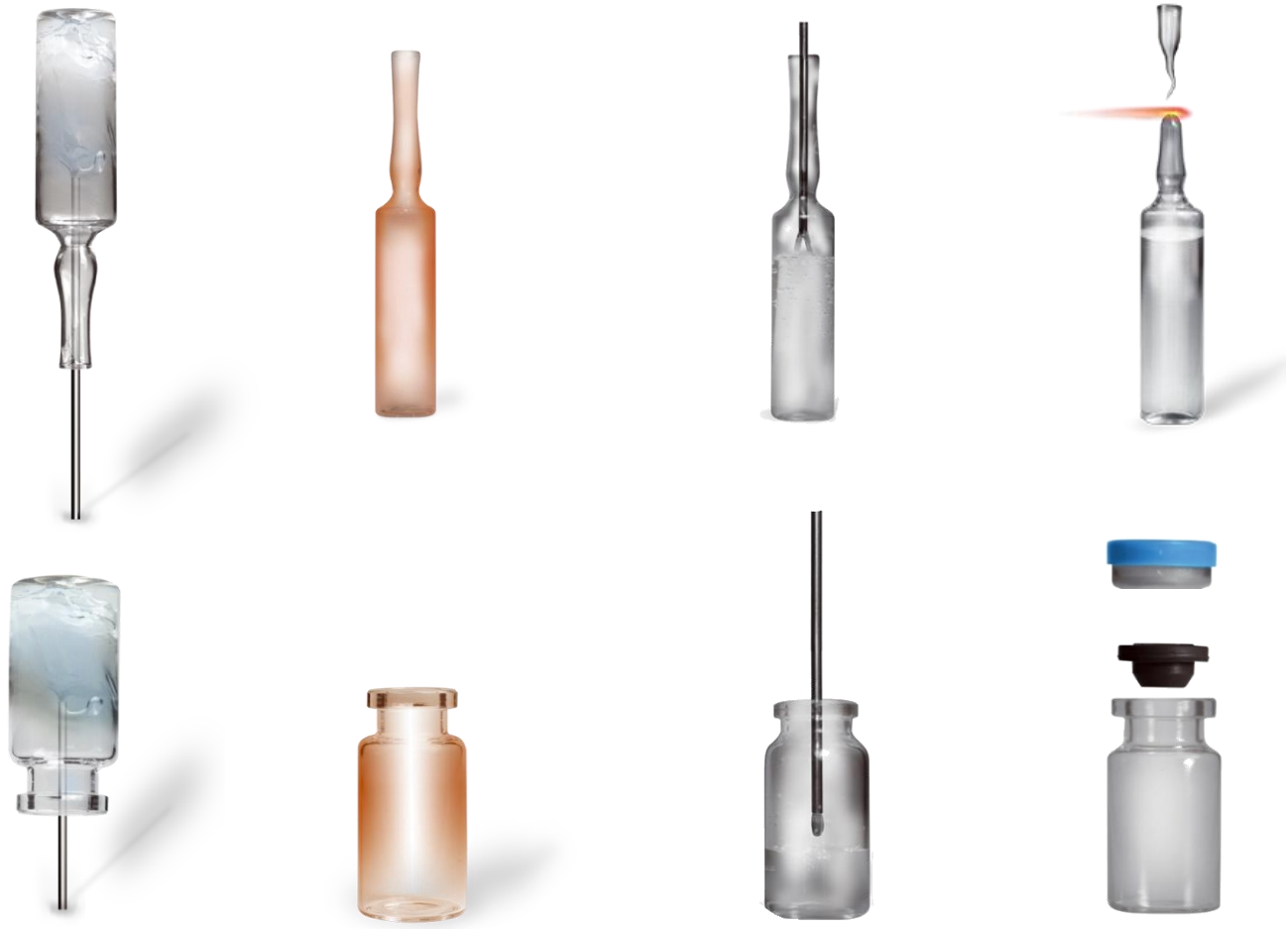
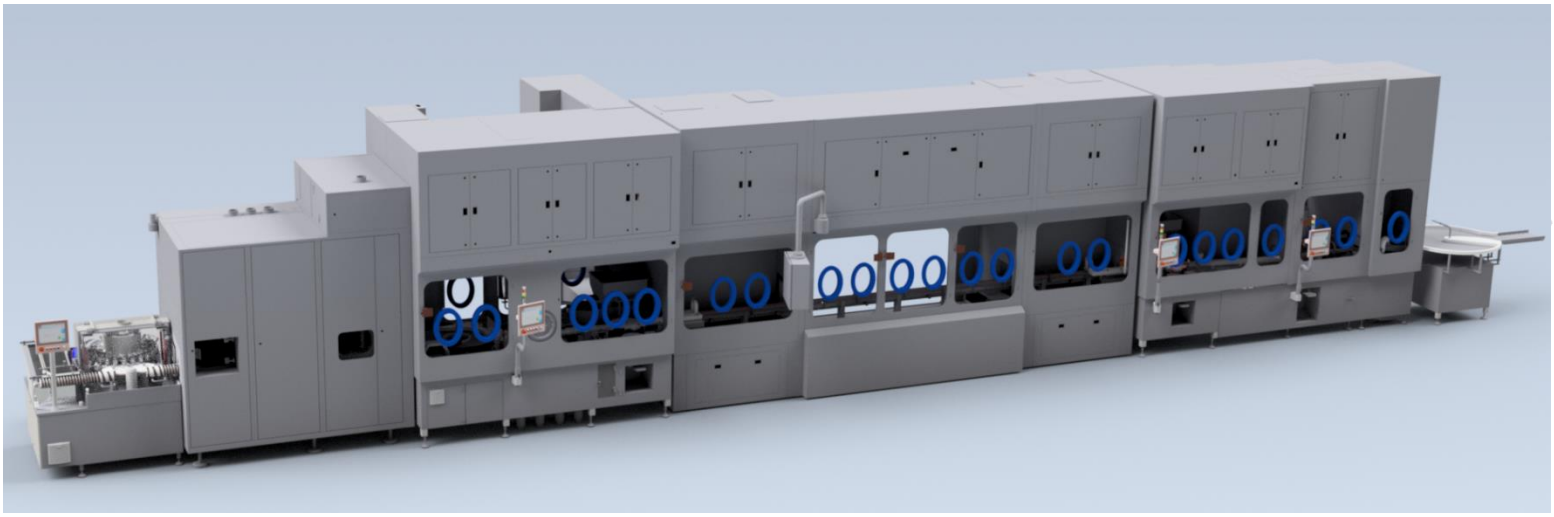


Integrated lines for Washing, Sterilising, Filling and Closing

When high process reliability matters

Integrated lines for ampoules, vials and bottles



Process concepts for minimal exposure of operating personnel ...

The production of large quantities requires highly automated process concepts. To achieve this goal, the machines for the fundamental process steps of washing, sterilising, filling and closing are integrated in a line. The large transportation capacities lead to low manufacturing costs. Due to the reduced operator contact with the objects the process quality of the sterile filling is even improved.

With engineers and technicians on the side...

All ROTA automatic machines can be integrated and assembled from us into compact lines. Even ampoules, vials and bottles can be easily processed on a single system. Large and complex systems of this type are often designed and built for specific customer needs. Already in the design phase an experienced team of engineers and technicians are supporting our customers.

Already from 3000 per hour

The application field is almost unlimited. Whether standard products, serums, antibiotics or freeze-dried products – there is an appropriate ROTA line. Thereby cRABS or isolator technology can of course be applied.

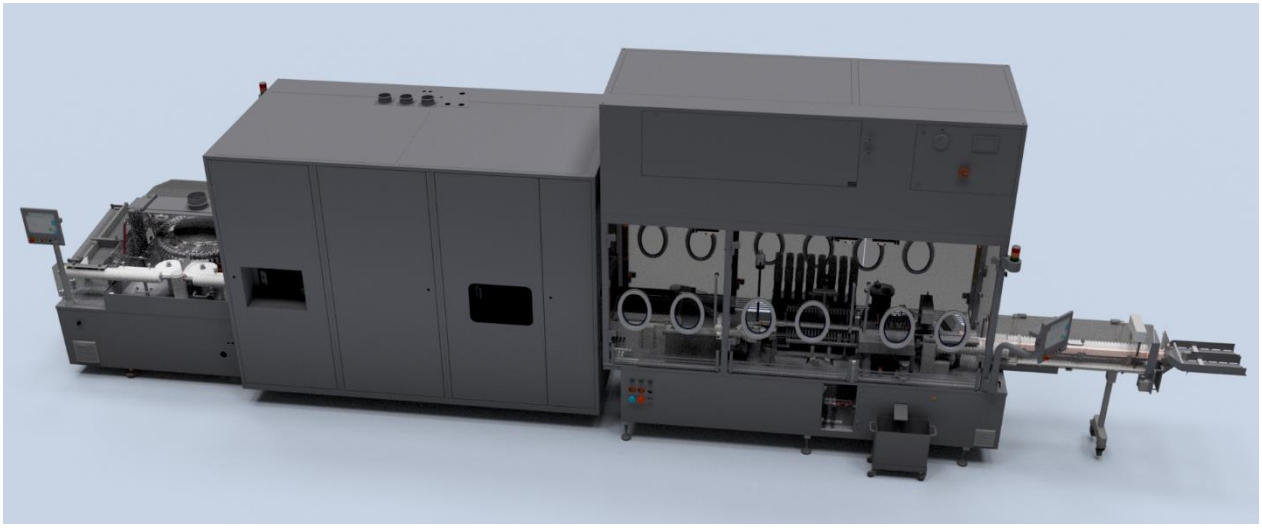
From ⌀ 9 mm to ⌀ 68 mm

Our systems are characterised by their compactness and low utility consumption. Your production also benefits from the high flexibility and ease of use of the machines.
Particularly interesting are our combined lines where ampoules, vials and bottles are processed on a single system. For ampoules, the filling and sealing machine can be linked with our ring coding machine.

ROTA FOCUS ON DETAILS

When high process reliability matters

Integrated lines for ampoules, vials and bottles



Models	K-50/A	K-100/A	K-200/A	K-300/A	K-400/A
Ampoules					
Max. Output/h	3.000	6.000	12.000	18.000	24.000
Max. ∅ (mm)	24	24	24	24	24

Models	K-50/A-F	K-100/A-F	K-200/A-F	K-300/A-F	K-400/A-F
Ampoules & Vials					
Max. Output/h	3.000	6.000	12.000	18.000	24.000
Max. ∅ (mm)	52	52	32	24	24

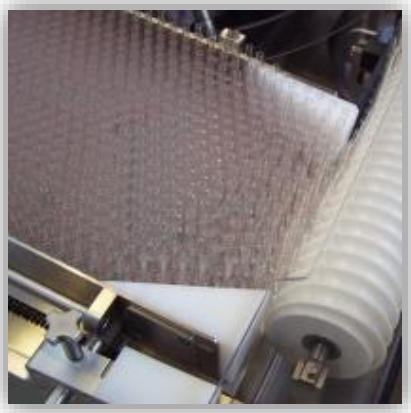
Models	K-30/F	K-60/F	K-120/F	K-201/F	K-301/F	K-401/F
Vials						
Max. Output/h	1.800	3.600	7.200	12.000	18.000	24.000
Max. ∅ (mm)	68	68	68	68	52	52

OUTPUT PER HOUR

ROTA FOCUS ON DETAILS

Pharma Conform Cleaning

Washing of ampoules, vials and bottles



An inclined belt infeed magazine (or a turntable infeed for stable vials) allows the containers to be discharged directly from trays. From the infeed magazine, they are by means of an infeed scroll gently transferred to an intermediary star wheel.

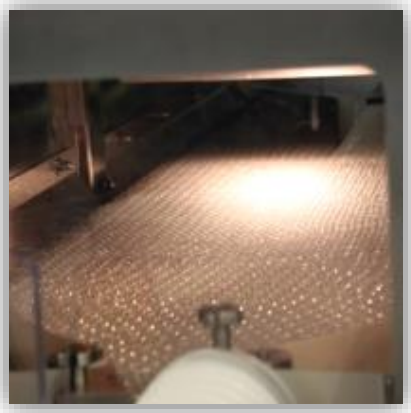
From the star wheel, the containers are picked up by suitable grippers mounted onto the central transport turret, turned by 180° and processed to the 8 inside and 4 outside standard available washing and air blowing stations.

Once the containers went through all washing stations, they are turned by 180° in their outfeed position, released from the grippers and transferred with an outfeed scroll into the connected sterilisation tunnel

ROTA FOCUS ON DETAILS

Reliability up to 350°C

Sterilising of ampoules, vials and bottles



The containers are fed into the infeed zone of the hot air sterilisation and depyrogenisation tunnel, in which side belts ensure a perfect synchronisation with the washing machine.

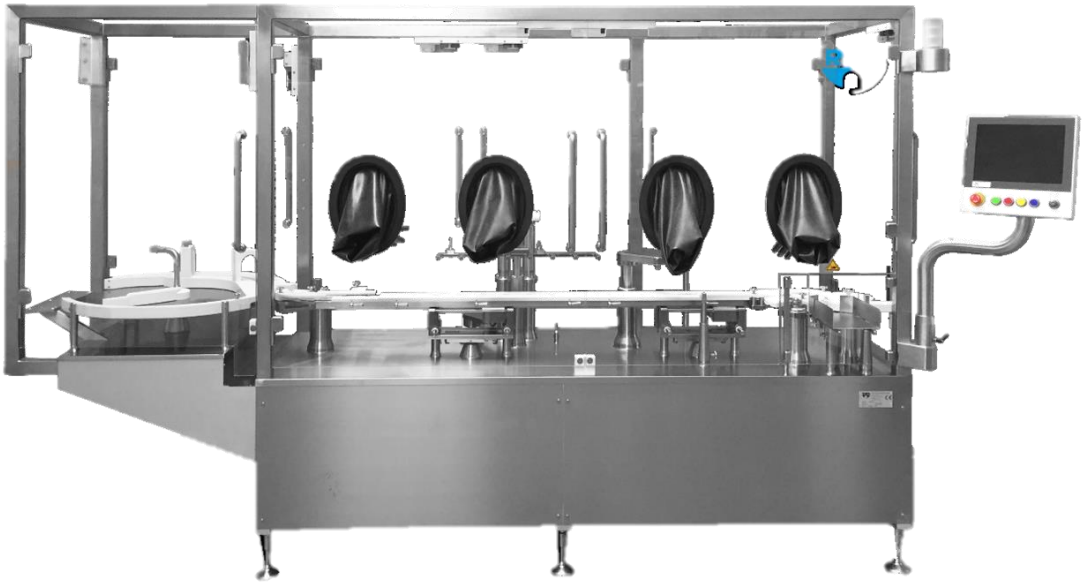
In addition to control windows in infeed and outfeed zones, ROTA tunnels feature a high grade of standard equipments like recorder, automatic shutter height regulation, automatic differential pressure compen-sation, chilled water air cooling... securing a perfect sterilisation and depyrogenisation process.

The high insulation grade of ROTA tunnels allows the electrical cabinet to be integrated, and consequently saves installation and maintenance costs of a separate dedicated room.

ROTA FOCUS ON DETAILS

High reproducibility and accuracy

Filling of ampoules, vials and bottles



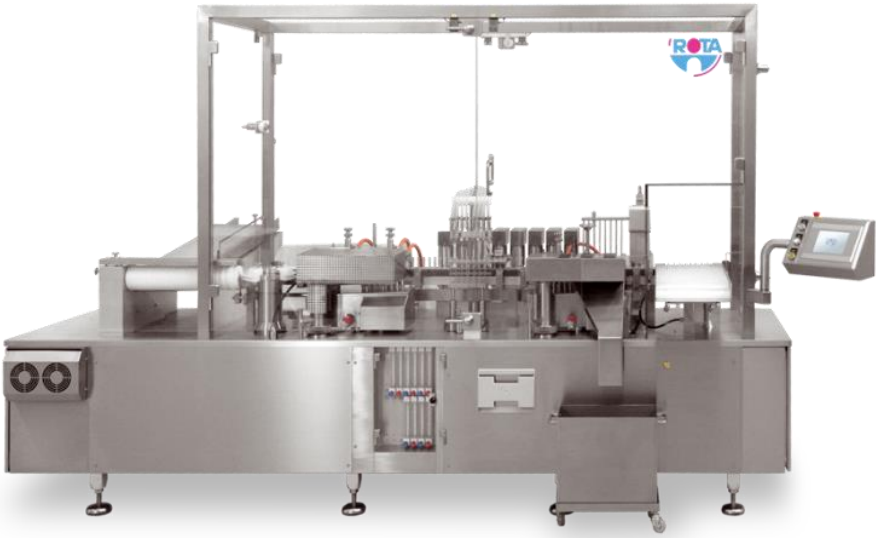
The containers are safely transferred from the tunnel onto the filling machine. A flexible metal belt allows though min-max sensors the synchronisation of the machines. From the infeed system, ampoules/vials are gently transferred towards the different processing stations of the filling machines.

Filling generally happens using rotary piston pumps made of 316L stainless steel (ceramic also available) ranging from some micro-litres to 125 ml, depending on the application and the machine. Other filling principles like peristaltic pumps or time-pressure may be delivered too.

When processing ampoules, centering of necks at the filling and inert gas supply stations ensures the needles entering the ampoules in the centre position, thus wet necks and carbonised necks are avoided.

To guarantee the sterility

Closing of ampoules, vials and bottles



On ampoule machines, the sealing happens by means of flame.

In case of vials, different type of machines are available: filling & stoppering, capping & crimping on the same machine, or separated from the filling & stoppering machine.

In case of separate machines, once the vials are filled and stoppered, they are transferred to the capping & crimping machine by means of a conveyor belt, equipped with a maximum load cell for the synchronisation between the machines. Special equipment to process vials to be freeze dried are also available.

Final sealing of vials can happen using standard crimping heads, but also, depending on machine type and customer wishes, by means of crimping discs.

...substantially derived from the rotary transport technology of containers during the filling process, has been in business for more than 100 years.

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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