynafix         | 2                             | 400 x 400 mm                |
| Delphin         | 2                             | 400 x 400 mm                |



In **wire EDM**, only customer-specific solutions, since the number of positions per shelf is determined mainly by the size of the workpiece and therefore of the clamping elements and not by the tool system – whether you choose Macro, Unimatic or MacroTwin.

## Rotary magazine

- Maximum total load – 1000 kg

| Tool system | Number of positions per shelf | Maximum dimensions workpiece |
|-------------|-------------------------------|------------------------------|
| Macro Ø116  | 20                            | 135 x 135 / Ø150 mm          |
| GPS120      | 20                            | 135 x 135 / Ø150 mm          |
| MacroMagnum | 15                            | 160 x 160 / Ø190 mm          |
| GPS240      | 6                             | 280 x 280 mm                 |
| Dynafix     | 6                             | 280 x 280 mm                 |

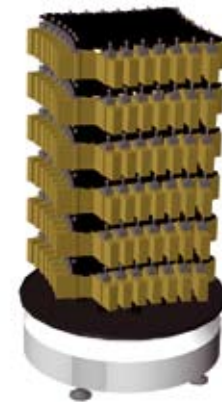
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## Indexing magazine

- Maximum total load – 1000 kg

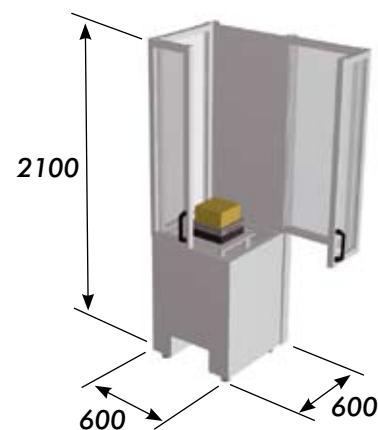
| Tool system     | Number of positions per shelf | Maximum dimensions workpiece |
|-----------------|-------------------------------|------------------------------|
| MacroCombi      | 60                            | 44 x 44 / Ø44 mm             |
| Macro 54 och 70 | 32                            | 65 x 65 / Ø90 mm             |
| GPS70           | 32                            | 90 x 90 / Ø95 mm             |



## WPS – preparation station / loading station

Station for the preparation of workpieces. The station has a door and side guards. Fencing is not needed. A chuck is not included.

- Maximum workpiece dimensions – 450x450x450 mm
- Maximum load – 200 kg
- Collection tray for oil and flushing liquid
- Presence monitoring
- Prepared for chuck installation, including foot control and pneumatic connections
- ▶ Option – manual flushing liquid sensor
- ▶ Manual indexing unit, 4x90 degrees, with locking device
- ▶ D antenna, fixed

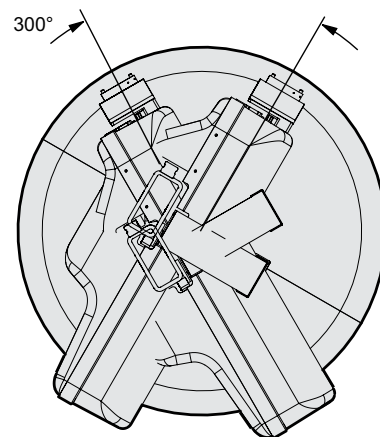
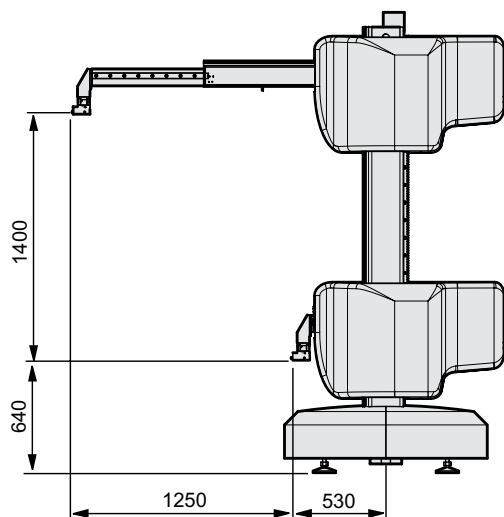
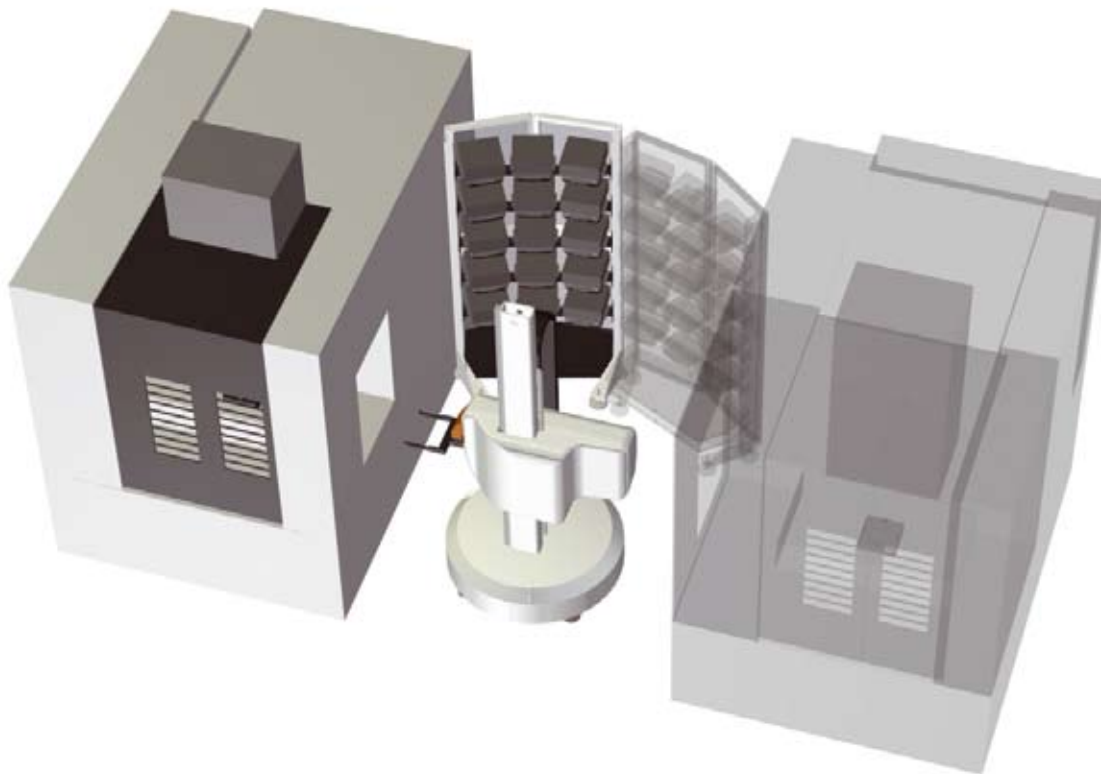


## GROWS WITH THE NEED

WorkMaster has enough capacity to serve more than one machine. One machine, two machines, three machines or four machines! Machines of the same type and make, or machines with different machining technologies and of different makes. WorkMaster has an open architecture, bringing them all together under one roof. Always with the focus on flexibility and productivity. The possibilities are endless.

## Options

- ▶ Gripper jaw with tipping function
- ▶ Gripper jaw with rotary function
- ▶ Double gripper jaw
- ▶ Tipping arm
- ▶ Loading stations
- ▶ Draining station
- ▶ Drying station
- ▶ Chuck adapters
- ▶ ID system with/without automatic scanning
- ▶ Cell PC with WorkShopManager software



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**system 3R** the Pioneer

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# WorkMaster

