



Cleanliness is part of its DNA

The MC 1400 is the ideal machine for highly complex products containing powders, liquids, lyophilized ingredients or large solids – offering flexibility in processing combined with very high output rates.

MC 1400

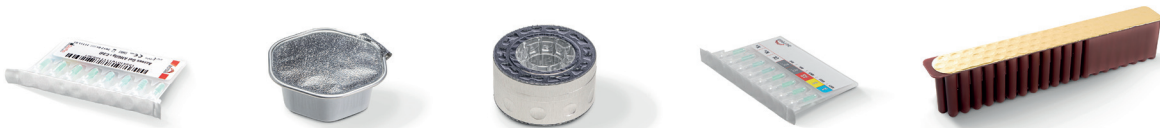
- ✓ Ideal for IVD and POC devices
- ✓ High output rate
- ✓ DNA-safe
- ✓ Asynchronous transport
- ✓ Suitable for component assembly

The MC 1400 sets new standards in the production of molecular diagnostics. It has been specifically designed for the filling of powders, liquids and lyophilized spheres in the production of complex IVD and POC products – with an output rate of up to 100 units per minute.

Thanks to its modular design, the MC 1400 supports all processing stations you need for your product, from filling to punching and sealing. Should you require special processes, Rychiger would of course be delighted to design them for you and integrate them into your MC 1400.

The containers are transferred through the machine by an advanced asynchronous transport system that makes use of state-of-the-art technology where the individual carriers are moved by magnetic force and independently of each other. This means that there are no fixed cycle rates so that processes that take longer to complete can be performed in parallel and with additional tools, doing away with bottlenecks.

As in all Rychiger machines destined for the healthcare market, the drive compartment is completely separate from the processing area. When it comes to hygiene, the MC 1400 is in a league of its own. Not only are all surfaces in the production area wipe-cleanable – they are also designed in such a way that extraneous DNA can be completely removed. Every area of the machine is easily accessible with unobstructed door openings of two meters. Optional laminar flow guarantees that the process air is free of particles, so that your production meets even the most stringent regulations governing diagnostics production.



Details



Transport

Asynchronous transport system with independent carriers.



Operation on the machine

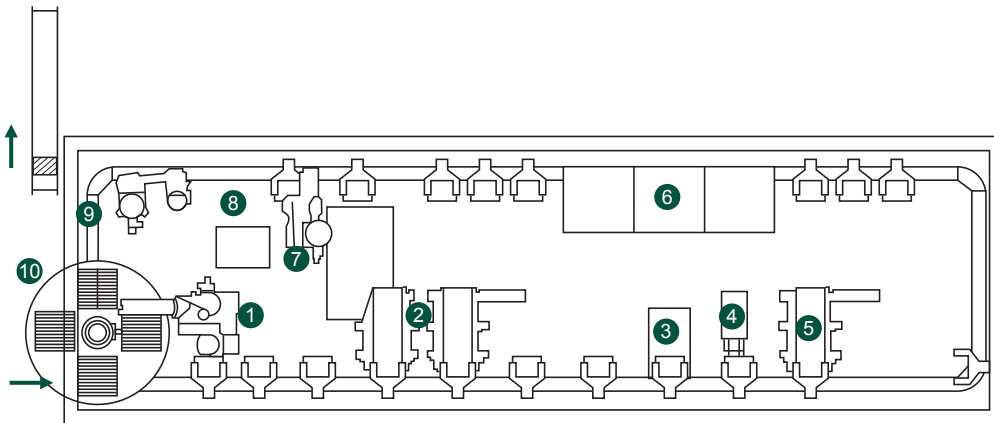
Typical protective equipment (PPE) in molecular diagnostic manufacturing.



DNA-cleanability

Detail of two process units featuring DNA-clean machine design.

Process illustration



- 1 Tray-handling and loading of parts
- 2 Powder dosing, quality control
- 3 Liquid dosing, quality control
- 4 Assembly of part, presence check
- 5 Conductive heat sealing
- 6 Ultrasonic sealing
- 7 Labelling
- 8 QC-parts
- 9 Rejects
- 10 Exit good parts

Technical data MC 1400

The technical data might vary, depending on the container dimensions and shapes, the product to be filled, the machine configuration and material specifications.

Outer unit diameter	Number of lanes	Cycles/min	Output/min	Output/h
120 mm	1	20	20	1'200
60 mm	2	20	40	2'400
30 mm	5	20	100	6'000

Size (LxWxH)	Weight	Connected load	Rated power	Compressed air
14 x 2,7 x 2,4 m	1'000 kg per module	3 x 400 V / 50 Hz 3 x 460 V / 60 Hz	40 kW	≥ 5 bar 30 l/min