# **ASSEMBLY MACHINE 4.0**

Automatic assembly machines enhanced by planar magnetic systems allow unprecedented flexibility without compromising precision and speed. This modular solution combines indexing, continuous motion and magnetic levitating shuttles.

### **Maintenance free**

Thanks to zero contact with moving shuttles, the planar system does not require any maintenance or lubrication. Magnetic levitation allows the deletion of all mechanical guides and the transport of all parts from one station to another by shuttles only. Manipulators' movements are defined by their electronic profiles and harmoniously aligned with no mechanical systems. That eliminates most of the mechanical elements and reduces machine maintenance to zero.



### Flexibility and enhanced manufacturing

Multiple variants assembly suitable for large and small batches.

Quick changeover thanks to snap-on tooling fixations. Programmable PIN movement profiles allow instant production launch after tooling replacement.

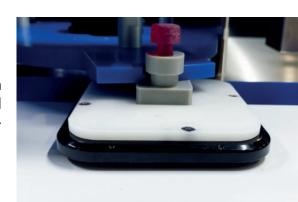
Dials with servo linear and rotating pins.

Personalized assembly sequence.

No mechanical cams.

### No air contamination

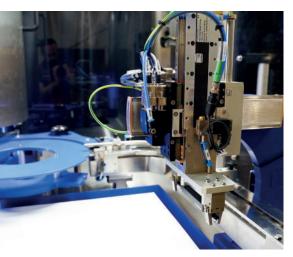
The magnetic planar system does not create any friction or mechanical wear. It is perfectly adapted for medical device manufacture in cleanrooms and aseptic environments, sensitive to contamination.





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### Seamless integration with all available high-end technologies



This modular solution allows the combination of distinct technologies within the same platform. The planar system is paired perfectly with indexing high-speed manipulators and continuous motion dials. Shuttles move according to the process time and quickly transport parts from one station to another without bottlenecks. Furthermore, the software constantly calculates the optimal path to direct the shuttles.

This assembly machine can be equipped with all types of feeding systems and can be associated with other machines, as well as, all existing assembly platforms, either linear conveyors or rotating tables.

### **Compact and scalable solution**

The planar system offers remarkable opportunities for disrupting the regular production process. Magnetic shuttles are able to tilt, change their height, apply force to the product and perform multiple movements at the same station. Thanks to such great mobility, certain processes and control stations can be simplified or completely eliminated.

The machine footprint can be significantly reduced, as well. This machine is scalable, adaptable and can be repurposed for other processes.



## **Energy efficiency**

Track feeding with no compressed air.

