



**OPTIMA**

SMART SOLUTIONS FOR PHARMA EXPERTS  
STERILE & NON-STERILE EXPERTISE

Member of

PACKAGING VALLEY  
Germany

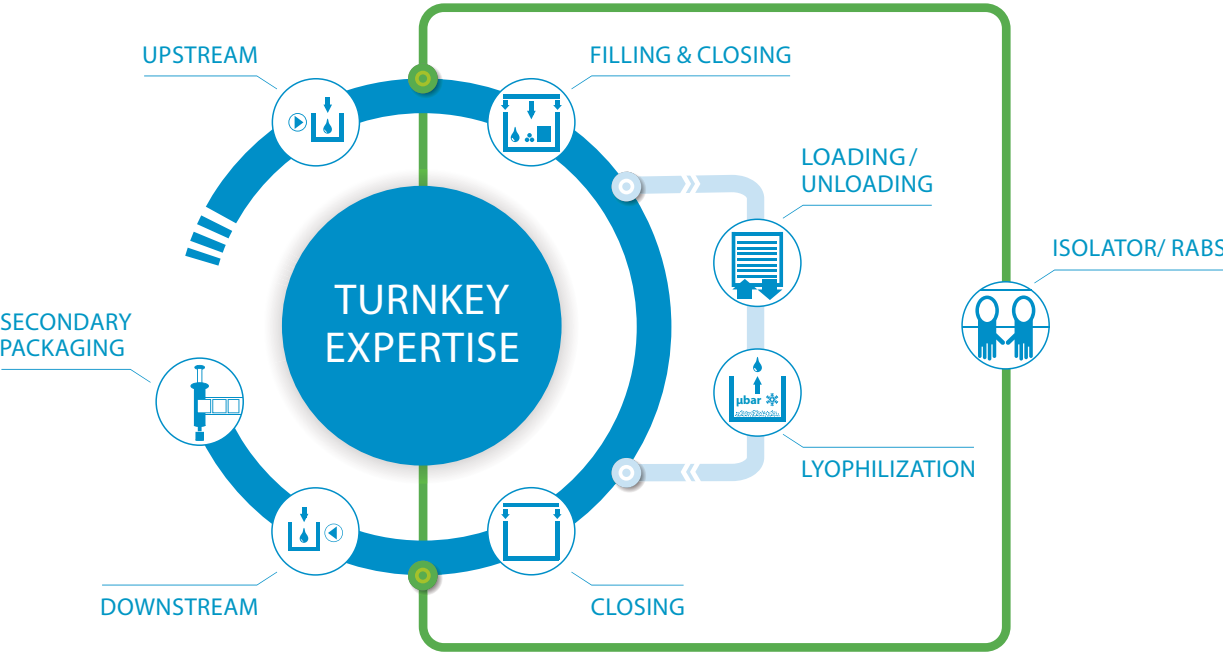
EN

# OPTIMA

## For uncompromising pharmaceutical applications

Optima Pharma develops and manufactures highly flexible filling, closing and process technology for pharmaceutical products. Exceedingly sophisticated, fully automated systems from Optima Pharma are used to process blood plasma products, vaccines, oncology and biotech products in prefilled syringes, vials, bottles and cartridges. Non-sterile pharmaceu-

ticals and diagnostics are additional applications of Optima Pharma. The company's extensive technology portfolio includes washing machines, sterilization tunnels, filling and sealing, robotic product handling and other functions. Freeze drying systems and isolator technologies complete the extensive turnkey systems by Optima Pharma.



### OPTIMA packaging group GmbH

<b>2450</b> Employees worldwide 	<b>&gt;400</b> Service-Employees worldwide 	<b>85%</b> Export 	Family-owned <b>Third generation</b>
<b>&gt;100</b> Patents worldwide 	 <b>19</b> International Locations 	<b>&gt;400 Mio. €</b> Turnover 	

## STERILE & NON-STERILE FILLING SOLUTIONS

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As a technology leader in a complex environment, we possess the knowledge for the entire supply chain.

This includes complete lines, specialty solutions and demanding standard machines for primary packaging ranges.

*Jürgen Rothbauer*

Managing Director, OPTIMA pharma GmbH

**Large Variety  
of Container  
Closure  
Combinations**

## Sterile & Non-sterile Filling Solutions

The machine range includes individual solutions for GMP-conforming production as well as a complete selection for all dosage forms, from cleaning, filling and closing, up to the assembly of complex packages – including turn-key line solutions.

Whether it be a compact monoblock machine or a complete packaging line: thanks to the quick format changeovers, Kugler machinery processes highly diverse container and closure forms, offers modular designs and represents a unique investment for long-term reliability.

### **LEADING ROLE AS A SOLUTION PROVIDER**

for sterile and aseptic filling, lyophilization and containment technology

### **GMP-COMPLIANT MACHINES AND SYSTEMS**

including the newest technologies

### **MAXIMUM SECURITY AND HIGHEST SAFETY**

with our machine solutions for highest purity levels

### **EXPERTISE IN THE IMPLEMENTATION**

of complex turnkey projects



# Complete Cleanliness for Your Containers

## Linoclean

The linear filling machines are available in several performance ranges (single- or multi-position design), continuous or intermittent, and with a wide selection of dosing systems. The cleaning machine cleans the objects with deionized and filtered compressed air and sucks loose particles up using a vacuum.



Bottle Rinsing Machines

### Technical Data

Output	up to 12,800 pcs./h	
Processing range	Round bottles and rectangular bottles	
	Bottle diameter	25 - 95 mm
	Cylindrical height	min. 35 mm
	Inside bottle neck diameter	min. 12 mm





FILLING AND CLOSING

# Compact and Highly Efficient

## Monoblock Machines

A variety of state-of-the-art technologies and minimum space requirements – these are the compact Optima Pharma Monobloc machines. The Monobloc machines Flexofill, Linoline and Contiline are filling and closing liquids to pasty products in containers with a diameter of up to 100 millimeters and a height of up to 200 millimeters - all on one machine.

The output ranges up to 21,600 containers per hour, depending on machine type. You select the number of filling heads, the fill volume or the number of closing stations for your application. Please contact us to find out which machine solution is right for you.



Technical Data			
	Flexofill	Linoline	Contiline
Products	Liquid to viscous	Liquid to viscous	Liquid to viscous
Container	max. Ø 100 mm/ 220 mm Height	max. Ø 100 mm/ 220 mm Height	max. Ø 100 mm/ 220 mm Height
Output	up to 4,200 pcs./h	up to 7,200 pcs./h	up to 21,600 pcs./h
Filling positions	1 - 4	1 - 8	1 - 8
Filling volume	0.1 - 2,500 ml	0.1 - 2,500 ml	0.1 - 2,500 ml
Closures	Ø up to 50 mm  For stoppers, press-on, threaded, pump, crimping, roll-on and PP closures	Ø up to 50 mm  For stoppers, press-on, threaded, pump, crimping, roll-on and PP closures	Ø up to 50 mm  For stoppers, press-on, threaded, pump, crimping, roll-on and PP closures
Closure stations	up to 3	up to 3	up to 2

## Monoblock Machines





# More Flexibility for Your Production

## Flexofill

Do you want to fill pharmaceutical liquids, close the containers and only have a limited amount of space? The Flexofill has the widest processing range for closures. Stoppers, press-in closures, screw caps, pump inserts, crimping and pp-closures can be processed with this machine. Clear visibility and easy access allow the operator a fast and tool less format change and easy cleaning. The Flexofill Monobloc machine also meets the cGMP standards – all drives are below the machine’s table. With a minimum space requirement, the modular concept stands out and makes the Flexofill a flexible partner for your requirements.



## Your Advantages

- cGMP compliant construction: All drives are in the machine base
- Virtually all motions controlled by mechanical cams or servo motors
- Good cleanability
- Good accessibility
- Modular concept: processing stations can be arranged freely
- Feeding possibilities for any type of container
- All adjustments can be reproduced automatically or by means of digital display
- Quick, toolless format changes
- Compact machine footprint

## Technical Data

Container transport	Star wheel
Output	up to 4,200 pcs./h
Filling positions	1 – 4
Filling volume	0.1 - 2,500 ml
Closure stations	up to 3
Container height	220 mm
Container diameter	100 mm





FILLING AND CLOSING

Linear Design  
and Easy Access

Linoline

The Linoline machine concept stands for experience and technical sophistication. It is designed to process up to 7,200 containers per hour. The Linoline is breaking new ground; with its wide range of formats, servomotor drives and a transport system that adjusts to any container size, the new linear monoblock machine is outstanding.

Complex closure styles can be processed over several stations and format changeovers can be implemented very quickly. Each station is continuously adjustable for different bottle heights using an infinitely variable height adjustment. Part size changes require little to no additional tools and the linear arrangement of the Linoline also provides ideal machine accessibility.



Monoblock Machines

Your Advantages

- Modular design
- Diving nozzle movement can be flexibly adjusted to the shape of the bottle, and can be saved as a variable pre-defined value
- Dosing volume setting can be saved as a variable pre-defined value
- Variable settings for suction and dosing time. This increases efficiency by up to 20%
- Drip retraction can be configured and stored
- Dosing speed can be varied to handle very foamy products
- Processing of liquid and highly viscous products
- Laminar flow friendly
- Quick toolless format changeover

Technical Data

Container Transportsystem	Rake transport
Output	up to 7,200 pcs./h
Filling positions	2 - 8
Filling volume	0.1 - 2,500 ml
Closure stations	up to 3
Container height	30 – 220 mm
Container diameter	100 mm





FILLING AND CLOSING

# Designed for the Highest Performance

## Contiline

The Contiline is a continuous motion, high capacity machine for the filling and closing of vials, bottles and plastic syringes. It is designed to process up to 21,600 bottles/hour, adherent to the GMP and FDA regulations as well as all other worldwide applicable Standards. For handling high-quality products, the Contiline combines speed with efficiency. The linear transport system ensures an optimum LF flux. The clearly arranged and easily accessible construction, allows for a precise check as well as quick changeovers for parts of all sizes. All vital components are constructed using corrosion resistant materials, making it easy to clean and maintain the machine.



## Monoblock Machines

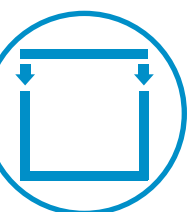
### Your Advantages

- Modular design
- Linear construction gives optimal access and allows thorough cleaning
- Continuous container infeed, no product spill
- Diving nozzle movement can be adjusted flexibly to the shape of the container via servo motor, and can be saved as a variable pre-defined value
- Dosing volume setting can be saved as pre-defined value
- Variable settings for suction and dosing time via PLC. This increases efficiency by up to 20%
- Variable return suction can be configured as a predefined value
- Dosing speed can be varied to handle very foamy products
- Processing of liquid and highly viscous products
- Laminar flow friendly
- Quick toolless format changeover

### Technical Data

Container transport	Auger transport
Output	up to 21,600 pcs./h
Filling positions	4-12
Filling volume	0.1 - 2,500 ml
Closure stations	up to 2
Container height	220 mm
Container diameter	100 mm





## CLOSING

# High Accuracy and Efficiency with a Compact Design

Highest precision and efficiency with minium space requirements. The fully automatic Optima closing machines are suitable for the individual operation, as well as the integration of a complete production line for the pharmaceutical industry. The flexibility for different container heights is infinitely adjustable. Different closures for a variety of containers can be processed.

### Flexocap

Fully automatic mounting and closing machine for handling stable and unstable containers.

### Linocap

Fully automatic closing machine with up to four independent closing units in twin design for variable throughputs.

### Rotocap

High-performance rotary closing machine for the fully-automatic handling of most closures..



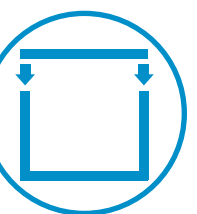
## Closing Machines

### Intermittent Operation

		Closures	Bottles
Typ	Output	Processing range	
Flexocap	up to 4,200 pcs./h	Ø up to 50 mm	Ø up to 100 mm 220 mm height
Linocap	up to 7,200 pcs./h	Ø up to 50 mm	Ø up to 96 mm 220 mm height

### Continuous Operation

		Closures	Bottles
Typ	Output	Processing range	
Rotocap	up to 24,000 pcs./h	Ø up to 50 mm	Ø up to 100 mm 220 mm height



## CLOSING

# Jack of all Trades Among Closing Machines

## Flexocap

The key word in the pharmaceutical industry is flexibility. The Flexocap machine ensures this with its modular design that can combine all closing systems in any sequence. The machine has appropriate infeed systems for all containers. The machine is easy to access to guarantee easy cleaning.

All drives are below the machine's tabletop according to cGMP standards. A tool less format change makes it quick and easy to change format parts. The compact design of the Flexocap is the ideal solution for limited space. The Flexocap processes stoppers, droppers, screw caps and many more closure types with an output of 4,200 pieces per hour.



## Closing Machines

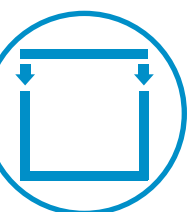
### Your Advantages

- cGMP compliant construction: All drives are in the machine base
- Virtually all motions are controlled by mechanical cams or servo motors
- Good cleanability
- Good accessibility
- Modular concept: All closing stations can be arranged freely
- Feeding possibilities for any type of containers
- All adjustments can be reproduced automatically or by means of digital display
- Quick, toolless format changes
- Compact machine footprint

### Technical Data

Output	up to 4,200 pcs./h
Closure Stations	up to 4
Container Height	220 mm
Container Diameter	100 mm





CLOSING

Easy and Quick Format Changes

Linocap

Closing machine for closures with or without a dip tube with a crimp or threaded design, roll-on and PP closures, stoppers, droppers and pipettes.

Linocap with Transport Rake

The advantage: easy changeover to other container sizes. The transport system can be quickly cleaned, resulting in minimum downtime.

4 x 2 Work Stations

Containers are transported by an intermittent motion rake. Easy access to the workstations leads to easy and quick changeover to other containers and closure sizes.



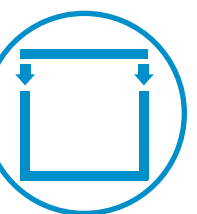
Closing Machines

Your Advantages

- GMP compliant construction:  
All drives are in the machine base
- Easy to operate via graphic user panel
- Reproducible setting values by use of digital displays
- Screw spindles with servo drive
- Modular design
- Linear transport system
- Verification for all processing stations and automatic reject

Technical Data	
Output	up to 7,200 pcs./h
Closure stations	4 units in twin design
Container height	220 mm
Container diameter	96 mm





CLOSING

# Cap Transfer According to Your Requirements

## Rotocap

Closing machine for threaded closures with or without dip tube stoppers, droppers or pipettes for crimped and PP closures. High flexibility at the cap transfer can also be positioned at the infeed or discharge.

## Rotary Closing Machine

A continuous motion rotary closing machine with up to three rotors.

## Rotocap With Servo Screw Capping Spindles

The positioning of screw closures can be achieved with the servo screw capping spindles as well as with the servo motors.



## Closing Machines

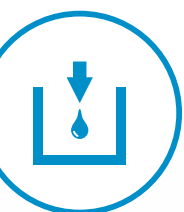
### Your Advantages

- cGMP compliant construction:  
All drives are in the machine base
- Easy to operate via graphical user panel
- Reproducible setting values  
by use of digital displays
- Screw capping spindles with servo drive
- Modular design
- Verification for all processing stations  
and automatic reject

### Technical Data

Output	up to 24,000 pcs./h
Closure stations	4 - 12
Container height	220 mm
Container diameter	100 mm

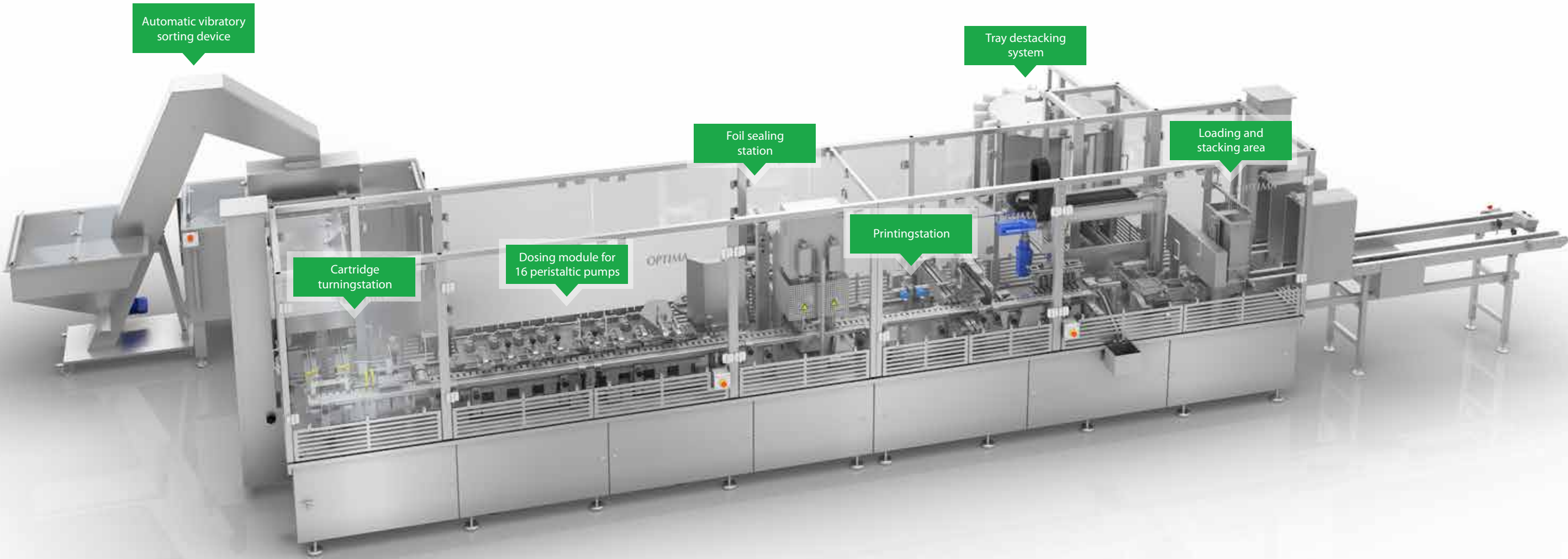




NON-STERILE FILLING

# Turnkey-Line for Multi Cartridges

Linoline120

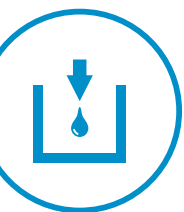


## Technical Data

- **Output:** up to 7,200 pcs./h
- **Process:** 2-laned
- **Object Diameter:** between 30 mm and 95 mm
- **Object Height:** between 50 mm and 220 mm

## Features

- 100% In-Process Control
- ATEX model optional
- Intermittent operation

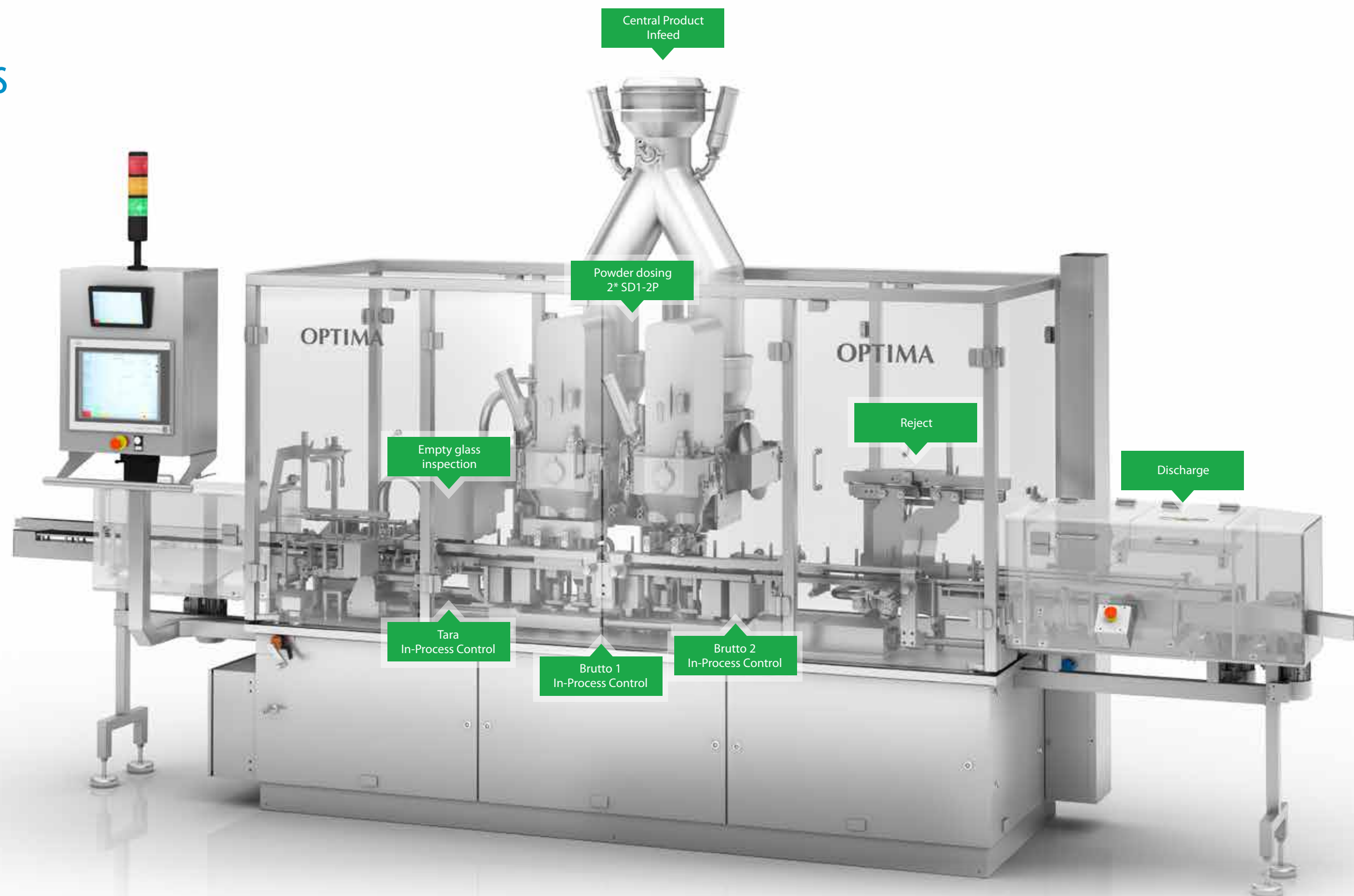


NON-STERILE FILLING

Turnkey Solutions

# Turnkey-Line for Powdery Products

Linoline60



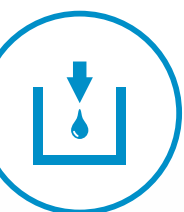
## Technical Data

- **Output:** up to max. 3,600 pcs./h
- **Processing range:** 1-laned
- **Object diameter:** 30 mm up to max. 95 mm
- **Object height:** 50 mm up to max. 220 mm

## Features

- 100% In-Process Control
- ATEX model optional
- Intermittent operation



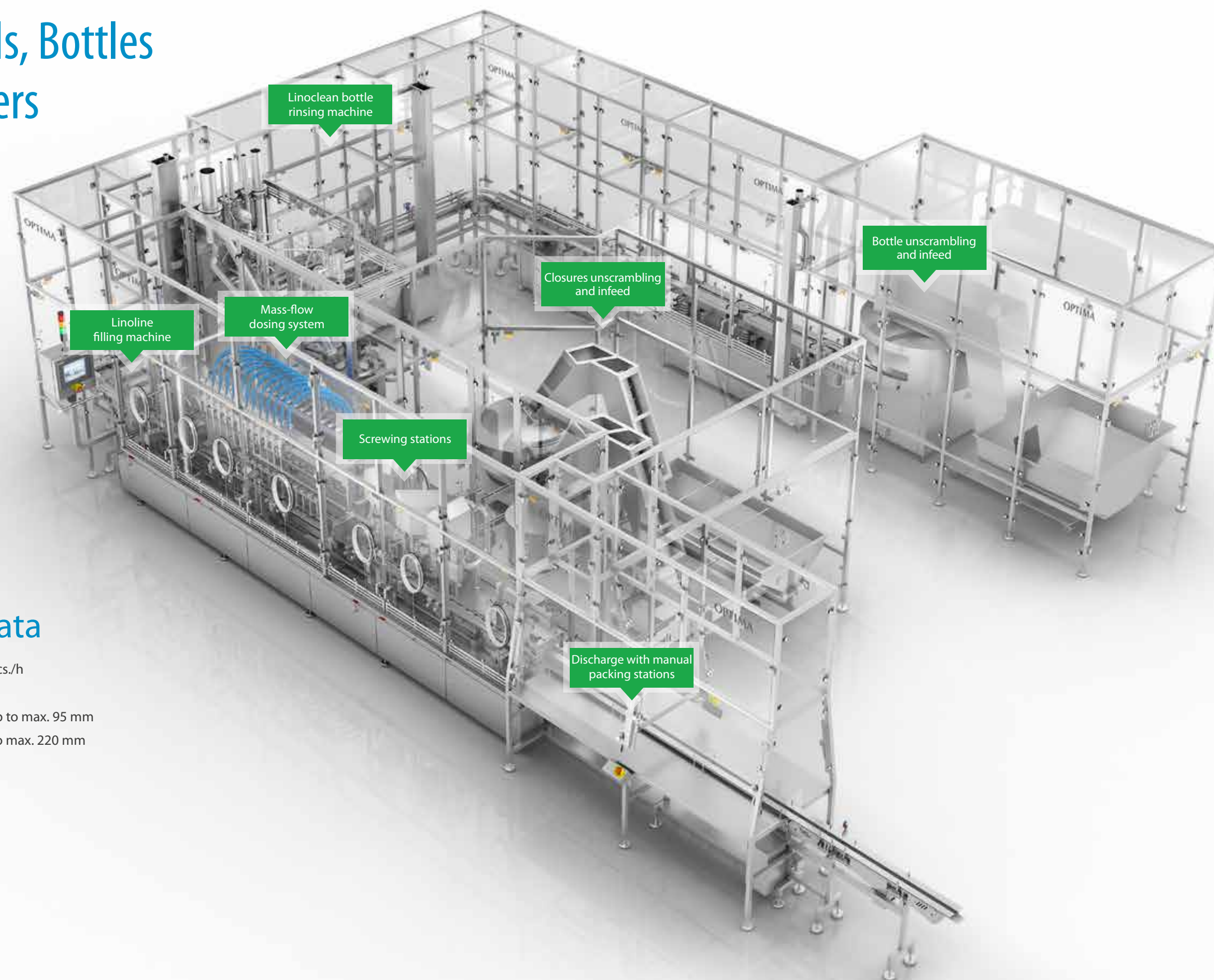


NON-STERILE FILLING

Turnkey Solutions

# Turnkey Line For Vials, Bottles and Similar Containers

Linoline, Linoclean

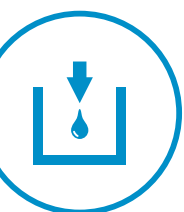


## Technical Data

- **Output:** up to max. 7,200 pcs./h
- **Processing range:** 2-laned
- **Object diameter:** 30 mm up to max. 95 mm
- **Object height:** 50 mm up to max. 220 mm

## Features

- 100% In-Process Control
- ATEX model optional
- Intermittent operation

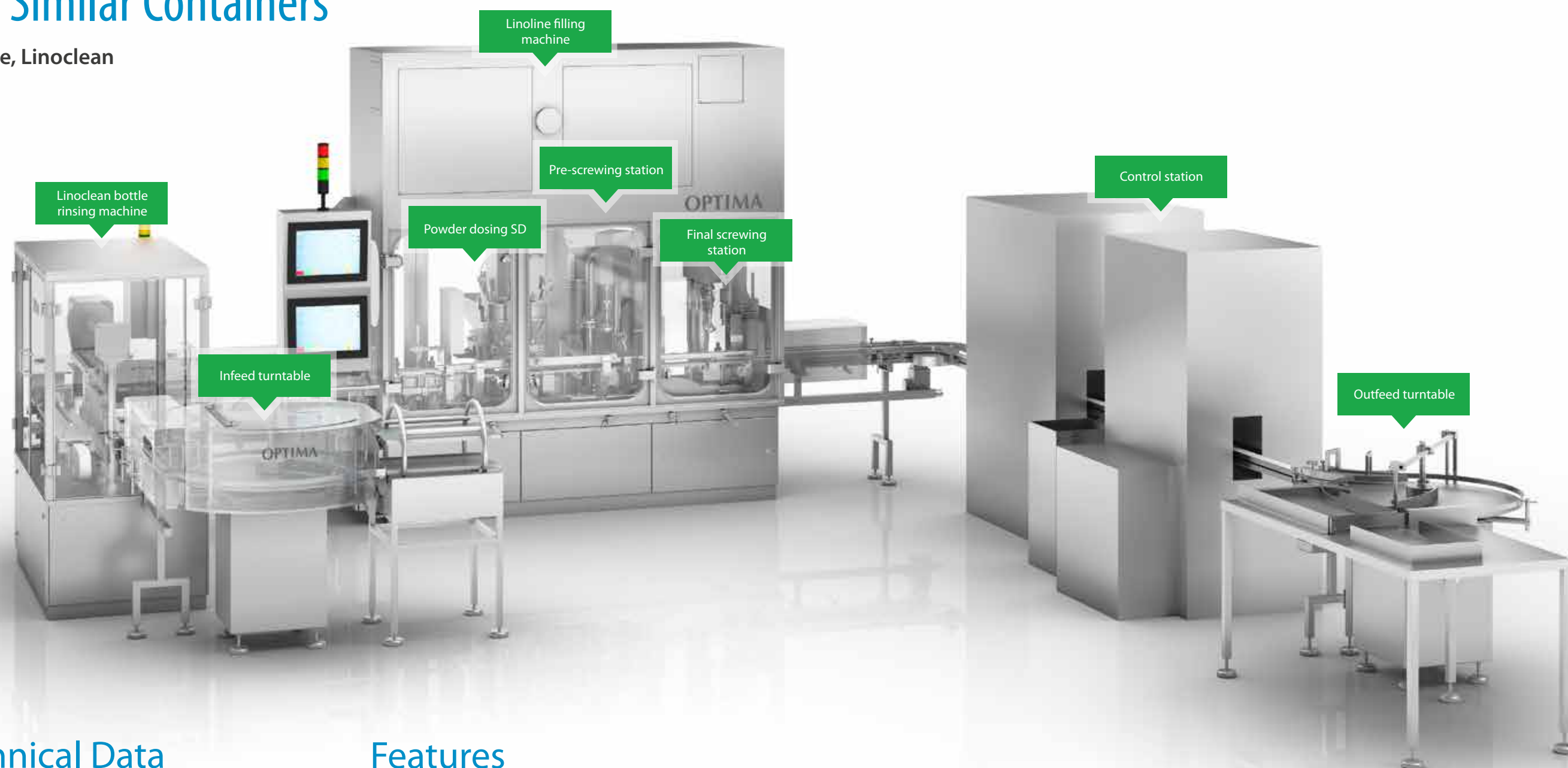


NON-STERILE FILLING

Turnkey Solutions

# Turnkey Line For Vials, Bottles and Similar Containers

Linoline, Linclean



## Technical Data

- **Output:** up to max. 7,200 pcs./h
- **Processing range:** 2-laned
- **Object diameter:** 30 mm up to max. 95 mm
- **Object height:** 50 mm up to max. 220 mm

## Features

- 100% In-Process Control
- ATEX model optional
- Intermittent operation



## Life Cycle Based Services

Packaging processes of the future will be more efficient, digitally interconnected and complex. We gladly support you with this process. Personal and individual customer service is the highest priority at Optima. Choose from our comprehensive "OPTIMA Total Care" portfolio to support your needs and to reach your objectives faster and more efficiently. Our consultants and experts will be at your side – at all times during the complete life cycle of your equipment. Our constant focus: Your needs, your objectives and your success. You can rely on us.



### Smart Services

Our Smart Services are designed to effectively complement our Basic Services package. They include all of Optima's digital services, which you use to improve the efficiency of your production. These Services comprise Knowledge Transfer, Manufacturing Intelligence, Maintenance Support, and Smart Assistance. What you get is a powerful comprehensive package that can be tailored precisely to your requirements, including everything from OEE optimization to your desired maintenance mode and fast access to machine knowledge, as well as digital support when process issues or format changes occur. All services are available around the clock on the Optima central platform. In addition, they can also be tested live at the Digital Innovation Center in Schwäbisch Hall.



### Basic Services

Our Basic Services offer you a wide range of services that are designed to support you in all phases of the machine life cycle. These services start up in the project phase, where we provide support during installation, commissioning, qualification, and user training. Integrated factory acceptance tests reduce your time-to-market. They continue in the ramp-up phase, where customized production support is offered. During the production phase, our Basic Services are there for you, providing a wide range of services around the clock – all the way up to retrofitting.



➔ More Information:  
[www.optima-packaging.com/totalcare](http://www.optima-packaging.com/totalcare)





## Instruction & Training

Become an expert. Our specialists will convey their knowledge about Optima's equipment through virtual reality, at the machine at Optima's facility or at your production site. The easy and correct utilization of our machinery is our work guarantee. With each custom tailored machine, we offer individual training that is customized to your needs. A special emphasis is placed on complete documentation.

For basic or more extensive expert knowledge, you can choose from a variety of training units based on your requirements. After the training, you will be able to identify application opportunities, potential safety hazards, error sources and understand safety requirements.



## Total Care

### Your Advantages

- Training tailored to your requirements and designed for your machine needs
- Minimal downtime, high efficiency and minimal error rate
- User-oriented machine settings
- Knowledge transfer through experts
- Production safety for operators and machines

### Services

- Virtual reality training
- Training units tailored to your needs
- Individual training documentation
- Various training medias as reference guides
- Basic and operator training
- Technician and expert training
- "Train-the-Trainer" education
- Safety training



More information:  
[www.optima-packaging.com/pharma](http://www.optima-packaging.com/pharma)