

SCALABLE ASSEMBLY SOLUTIONS – FULLY INTEGRATED AND TRULY GLOBAL



With the demand for more stringent standards, greater variety, smaller volumes and ever-shorter product lifecycles, the requirements for automation solutions have risen sharply in manufacturing industries. Here, Rolf Rihs, President, and Jean-François Bauer, Head of Marketing & Business Development, both of Mikron Automation, look at how – to meet customer needs – Mikron has specialised in flexible, modular assembly solutions that are easy to evolve during the different stages of a product lifecycle: from the development phase through to fully automated, maximum-performance production.

Demands on manufacturers in industries such as medical, pharmaceutical, automotive, consumer goods and electronics are especially high. In an extremely competitive market, pressure on costs is rising and the lead time for new products is getting ever shorter. An assembly solution often has to be ready before all the details of the new product are even known. In many cases, assembly solutions also need to be frequently switched to another variant.

It's no wonder then that demand for innovative, cost-optimised solutions has risen dramatically over the past few years. The future belongs to flexible automation systems that can be expanded and enhanced easily and cost effectively – from the development phase through to fully automatic production.

FIRST PROTOTYPES TO FULLY AUTOMATIC PRODUCTION LINES

Providers of automation solutions should be involved from the very beginning of product development. As a fully integrated project partner, we often learn all about the process at the same time as our customer. We always have a sound grasp of the risks involved and, through constant communication, we are able to anticipate future changes – from design for assembly to proof of principle, and from the validation process through to the pilot line and highperformance production (Figure 1).



Figure 1: High-performance automatic assembly and test systems.

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A close partnership with our customers enables us to understand their needs and react immediately. That’s why the flexibility of our automation systems is so important. As a global company, Mikron is ready to go to its customers wherever they are. This means the customer can start their production in very small batches anywhere in Europe, for example, and finish it in very high volumes somewhere in America or in Asia. Thanks to the multi-cell configurations of our automation systems and the integration of manual workplaces, we offer almost unlimited layout options. Throughout the whole process, it is easy to redeploy and reconfigure whenever necessary. This considerably increases cost efficiency and greatly shortens delivery times. What’s more, process validation can be transferred from one automation level to the next.

MINIMUM RISK WITH FLEXIBLE PRODUCTION STARTS

The key word in the brave new world of flexible automation systems is “scalability” (see Figure 2). For our customers, the new approach means minimum risk and a faster, more flexible production start – in several stages, if required. For many years, Mikron Automation has enjoyed an international reputation as a partner for high-performance automation solutions in the large-scale manufacture of precision products. For many, however, the fact that Mikron Automation is also one of the leading providers of scalable and flexible automation systems is a huge bonus. This strengthens our position as a first choice, long-term partner.

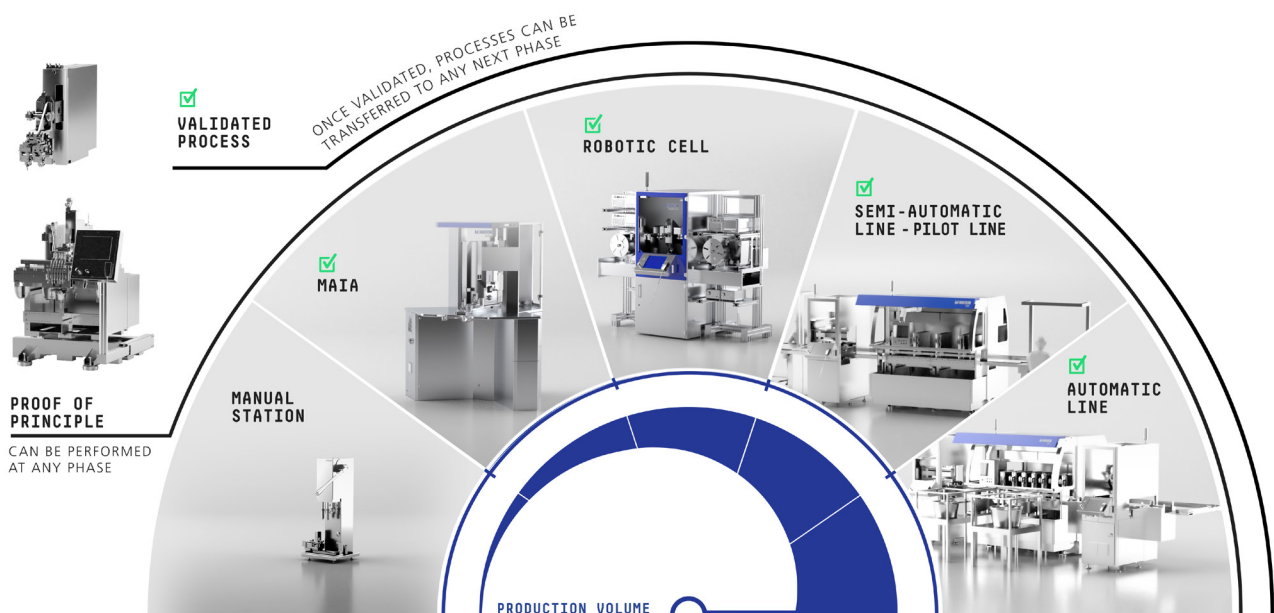


Figure 2: Mikron's scalable solution from the first idea to the highest performance solutions.



ABOUT THE AUTHORS

Rolf Rihs, Dipl Ing ETH, took over as head of the Mikron Automation business segment in mid-2002, prior to which he worked for the Sulzer Group for eight years in various regions and functions. He was previously a consultant at Helbling Management Consulting working on numerous projects for well known Swiss companies. Mr Rihs is a member of the Swissmem specialist group "Assembly and factory automation".

Jean-François Bauer is Head of Marketing & Business Development for Mikron Automation. He has been working for Mikron Automation for 21 years. As of today, he has 35 years of industrial experience with 25 years in precision machinery. Mr Bauer has occupied several management functions from production to purchasing, and from after sales to product management.

ABOUT MIKRON AUTOMATION

Mikron Automation – a division of the Mikron Group – is the leading partner for scalable and customized assembly systems – from the first idea to the highest performance solutions. Mikron's expertise and proven track record guarantee the most productive solution to assemble customer products at each stage of their lifecycle. To date, Mikron Automation has installed more than 3,700 assembly and testing systems worldwide. Its international customers operate in the following markets: pharmaceutical, medtech, automotive, electrical/electronics, consumer goods and construction/building. Mikron Automation currently employs over 650 people and is headquartered in Boudry (Neuchâtel), a region that is regarded as the heart of the Swiss watchmaking industry. It also has sites in Denver (USA), Singapore, Shanghai (China) and Kaunas (Lithuania).

Mikron Boudry SA
Route du Vignoble 17
2017 Boudry
Switzerland

Phone +41 32 843 11 11
Fax +41 32 843 11 12
mbo@mikron.com

MIKRON.COM/AUTOMATION

