

### **Romaco Macofar MicroRobot 50**

MicroRobot 50 is the first Romaco Macofar robotic filling and closing machine specifically designed to fit under isolation technology.

MicroRobot 50 can dose cytotoxic products, powder and/or liquid (combi filling), into glass vials. The machine is complete with two closing stations to secure the vials with rubber stopper and alu cap/flip-off alu cap.

MicroRobot 50 powder filling system is prepared to dose powders beyond the range normally handled by means of vacuum-assisted dosing wheels, including hygroscopic HP-API (highly potent active pharmaceutical ingredient), whilst maintaining a high level of accuracy.

MicroRobot 50 manages vials transfer and operations by means of robots, cutting down spare parts and changeover time, eliminating frictions, electrostatic charge and risk of impacts. Robots handling machine operations follow zero-loss logic to reduce waste and rejections.

MicroRobot 50 runs up to 50 vials/min. with 100% C.W. and 100% sealing force verification.



## Highlights

- No vials' transport size parts thanks to operations handled by means of robots
- All format parts can be disassembled using gloves and taken out via RTP (Rapid Transfer Port) for sterilization in autoclave
- Zero loss logic processes: in case of missing rubber stopper/alu cap, the robot will go back to stoppering station/alu capping station in order to correctly close the vials, reducing rejections
- End of batch procedure granting minimum powder residual at the end of the batch (ideal for high value products)
- High level of inertization thanks to gassing points located on robots' arms, in the powder hopper and in the filling needles
- Environmental controls in each process area (viable and non-viable particles detection)
- MicroRobot 50 can be prepared to be integrated with any isolator on the market as per customer's demand
- Washing can be performed by means of robot, creating a validated cleaning process

Technical Data	MicroRobot 50
Speed up to – single dose (pieces/hour)	3,000
Vial dimensions diameter (mm), min.–max.	16 – 52
Vial dimensions height (mm), min.–max.	35 – 110
Minimum dose (mg), min. dosages can change according to the powder specific weight	20
Minimum dose liquid (ml)*	0.5
Installed power (kW), without L.F.	22
Compressed air (bar)	6
PLC standard	SCHNEIDER
Machine dimensions (mm), L × W × H	3,950 × 1,700 × 3,000
Weight approx. (kg)	6,000

\* Depending on product and machine configuration

