

# Z-810 R-2

## Filling and Closing Machine



### Footprint

2400 x 1200 mm (without infeed and outfeed area)

### Output

800 – 5000 vials / h (depending on the filling medium)

### Technical data

GMP-Design

3 x 400 VAC, N, PE

5 - 6 bar air

1550 kg

SPS / HMI Siemens / Rockwell

Servo drives Bosch Rexroth / Linmot

### Products

Liquids (e.g. parenterals), semi-solids  
(e.g. gels)

### Containers

Syringes, vials, cartridges, always nested

### Configurations

Vacuum system

Manual / semi-automatic unpack and loading unit for sterile packed „ready to use“, nested containers

Automatic remove of Tyvek foil and slipsheet

Filling under vacuum (viscous products)

Dosing system according to product

Optional integration of particle and germ measuring system

Upgrade of safety hood with LAF (Laminar Air Flow)

RABS (Restricted Area Barrier System)

### Quality assurance

Thanks to the integrated IPC (In Process Control) any container in the nest can be freely chosen for weighing

## Features

- Fully automatic filling, closing and handling process
- Clear, well thought-out design concept
- A central robot system with just one coordinate system for filling and closing under vacuum guarantees an automatic and exact calibration of all operating axes

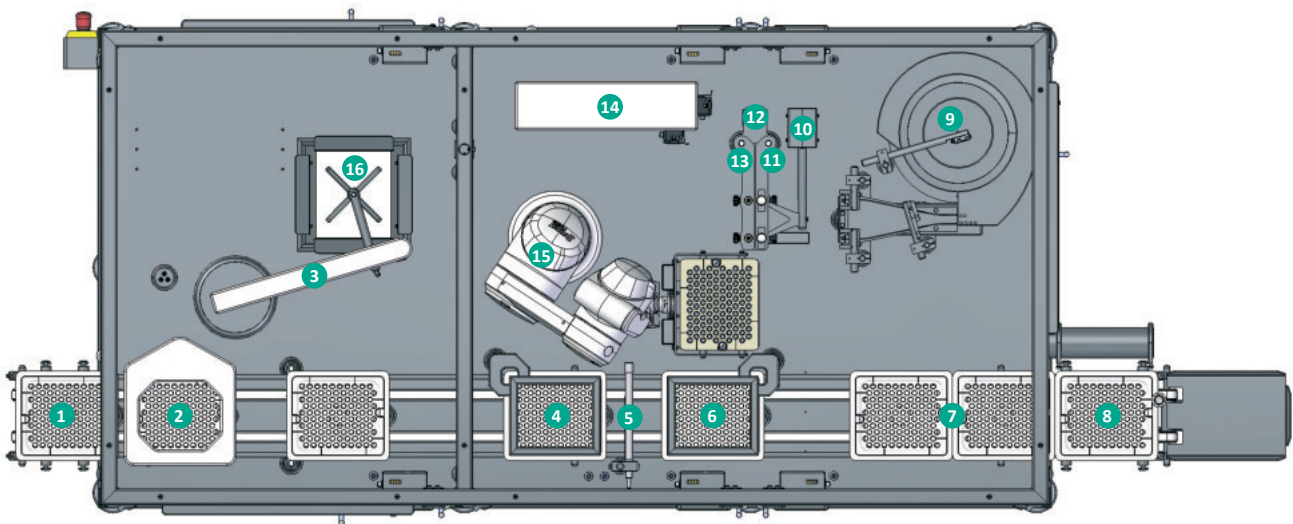
## Compliance with legal requirements

- Complies with the requirements of ISO 5 (ISO 6 for clean room)
- By means of the integrated data recording, production data can be exported according to 21 CFR Part 11
- A stainless steel frame grade 304 and parts in contact with product of stainless steel grade 316 ensure cGMP compliance
- IQ-/OQ-validation package

## Customer benefits

- Fast and tool-free format and product change
- Easy cleaning thanks to good accessibility to all parts
- Vacuum is 100 % monitored and controlled at each filled unit, up to - 950 mbar relative to atmosphere
- Liquid and viscous products, such as collagen and hyaluronic acid, can be filled
- Low operating and maintenance costs thanks to a compact design and a small footprint
- High flexibility (modular design)
- For clean room applications with Laminar Air Flow (LAF) or in the isolator
- Interfaces to external systems are freely configurable
- Dosing accuracy of +/- 1%

## PROCESS (CONFIGURATION EXAMPLE)



- |   |  |    |  |
|---|--|----|--|
| 1 | Product infeed                                       | 9  | Vibrating bowl for stoppers            |
| 2 | Heating station                                      | 10 | Stopper presenting unit                |
| 3 | Handling for the removal of Tyvek foil and slipsheet | 11 | Stoppering arm                         |
| 4 | Pick position  | 12 | Vacuum unit                            |
| 5 | Deionization   | 13 | Filling arm                            |
| 6 | Place position                                       | 14 | Filling system (pumps)                 |
| 7 | Buffer for finished products                         | 15 | Robot for nest handling                |
| 8 | Product unload for finished products                 | 16 | Waste box for removed foils and sheets |