# Machine Types Overview

## Rotary Indexing

- **Capacity**: up to 10,800 parts/hr
- **Components**: 2–6 components

**Technology**
- Mechanical round table with pick-and-place units
- Driven by central cam disk
- 12 to 16 stations designed with up to four production lines
- Up to 18 processes

**Advantages and Special Features**
- Fair prices, fully automated production
- Easy to retool, good for up to three different products
- Well suited to bottling viscous materials

## Ring Indexing

- **Capacity**: up to 16,800 parts/hr
- **Components**: 3–10 components

**Technology**
- Ring transfer with specific station layout
- Patented drive with up to 100 cycles
- 16 to 24 stations
- Up to 20 processes
- Large components possible (up to 600cm³)
- High positioning precision (± 0.02mm)

**Advantages and Special Features**
- Very quick and reliable
- Highly compact, switch cabinet integrated in system
- All surfaces of stainless steel or anodized aluminum
- Meets strict legal requirements for medicinal products

## Continuous Motion

- **Capacity**: up to 60,000 parts/hr
- **Components**: 2–5 components

**Technology**
- Round continuous-motion system with central tower
- 24 or 36 nests possible
- Up to 4 inner horizontal cams
- 100% mechanical motion
- Connection with up to six satellite stations

**Advantages and Special Features**
- High output quantities, perfectly suited to mass production
- Also suited to non-symmetrical rotational parts
- Processes with longer process times possible, e.g. bottling, vacuum checking and reshaping
- Very long lifespan
<table>
<thead>
<tr>
<th>Module</th>
<th>Parts/hr</th>
<th>Components</th>
<th>Technology</th>
<th>Advantages and special features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear Indexing</td>
<td>up to 8,400/</td>
<td>2-18</td>
<td>Cam-driven stations synchronized by a master shaft</td>
<td>High flexibility through exchangeable stations that can be switched on and off, maximum number of processes can be integrated, e.g. imprinting, welding, bottling, hot embossing and much more... Optimal accessibility to the assembly process</td>
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<tr>
<td></td>
<td>up to 21,500 parts/hr</td>
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<td>64 process steps with up to 80 cycles per minute</td>
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<td>8 production lines</td>
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<td>Complex parts can be assembled very cost effectively</td>
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<td>Closing Unit</td>
<td>up to 21,500 parts/hr</td>
<td>1</td>
<td>Individual flip-top design</td>
<td>Enables lower cycle times than inmold closing, simplification of the production process, reduced costs per part, quality control – 100% inline with no time loss, up to 350 parts/min</td>
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<td>Up to 24 tools</td>
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<td>Up to 3 processes</td>
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<td>Continuous-motion technology, vibratory-feeding technology for hot molded parts</td>
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<tr>
<td>Robot Cell</td>
<td>up to 600 parts/hr</td>
<td>1-4</td>
<td>Scara and 6-axle robots combined with standard feeding and assembly stations</td>
<td>High product diversity and different part components possible during production, sorting processes: palletizing, commissioning and packaging, complex handling processes and variation management, multiple check processes possible</td>
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<td>Freely programmable for complex requirements</td>
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<td>Optional: individual parts via integrated round-table assembly</td>
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