



# SMART SOLUTIONS FOR PHARMA EXPERTS

## SYRINGE & CARTRIDGE FILLING EXPERTISE

Member of

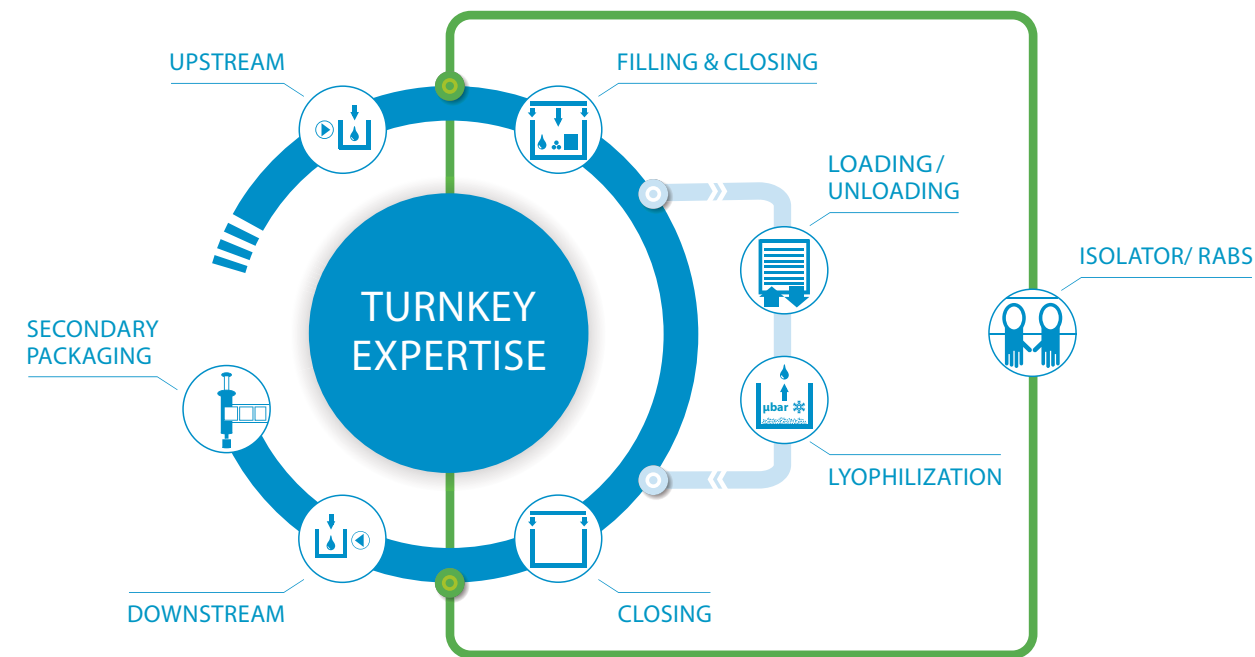


# OPTIMA

## 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> 	

# SYRINGE & CARTRIDGE FILLING EXPERTISE

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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 the primary packaging range.

### Processing of Nested Objects

## Syringe & Cartridge Filling Expertise

Optima Pharma is an expert in the development, construction and manufacturing of machines and whole lines in the field of sterile filling technology. The machines for syringes and syringe systems offer a corresponding solution for your application.

Through constant dialogue with our customers and increasing demands in everyday practice, our systems for the processing of nested pre-sterilized disposable pre-filled syringes, bulk glass and plastic syringes, as well as cartridges are optimally developed further. As a result innovative and proven machine concepts are established for a functional production process that creates many advantages for you.

#### 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

*Jürgen Rothbauer*

Managing Director, OPTIMA pharma GmbH

# Select the Appropriate Opening System

## DBM

Manual system facilitates the opening of the bags using gloves.

## DBS

Semi-automatic system with manual bag opening using gloves. The bags are fed either manually or automatically to the debagger. They are then opened semi-automatically and disposed of.

## DBA

The bags are automatically fed and opened and the tub is automatically removed from the opened bag. The bag is then remove automatically.

## TRB

System for the manual opening of bags with gloves.

## TRR

Fully-automatic cleanroom suitable robot system for the Tyvek® lid and liner removal. The syringe handling robot is specifically designed for cleanroom applications. The handling robot peels off the Tyvek cover from the tub, removes the Tyvek® liner and transports the tubs with a gripper.



Technical Data				
Type	DBM	DBS	DBA-SBA	DBA
Machine description	Manual bag debagger	Semi-automatic debagger for outer bag	Fully-automatic debagger for inner bag	Fully-automatic bag debagger
Syringe Systems	Nested syringes in tubs and bags			

Technical Data		
Type	TRB	TRR
Machine description	Manual tyvek® removal box	Fully-automatic tyvek® removal roboter





## FILLING AND CLOSING

# Process up to Three Container Types

### SV125

With the SV125 it is possible to process three different container types on a single machine. The SV125 can be made to process nested syringes, vials and cartridges. It is also possible to integrate up to three different types of filling systems, such as a peristaltic, rotary pump and time-pressure, to meet a broad range of product requirements. Filling and closing with a vacuum is another option that is available. Switching over from one container type to another is comparable to a conventional format change on the machine.

The filler can be rounded out with tertiary equipment such as a debagger or Tyvek® lid and liner removal for full line automation.

With additional isolator technology the machine provides the highest levels of sterility.



## Filling and Closing Machines

### Your Advantages

- Output: up to 20,000 pcs./h
- Processing of three different container types possible: syringes, vials, cartridges
- Slim and compact design
- 2-10-laned dosing system
- High dosing accuracy
- Quick changeover time of format parts

### Features

- Vacuum filling and vacuum stopper insertion
- In-Process Control
- Pre- and post gas flushing
- Integration of all containment systems oRABS, cRABS and isolator





## FILLING AND CLOSING

# User Friendly Operation, Easy Access and Reliability

### H4-10

The filling and closing machine, model H4-10, meets your requirements for simple operation, accessibility, reliability and compact design. Nested syringes, vials and cartridges are all processed with this machine. Automated Tyvek® lid and liner removal can be integrated, if required. Space for the robot preplanned on the filling machine, thereby saving space. A 10-laned system is provided for filling. Rotary piston pumps as well as peristaltic or time pressure filling systems can be added at any time for filling flexibility and simple format changes. Regardless whether the system is an oRABS, cRABS or an isolator, all of our systems can be economically fitted to the standardized machine baseplate. The transport system ensures particularly careful handling of the containers. The same applies to the upgrading of In-Process Control, vacuum filling and vacuum stopper inserting.



## Filling and Closing Machines

### Your Advantages

- Output: up to 24,000 pcs./h
- High dosing accuracy with
  - rotary piston pump system
  - time pressure dosing system
  - peristaltic pump system
- Processing of three different container types possible: syringes, vials, cartridges
- Small machine footprint
- Processing of liquid to highly viscous products
- Processing of highly potent and non highly potent products

### Features

- Vacuum filling and stopper inserting
- In-Process Control
- Pre- and post gas flushing
- Integration of all containment systems oRABS, cRABS and isolator





## FILLING AND CLOSING

# One Machine to Process Nested Syringes, Cartridges and Vials

### H6-10

With the H6-10 it is possible to process three different container types on a single machine. The machine is customized to process nested syringes, vials and cartridges.

It is also possible to integrate up to three different types of dosing systems, such as a peristaltic pumps, rotary piston pumps and a time pressure system; to meet a broad range of product requirements. Filling and closing with a vacuum as well as In-Process Control are further available options on this machine.



## Filling and Closing Machines

### Your Advantages

- Output: up to 36,000 pcs./h
- Highest dosing technique either with
  - rotary piston pump system
  - time pressure dosing system
  - peristaltic pump system
- Processing of three different container types possible: syringes, vials, cartridges
- Linear and vertical processing of tubs
- Linear transport system allows the combination of the H6-10 with other machinery
- Processing of highly potent and non highly potent products

### Features

- Vacuum filling and stopper inserting
- In-Process Control
- Integration of all containment systems oRABS, cRABS and isolator





FILLING AND CLOSING

# Take Your Production to the Highest Performance Level

## H10-16

A fully-automatic filling and closing machine to process disposable, commercially available nested syringes. With a format range up to 50 ml and an output of up to 60,000 syringes/hour can be reached with the 16-lane version. The machine is equipped with an infeed and a discharge conveyor belt for the tubs.



## Filling and Closing Machines

### Your Advantages

- Output: up to 60,000 pcs./h
- Highest dosing technique either with
  - rotary piston pump system
  - time pressure dosing system
  - peristaltic pump system
- Slim design
- Processing of three different container types possible: syringes, vials, cartridges
- Processing of liquid to highly viscous products
- Processing of highly potent and non highly potent products

### Features

- Vacuum filling and stopper inserting
- 100% In-Process Control
- Integration of all containment systems like oRABS, cRABS and isolators

### Technical Data

Type	SV125	H4-10	H6-10	H10-16
Objects	Nested syringes, vials and cartridges (glass/plastic)			
Dosing range	0.1 ml - 50 ml			
Dosing technique	Rotary piston pump system, time pressure dosing system, peristaltic pump system			
Processing range	up to 10-laned	up to 10-laned	up to 10-laned	up to 16-laned
Output	up to 20,000 pcs./h	up to 24,000 pcs./h	up to 36,000 pcs./h	up to 60,000 pcs./h
Features	Vacuum filling and stopper inserting, pre- and post-gas flushing, IPC			





FILLING AND CLOSING

Disposable Syringes -  
Filling with Hardly  
Any Format Parts

UniJect™

The UniJect™ “Prefill Injection Device” is a cost efficient, non-reusable and high quality injection unit for intra-muscular and subcutaneous applications. The UniJect™ model guarantees a safe operation process, flexibility, a compact design and combines these features with a high output – the UJ120, UJ150 and UJ300. With the UniJect™ model almost no extra parts are required to process any UniJect™ devices. The UniJect™ devices are smoothly processed with an unwinding and rewinding device in a custom designed transport system. The filling station of the UniJect™ is designed for different filling systems: time pressure, rotary piston pumps or peristaltic pumps. This allows a variety of media to be processed. Programmable fill movements provide an optimal output and the parameters of different products and filling volumes are set simply by using a teach-in function. The UniJect™ devices are sealed with a heat sealing module. Process data, like time, temperature and pressure are continuously monitored and adjusted for optimum results.



Filling and  
Closing Machines

Technical Data

Type	UJ120	UJ150	UJ300
Machine description	Fully-automatic filling and closing machine		
Syringe-systems	UniJect™ “prefill injection device”		
Application	High speed processing of UniJect™ devices in a cleanroom		
Infeed	Manual feeding of syringe rolls into machine		
Format range	UniJect™- processing from 0.3 ml - 2 ml		
Filling heads	4-laned	6-laned	12-laned
Output	up to 7,200 pcs./h	up to 9,000 pcs./h	up to 18,000 pcs./h
Features	Semi-automatic debagger - DBA RABS version		





## SECONDARY PACKAGING

# Select the Right Denester to Meet Your Production Needs

### SH

The aseptically filled and stoppered syringes are automatically removed from the nest and placed into a discharge track. The tub can be placed manually or automatically onto the infeed conveyor of the machine. The following process is fully automated. The empty nest is transported with an intermittent conveyor belt to the stacking device and automatically stacked then the tubs and nests in the stack are manually removed. The machine discharge can be one or two lanes.

### TD

The syringes are automatically removed from the tray and placed onto a discharge track. The Rondotray stacks are manually placed on the infeed conveyor belt of the machine. The following process is fully automated; the Rondo trays are automatically destacked and each tray is transported past the removal station using a carrier device, finally, the syringes are removed into a discharge track. The empty Rondo trays are automatically stacked and transported onto a discharge conveyor belt.



Technical Data – Denester Tubs					
Type	SH110	SH120	SH210	SH230	SH260
Machine description	Fully-automatic denester				
Syringe systems	Nested syringes				
Format range	0.5 ml – 20 ml				
Output	up to 7,200 pcs./h	up to 1,000 pcs./h	up to 12,000 pcs./h	up to 24,000 pcs./h	up to 36,000 pcs./h

Technical Data – Denester Rondotrays			
Type	TD210	TD230	TD240
Machine description	Fully-automatic denester		
Syringe systems	Syringes in rondo tray safety device		
Format range	0.5 ml - 20 ml		
Output	up to 10,000 pcs./h	up to 18,000 pcs./h	up to 24,000 pcs./h





## SECONDARY PACKAGING

# Newly Defined Syringe Handling

### SN

The completely processed syringes can be manually or automatically inserted into the nests. The syringes are fed, single-lane, into an oval transport system and are spaced out respectively to fit the arrangement of the syringe nest. For single-lane nest transport, the oval stops to take out a row of format dependent syringes with a vacuum. For the two and three lane nest transport, 2 or 3 grippers take out one row of syringes from the continuously running oval transport. The grippers work independently and the syringes are inserted in separately centered nests.

### TR

Using the fully-automatic renester, the syringes, which are fed with the aid of a feeding track and infeed wheels, are inserted into Rondo trays. The empty Rondo tray stacks are manually placed onto the infeed conveyor belt and the Rondo trays are automatically destacked. Each Rondo tray is transported past the inserting station with a carrier device and the syringes are inserted into the Rondo trays. The filled Rondo trays are automatically stacked and transported onto the discharge conveyor belt.



Renester

### Technical Data – Renester Tubs

Type	SN220	SN240	SN260
Machine description	Fully-automatic renester		
Syringe systems	Nested syringes		
Nest infeed	1-laned	2-laned	3-laned
Format range	0.5 ml - 20 ml		
Output	up to 15,000 pcs./h	up to 24,000 pcs./h	up to 36,000 pcs./h

### Technical Data – Renester Rondotrays

Type	TR210	TR230	TR240
Machine description	Fully-automatic renester		
Format range	0.5 ml - 20 ml		
Output	up to 10,000 pcs./h	up to 18,000 pcs./h	up to 24,000 pcs./h





## SECONDARY PACKAGING

# Continuous and Intermittent Operating Labeling and Assembling Machine

### EKK62

An economical, compact solution for medium and large batches, this machine processes all common glass and plastic syringes ranging from 0.5 to 20 ml. The syringes are transported into the continuous motion transport star-wheel using an inclined infeed and an infeed wheel. At the labelling station, the syringes are rotated using a roller band and the labels are glued on. A camera detects the presence of the label, on the label dispenser, a second camera controls the correct print of the label. Then, the syringes are distributed with two vacuum wheels into the discharge/reject.



## Labeling and Assembly Machines

### EK321

The Optima EK321 is the best solution for processing small production batches economically. The machine operates with efficiency and has a compact design. All commercially available glass and plastic syringes with a fill volume from 0.5 to 20 milliliters can be processed on this machine. The syringes are fed into the transport star wheel with a slanted chute and the plunger rods are then inserted into the syringe. The process safety is ensured twofold, a camera system inspects the correct label position and a second camera checks the print of the label. Correctly processed syringes are transported to the discharge and incorrectly processed syringes are transported to the reject station.





## SECONDARY PACKAGING

### Compact Designed Labeling and Plunger Rod Inserting Machine

#### EKM

Three functions integrated into one machine. The machine is designed to assemble finger flanges, insert plunger rods and label all common glass and plastic syringes. This machine processes syringes from 0.5 to 20 ml.

#### EK/CM

Labelling, plunger rod insertion and backstop assembly all combined into one machine. This machine is the economical, compact solution for small batches. It processes all common glass and plastic syringes from 0.5 to 10 ml.



## Labeling and Assembly Machines

#### EKCS

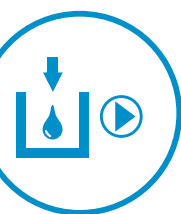
A compact machine with multifunctional processing of various components and continuous force measurement at the assembly stations.

#### EKK

The economical and compact solution for medium and large batches. These machines continuously process all common glass and plastic syringes.







# Continuous or Intermittent Operating Backstop Assembly Machine

## CM4/CM12/CM18

The working principle is either intermittent (CM4) or continuous motion (CM18). The syringes are directly fed into the machine with a chute to guide the syringes directly into the infeed star-wheel. While transferring the syringes from the transfer star-wheel into the main star-wheel, the back stops are assembled onto the finger flange of the syringe. The sorting/orientation of the backstops is done using a sorting bowl, the backstops are transported onto a rail to the point of assembly and the assembled syringes are guided out of the main star-wheel for further processing.

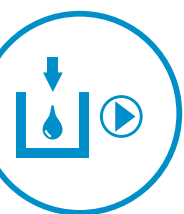
**CM4:** The fully assembled syringe is pushed laterally out of the star-wheel into the discharge chute.

**CM18:** The fully assembled syringe is pushed tangentially into the discharge star-wheel.



Technical Data									
Type	ESK91	EK321	EKK62	EKK182	EKM321 EKM331	EKK62/ CM12	EK321/ CM4 CM4/ EK321	EKCS	CM4/ CM12/ CM18
Machine description	Label- ling machine	Labelling and plunger rod inserting machine			Finger flange assembly, plunger rod inserting and labelling machine	Labelling and plunger rod inserting machine with backstop assembly		Labeling and plunger rod in- sertion machine with safety device and finger flange assembly	Backstop assembly machine
Format range	0.5 ml - 20 ml	0.5 ml - 20 ml	0.5 ml - 50 ml	0.5 ml - 10 ml	0.5 ml - 20 ml	0.5 ml - 50 ml	0.5 ml - 10 ml	0.5 ml - 10 ml	0.5 ml - 10 ml
Output	up to 9,000 pcs./h	up to 4,000 pcs./h	up to 12,000 pcs./h	up to 36,000 pcs./h	up to 3,600 pcs./h	up to 12,000 pcs./h	up to 4,000 pcs./h	up to 3,600 pcs./h	up to 18,000 pcs./h



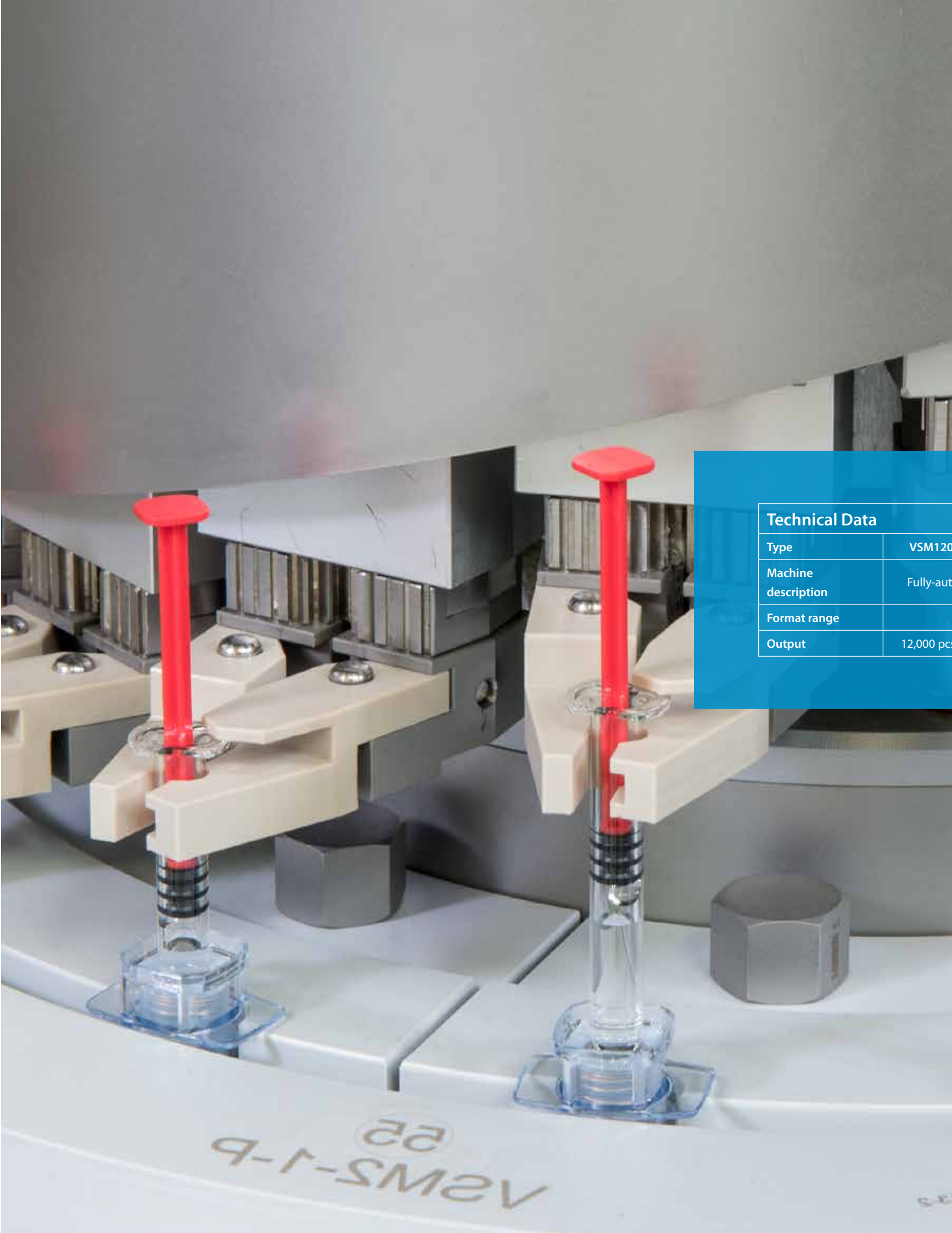


## SECONDARY PACKAGING

# Be on the Safe Side - Appropriate Safety Device Assembly Machines

### VSM

The safety devices are fed into the machine using an infeed chute. Depending on the product, they are carried over by a single or double scroll, separated and fed to the first labelling star-wheel. The label dispenser can be equipped with different print and control systems, depending on the customer's requests. Then, the safety devices are transported to the assembly star-wheel. The syringes are also fed into the machine using an infeed chute and are separated using an infeed wheel. The cam-controlled grippers pick up the syringes and insert them into the devices. Then, the safety devices are transported to the insertion star-wheel. The syringes and plungers are completely pushed into the devices. To ensure the exact insertion of the syringes, they are centered in the star-wheel with grippers. Then, the syringes are fed using two vacuum wheels to the discharge or reject stations. Manual safety device systems are available upon request.



## Labeling and Assembly Machines

### Technical Data

Type	VSM1200	VSM1800	VSM2400
Machine description	Fully-automatic assembly machine for safety devices		
Format range	0.5 ml - 20 ml		
Output	12,000 pcs./h	18,000 pcs./h	24,000 pcs./h



## SECONDARY PACKAGING

### Select Your Buffering System

#### SP300/600/900

Syringes are fed into a tray loading system using a star-wheel. The tray is filled row by row. The nest moves perpendicular to the infeed, with the row in front of the infeed being filled before shifting to the next row. The individual lanes are filled and emptied with gravity that is controlled with a discharge finger and an accumulation sensor.

#### SP2000/3000

Syringe accumulation buffer using the first-in, first-out principle, the syringes are fed into the accumulation racks with gravity or are pushed in and out of the rack mechanically. Empty racks descend below the machine plate and cycle back to the infeed.

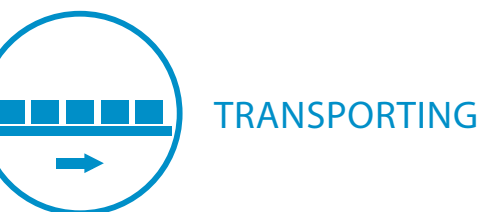


## Buffering Systems

### Technical Data

Type	SP300	SP600	SP900	SP2000/3000
Machine description	Syringe buffering system			
Syringe systems	0.5 ml - 50 ml Syringe length: up to 140 mm			
Processing	Sterile, filled and closed syringes Sterile, empty syringes			
Capacity	up to 300 pcs.	up to 300 pcs.	up to 300 pcs.	up to 300 pcs.





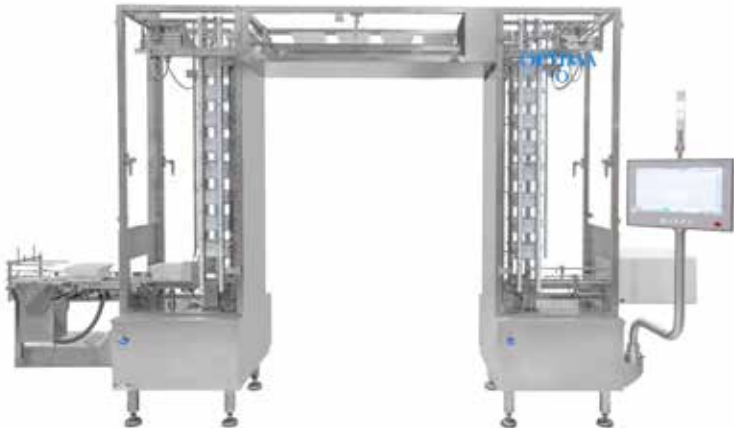
# Syringe Transport System for Your Requirements

## STS

The syringe transport system can be utilized as an infeed or discharge conveyor belt. Furthermore, it can be used to connect individual machines. Differences in height can be compensated for with an infinitely adjustable crossing angle.

## TVB

The paternoster system was developed for the optimization of complete turnkey lines to provide operators a passageway under the tub transport. The paternoster is available in various designs and sizes.



## Transport Systems

Technical Data			
Type	STS	STS-0	TVB
Machine description	Syringe transport system		Tub paternoster system
Syringe systems	Syringe 0.5 ml - 50 ml		0,5 ml- 50 ml
Application	- Sterile, filled and closed syringes - Sterile, empty syringes - Bridging different heights	Horizontal syringe transport	- Horizontal transport - Vertical transport
Belt length	1,000 mm - 2,000 mm	1,000 mm	On request





ISOLATOR/RABS

## Cleanroom Technology for the Highest Aseptic Quality

A leading global company for the development, manufacturing, installation and validation of isolators. Metall+Plastic isolators can be installed on different pharmaceutical machinery and combined with various process functions, such as machines for the aseptic dosing of liquids and powder, epyrogenation tunnels, freeze dryers, autoclaving equipment and aseptic transfer systems. Metall+Plastic also designs e-beam tunnels and emitter, locks, gas tight doors and glove testing systems.

## Triple Protection

At first glance, all three systems work as a clean room micro plant. As far as technology and regulation are concerned, the differences are quite considerable and have to be assessed for each individual project. We would be happy to recommend the correct protection system that is suitable for your application.

To restrict the operator access to the process area, our filling machines can be provided with RABS equipment as an option. The restricted access is, in this case, achieved by glove systems and mock-up studies are used to determine the gloves' positions in advance.



## Cleanroom Technology

### METALL+PLASTIC

Cleanroom Technology

#### Isolator

- Possible operation parameters
- Air speed
- Pressure regulation (option)
- Air temperature controls (option)
- Humidity controls

#### Restricted Access BarrierSystem (RABS)

The processed air is taken from the machine environment and filtered through a HEPA filter. Variable speed-controlled ventilators supply constant air volume to the unit. Air distribution is achieved with a plastic diaphragm, which ensures uniform air distribution in the protected area with little turbulence.

#### Closed Restricted AccessBarrier System (C-RABS)

The technical module consists of high-quality stainless steel materials and is located above the protection module. It contains the complete technical air equipment, such as ventilators, filters, cleanroom illumination and air distribution diaphragm.

The protection module consists of high-quality stainless steel materials. Doors, windows and other functional elements are integrated into the modular sectional framework. Intervention in the protection module is achieved with glove accesses that are integrated into the glass doors (tempered safety glass (ESG)).





ISOLATOR/RABS

## State-of-the-Art Technology for Econo- mical and Reliable Decontamination

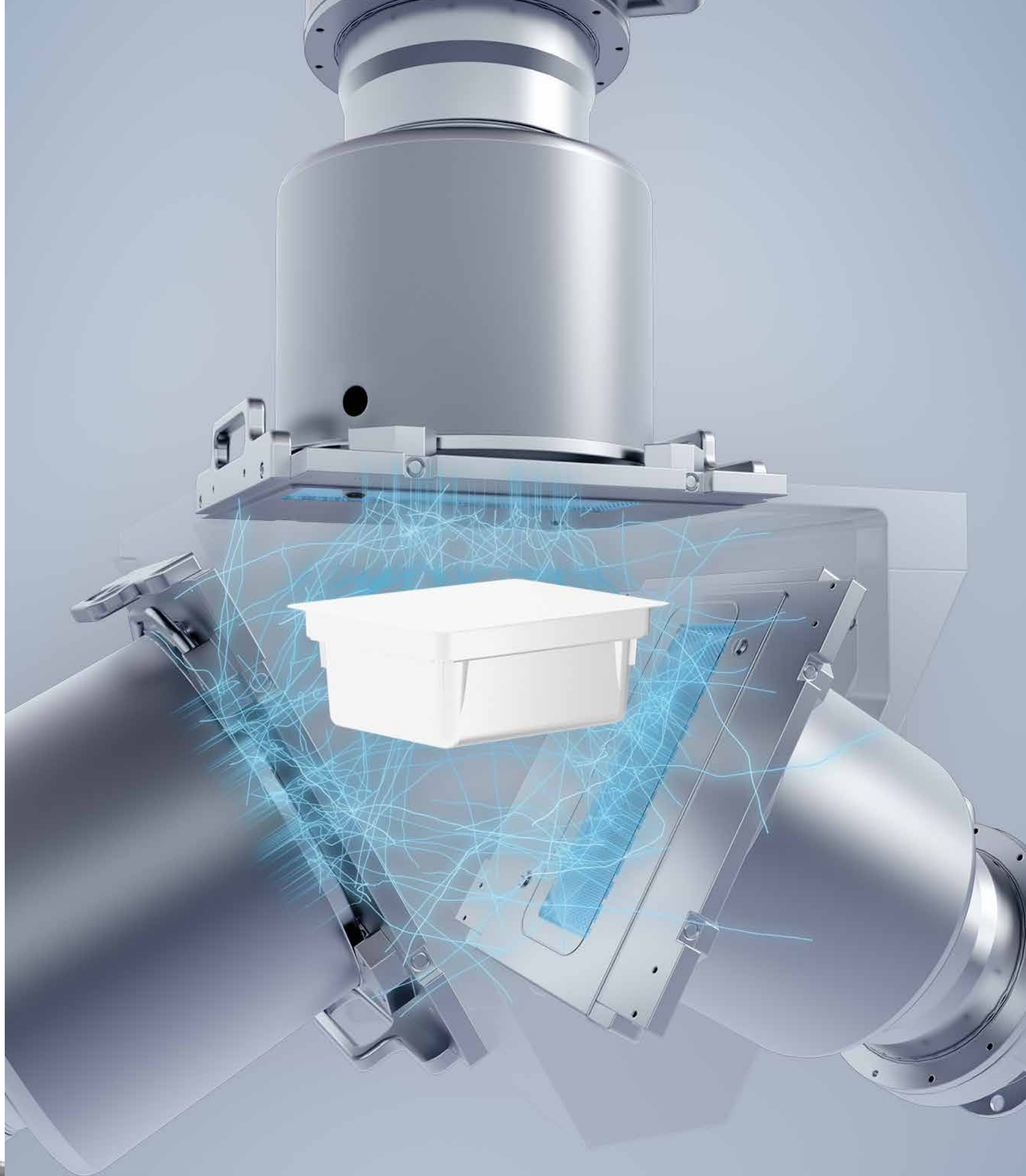
### E-BEAM

The application of pre-sterilized containers in tubs gains more and more importance due to its reliability and efficiency.

The Metall+Plastic E-Beam tunnel E-BEAMflex guarantees an average radiation energy of a minimum of 25kGy of the surface decontamination of pre-sterilized tubs. The E-Beam was designed for the continuous, low-maintenance aseptic transfer in class D/C room for class A-filling lines. The E-BEAMflex is qualified and validated as a unit.

#### Your Requirements:

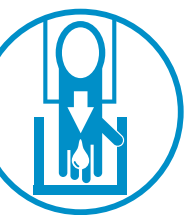
- Surface decontamination pre-sterilized, nested tubs
- Safe and continuous aseptic transfer of tubes in the filling line
- Low-maintenance and stable tub transport process in the filling line
- Time savings during qualification and validation, FDA and audit conform



### Cleanroom Technology

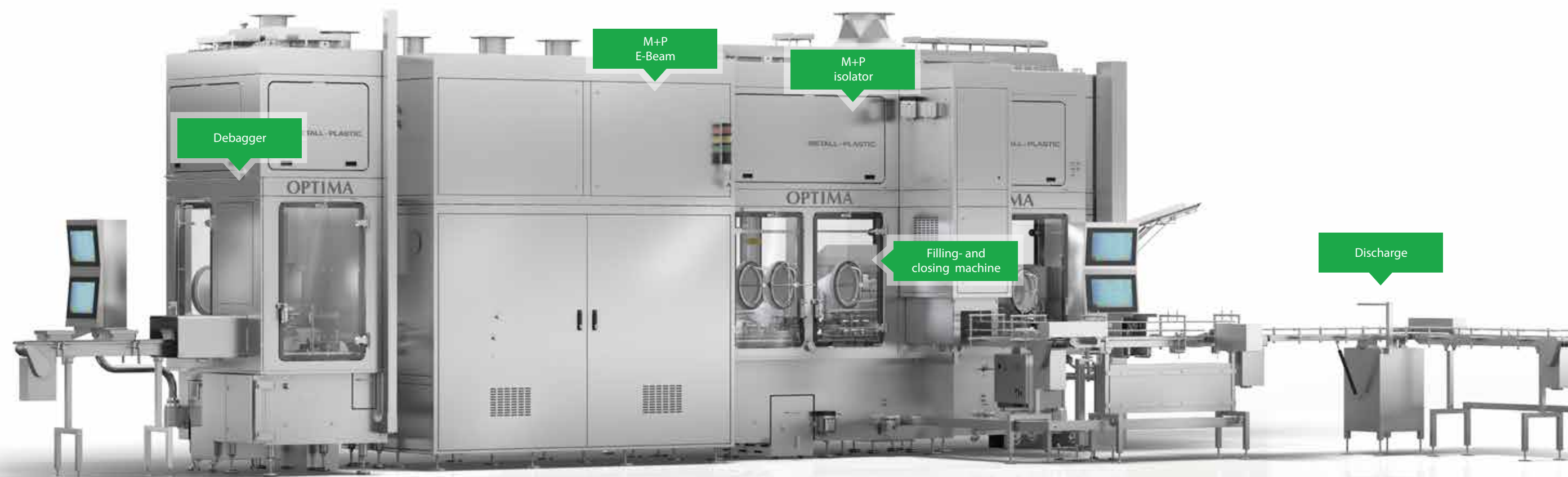
#### Your Advantages

- All common tub sizes can be processed, also transparent tubs
- Compact design for small spaces
- 100% in-house production ensures highest quality and flexibility
- Easy access for cleaning and maintenance
- Safe radiation protection due to rotary drums without unnecessary closing sensors
- Monitoring of tubs also in the radiation area



# Turnkey Line for Nested Syringes

DBA | M+P E-Beam | TRR130 | SV125-10 | M+P Isolator



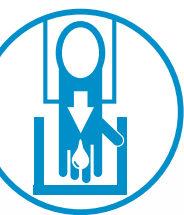
## Technical Data

- **Output:** up to 20,000 pcs./h
- **Filling stations:** up to 10-laned
- **Processing range carpules:** 3 ml - 10 ml
- **Processing range syringes:** 0.5 ml - 50 ml
- **Processing range vials:** 0.5 ml - 50 ml

## Features

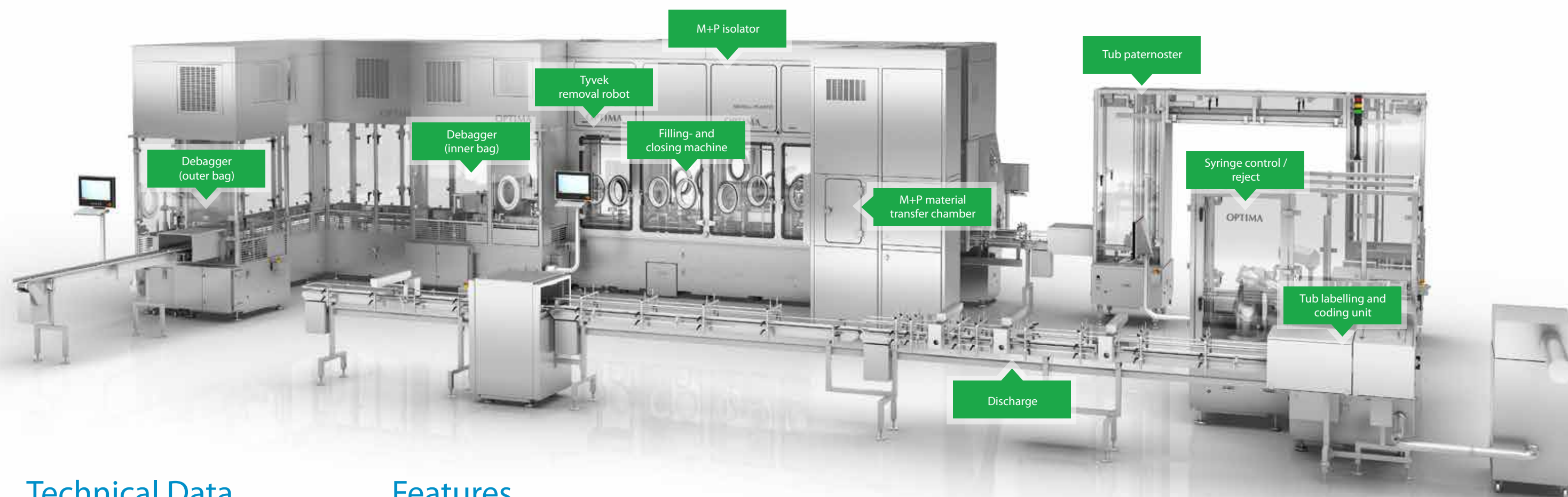
- Processing of three different container types (syringes, vials, cartridges)
- Vacuum filling and vacuum stopper insertion
- Fully automatic In-Process Control
- Processing from liquid to highly viscous products, from non highly potent to highly potent products
- Suitable for oRABS, cRABS and Isolator





# Turnkey-Linie for Nested Syringes

DBA-S, DBA-SBA, TRR130, H6-10, TVB, SIRM, M+P Isolator

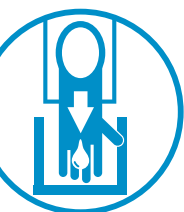


## Technical Data

- **Output:** up to 36,000 pcs./h
- **Filling stations:** up to 10-laned
- **Processing range carpules:** 3 ml - 20 ml
- **Processing range syringes:** 0.5 ml - 20 ml
- **Processing range vials:** 0.5 ml - 30 ml

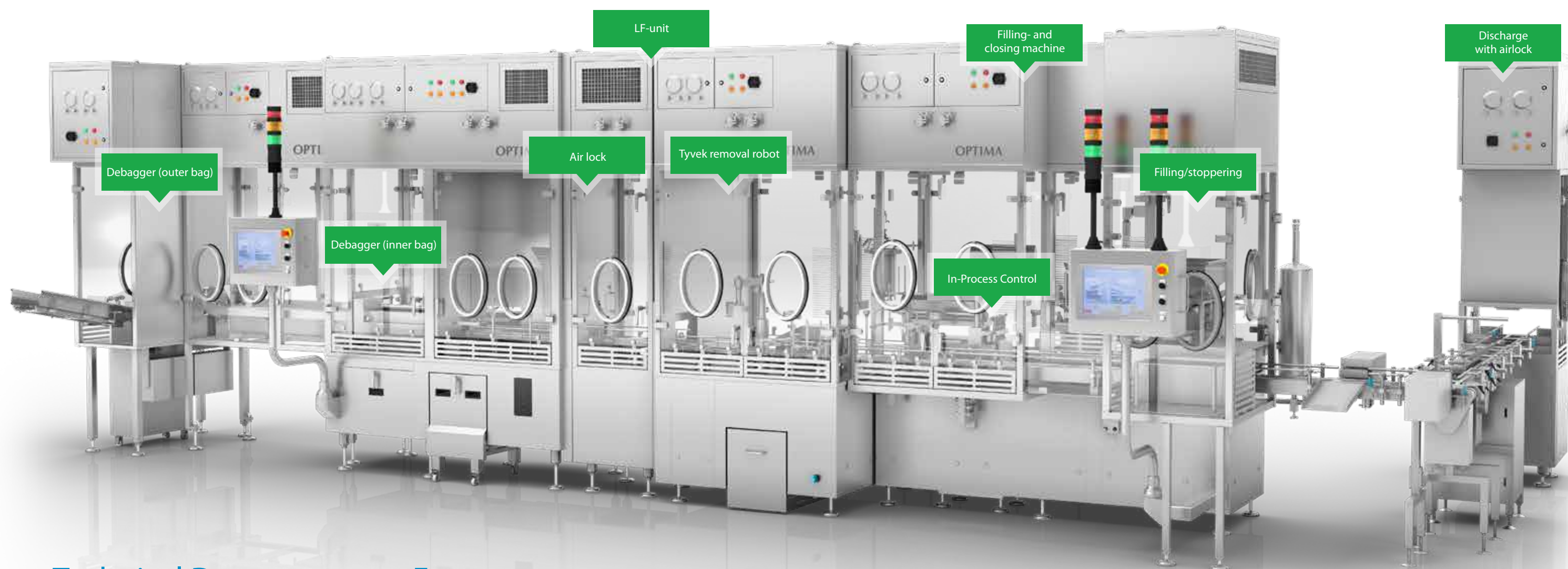
## Features

- Processing of three different container types (syringes, vials, cartridges)
- Vacuum filling and vacuum stopper insertion
- Fully automatic In-Process Control
- Processing from liquid to highly viscous products, from non highly potent to highly potent products
- Suitable for oRABS, cRABS and Isolator



# Turnkey-Linie for Nested Syringes

DBS | DBA | TRR130 | SV125 | SH120 | CM12/EKK62



## Technical Data

- **Output:** up to 20,000 pcs./h
- **Filling stations:** up to 10-laned
- **Processing range carpules:** 3 ml - 10 ml
- **Processing range syringes:** 0.5 ml - 50 ml
- **Processing range vials:** 0.5 ml - 50 ml

## Features

- Processing of three different container types (syringes, vials, cartridges)
- Vacuum filling and vacuum stopper insertion
- Fully automatic In-Process Control
- Processing from liquid to highly viscous products, from non highly potent to highly potent products
- Suitable for oRABS, cRABS and Isolator



## 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)