

# Glass Vial Filling & Closing Machines FLR50 & FLR100



FOCUS ON DETAILS

# Glass Vial Filling & Closing Machines

## FLR50 & FLR100

The vial filling and closing machines type FLR50 and FLR100 are suitable for filling any liquid, either under sterile conditions or not and are ideal for small scale production. Thanks to their compact design, the machines fit to small rooms and are very easy to operate and clean.

Since vial processing means also facing a wide range of vial types and closure types, the FLR50 and FLR100 machines are available in many versions, each of them featuring a large range of customisation possibilities depending on your individual needs and requirements.



### **Standard equipment**

- Product range: Vials up to Ø 52 mm
- Output up to: 6.000/h
- Adjustable infeed magazine with min. load cell
- Up to four filling stations depending on machine type.  
Dosing by means of seal-less rotary piston pumps made of stainless steel 1.4404 (316L) or ceramic.
- Sorting and insertion station for stoppers and/or alu-caps
- Change parts set for one vial size
- PLC control
- Operator interface with coloured touch screen
- Feature „No vial – no filling – no closure“
- Interlocking safety cabinet with stainless steel frame
- Warning beacon
- Outfeed magazine with max. load cell
- Filling pumps for volumes up to 100 ml.

### **Typical Options**

- Special dimensions for infeed and outfeed magazine
- Turntable infeed and/or outfeed
- Infeed and/or Outfeed conveyor belts
- Inert gas supply before, during and after filling as well as during sealing
- Inert gas supply deficiency control
- Interlocked laminar flow hood
- Pump moistening device
- Diverse filters for gasses and medium
- Processing counters
- Micro-dosing pumps
- Fill level check using ultrasonic sensors
- Batch protocol printer
- Processing of plastic vials
- Further options on request

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## FLR50 & FLR100



The inclined metal belt gently pushes the bunch of vials towards the infeed screw, which separates and transports them to the main star wheel. The transport star wheel hands gradually the vials over the machine through the filling station (pre-gassing, gassing during filling and post-gassing are optionally available), rubber stoppering, alu-cap inserting and crimping station. Thus a careful object transport is ensured, especially when handling non stable vials. When handling stable vials, the infeed can happen also through a turntable or infeed conveyor belt.



Vials are filled by mean of a rotary piston pump (accuracy better than  $\pm 0.5\%$ ). Depending on the vials to be processed and the requested output of the machine at large filling volume, the machine can be equipped with up to four filling pumps respectively four filling stations. This ensures a large flexibility in terms of filling volumes, and high productivity from low to large volumes.

The machine design allows also an easy integration of peristaltic pumps, filling system especially suitable in case one-use product contact parts is requested.



After the filling station, vial stoppering is performed through a pick & place arm, allowing full insertion as well as half insertion for vials to be freeze dried.

Crimping of aluminium caps is performed using dedicated discs. The vial is brought in rotation from the bottom while the crimping disc moves horizontally in its crimping position, limiting laminar air flow disturbances and particle emission. Protection cover and exhausting device at the crimping station are available on request.



Once closed, the objects can be discharged from the outfeed magazine with suitable trays.

On request, the machine can be equipped with an outfeed conveyor belt to automatically transport the vials to the next processing machine (e.g. particle inspection machine).

# Glass Vial Filling & Stoppering Machines FLR50 & FLR100

## Technical data

	<b>FLR50</b>	<b>FLR100</b>
Max. output (object/h)	3.000	6.000
Maximum diameter (mm)	52	32 (52 on request)
Number of filling station	1 (up to 4 on request)	2 (up to 4 on request)
Machine dimensions (mm)	1760L x 1230W x 1900H	2300L x 1470W x 1900H
Power consumption	700 W	800 W
Power supply	400V , 50 Hz , 3-Ph. (Alternates available on request)	

Machines of type FLR50 and FLR100 are available in a versatile range of processing possibilities, like for example filling, rubber stoppering and alu-capping (/GB), filling and rubber stoppering only (/G), alu-capping and crimping only (/B), filling and closing with screw caps (/S)...

## Other machines available from ROTA

- Washing machines for ampoules and vials
- Hot Air Sterilisation Tunnels.
- Ampoule filling and sealing machines
- Plastic vial filling and closing machines
- Inspection machines for ampoules and vials
- Labelling machines for ampoules and vials
- Nested syringes filling and plunging machines
- Labelling and assembling machines for syringes

What started with a simple machine for filling and closing ampoules has developed into a comprehensive range of equipment for the pharmaceutical industry

Send us your request or specifications.  
We will be pleased to meet your requirements.

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