MIKRON G05™
High volume automation solutions
for the assembling of products
THE G05 PRODUCT FAMILY OFFERS CUSTOMIZED PRODUCTION SOLUTIONS BASED ON HIGH PERFORMANCE ASSEMBLY PLATFORMS COMBINED WITH FLEXIBLE FEEDING SYSTEMS. THE G05 IS OUR CONTRIBUTION TO THE SUCCESS OF YOUR ASSEMBLY PROJECT
THE MIKRON G05™ – STANDARD PLATFORM FOR YOUR AUTOMATION SOLUTION

The Mikron G05 linear assembly cell is based on a range of standardized building blocks which offer flexibility and modularity. The platform makes use of a central drive and cam based pick & place units for all primary motions. This guarantees perfect synchronization between the working units and the pallet indexing system. Each assembly step is followed by a systematic check to ensure continuous and consistent quality. Multiple cells can be linked together depending on project requirements which allows full layout flexibility. The linear concepts gives Improved accessibility for material flow both to and from the assembly line and also very quick access for operators and maintenance personal. The use of manual working stations, semi- and fully automatic cells offer progressive investment from pilot to fully automatic lines.

YOUR BENEFITS

Short lead times
It is now necessary to be on the market much quicker. The basis for this is modularity – standardized chassis, process module and unit and logistic module. In addition to standardized mechanical and software functions too.

Rapid change-over, modular adaptability
Mikron G05 is able to combine single or double module cells with manual working stations. Cells can be linked together, front and back, in order to meet restrictions on customer production floor. The individual process modules can be removed from the cell and tested off-line by technicians.

Progressive investment
Quick market changes with a high level of responsiveness. The concept with its manual, semi-automatic and fully-automatic cells make it possible to react module by module to changes in the marketplace.

Clean room compatibility
From the outset, the G05 takes into account the special conditions for clean room ISO 7 (class 10,000) applications: featuring elements with lifetime lubrication, high-quality stainless steel and aluminium, protective coverings over conveyors, easy accessibility and cleaning.

Pharma and medical qualification
Production processes all need to be verified by means of very strict regulations. To meet these specific needs, Mikron Automation ensures that, right from the concept stage, its platforms are fully compliant with the latest certification standards in force. Specific emphasis has been put on ergonomic and cleaning tooling to meet the GMP norms. Moreover, the basic machine – hardware and software – is validated according to GAMP 5 and is 21 CFR part 11 compatible.

Easy programming and operation
Effortless operation, rapid learning and system mastery are accessible through the touch screen HMI (Human Machine Interface). The control and inspection software is specially designed for ease of use. The simple interface makes it easy to configure standard functions.

Process integration expertise
With 40 years of process experience, Mikron has mastered a number of very complex assembly and test processes. A vast library of standard processes assures the quality, stability and reliability of your solution. One of the Mikron core competencies is to integrate high speed processes even when they are very complex.

5 REASONS TO WORK WITH MIKRON

1. Proven know-how – over 100 years of experience with precision machinery – close to 40 years in assembly
2. Reliable and technical production solutions with high added value – mastery of complex processes, standardized and proven automation platforms
3. Short delivery time – quicker time to market
4. Mikron worldwide organization is committed to your project success – from project fulfillment to 24/7 customer service
5. Long-term partnership – industry references
**TECHNICAL SPECIFICATIONS**

**Standardized linear concept with power and free pallets, servo indexed and mechanically locked inside the process cell**

<table>
<thead>
<tr>
<th>Feature</th>
<th>1 MODULE</th>
<th>2 MODULES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assembled product size</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Working area</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pallet size</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Assembly Speed</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Indexing repeatability</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Number of stations</td>
<td>8 (16)</td>
<td>16 (32)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>1235 x 1816 x 2220</td>
<td>2195 x 1816 x 2220</td>
</tr>
<tr>
<td>Control System</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Process Integration</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cleanroom</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Validation</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The G05 platform concept is based on standard building block elements; a stable and proven base machine to build complex high speed automation solutions.
SOLUTIONS ADAPTED TO YOUR NEEDS: FROM PILOT TO FULLY AUTOMATED LINE

The concept with its manual, semi automatic and fully automatic cells make it possible to react module by module to changes in the marketplace.

It is possible to invest as needed, based on product volume requirements; the assembly system grows to meet market demands.

Manual G05 assembly line  Semi-automated G05 assembly line  Fully-automated G05 assembly line

Polyfeed is a perfect fit for Mikron’s high performance assembly systems. Polyfeed is a flexible feeding system based on the use of visual recognition and vertical vibration systems to identify parts in their various forms and positions.

Mikron supplies a highly standardized tray handler capable of dealing with a range of applications from single tray to multiple stack. The standardized building blocks concept allows easy integration of additional in-tray process such as lid handling, inkjet printing, quality inspection.

G05 2 modules front - G05 1 module back - G05 1 module front

FEEDING SOLUTIONS
Mikron Automation is headquartered in Boudry (Neuchâtel), in a region that is regarded as the heart of the Swiss watchmaking industry. To date, Mikron Automation has installed more than 3,000 assembly and testing systems worldwide. Its international customers operate in the following markets: Pharma and Medical Devices, Automotive Supply, Electrical/Electronics, Consumer Goods and Construction/Building. Mikron Automation employs around 590 people at its sites in Boudry (Switzerland, headquarters), Berlin (Germany), Denver (USA), Singapore and Shanghai (China).