Syringe Filling & Closing Machine

For Nested, Pre-Sterilized Syringes in Tubs



www.fillpackkorea.com

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NATIONAL REPRESENTATIVE FOR Syringe Filling & Closing Machine

For Nested, Pre-Sterilized Syringes in Tubs



About Us

Machines for Filling and stoppering machine for disposable syringes are designed and built in conformity with GMP standards.Conceived to fulfill the highest quality requirements of pharmaceutical industries, they can be set to cover a wide range of formats to satisfy the needs of every customer.



You will see the price when you buy the equipment, but you use it, you will see it's amazing performance

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Filling and stoppering machines for disposable syringes is designed and built in conformity with GMP standards. Conceived to fulfill the highest quality requirements of pharmaceutical industries, it can be set to cover a wide range of formats to satisfy the needs of every customer.

The Modular Design Principle

You select your machines using our standardized modular design feature. We offer you a variety of solutions to fulfill your requirements. Advantages of the Modular Design Principle are obvious.

The Customized Design Principle

However not all machines can be built with the modular design feature. In this case you will work with our application specialist. Together we will find an individual solution, which is tailorded to your exact needs.

- All components of the modular design program are already desinged and approved in daily use. This reduces the lead time of your machinery and gives you the reliability you need.
- Spare parts for the modular program are to a large extent on hand at lnova. This reduces your storage cists and risk
- Due to the use of standardized components no additional design costs are incurred. A fact you will benefit from.



The following filling and closing machines are designed for nested disposable syringes from all leading suppliers



Filling Systems to Process Nested Syringes













TO4000

Robotic Tyvek Removal System









Automatic Opening of the tub Barrels

- Tub peeling-off automatic operation
- De-lidding and De-lining machine to open sterile tube.
- Infeed conveyor
- Tub opening robotized station.
- Lid removal station.
- Waste box
- Gentle transfer of open tub to the filling machine
- Laminar flow hood







Standard executions

- Manual positioning of the box
- Automatic extraction and positioning of the nest.
- Micromatric dosage adjustment.
- Stainless steel dosing syringes, rotating piston type.

Advantages

- Compact construction
- Reputable service
- Highest dosing accuracy
- Superior construction 5 land 12,000 syringes/hour

Main characteristics

- Slim and compact design
- "High speed machine" technology and design
- Designed in modular system and prepared for
- max. 5 pumps.
- Output from 6,000/h(2 land) up to 8,500/h(5 land)

Construction features

- Automatic feeding and insertion of rubber pistons.
- Automatic reinsertion of nest into box.
- Manual discharge of box.

- Few size parts-short charge over time.

- Nest centering device for 0.5ml syringes

- Fixed or movable laminar flow

- Modular construction is suitable for different kind of feeding systems.
- Manual, semi automatic or fully automatic infeed systems
- Buffer systems

Support frame completely lined with stainless steel panel. Cams driven mechanical movements ; reducing gears and bearings with life long lubrification, all protected from liquids leakages. Minimize precence of operative groups over the syringes area, for a better efficiency of laminar flow

Optional equipments

- Ceramic dosing syringes, rotating piston type.
- Dosing syringes, rotating piston type, in CIP and SIP execution.
- Nitrogen immission during filling.

MACHINE DESCRIPTION	Fully automatic filling and closing machine to process disposable.		
	nested syringes		
SYRINGES SIZE RANGE	1 to 10ml		
INFEED	X-Y table		
DOSING VOLUME	0.1ml – 50ml depending on selected pump size		
DOSING SYSTEM	Rotary piston pumps		
TIME PRESSURE FILLING SYSTEM			
PERISTALTIC PUMPS			
FILLING HEADS	1- 10ml		
OUTPUT	Up to 12,000 syringes / hour		
OPTION	Vacuum filling and stopper inserting		
CAPACITY	120 tub/h		



A Fully automatic filling and closing machine for nested disposable syringes of all leading syringe suppliers. Format range up to 20ml. An output up to 12,000 syringes/hour can be reached

Syringe Filling & Closing Machine

SCV1000RA



ERUSE





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Advantages

- Highest dosing technique either with
- rotary piston pumps
- time pressure dosing system
- peristaltic pumps
- Linear and vertical processing of tubs
- The linear transport system allow combining the SCV1000RA machine with other machinery
- Slim design
- Isolator suitable
- All drives are installed in the machine's substructure
- Upstream and secondary packaging can be easily combined with Inova machinery(see table)

Optional

- Pre- and post gas flushing
- Vacuum filling and stopper inserting





MACHINE DESCRIPTION	Fully automatic filling and closing machine to process disposable,
	nested syringes
SYRINGES SIZE RANGE	0.5ml – 50ml nested syringes
INFEED	X-Y table
DOSING VOLUME	0.1ml – 50ml depending on selected pump size
DOSING SYSTEM	Rotary piston pumps
TIME PRESSURE FILLING SYSTEM	
PERISTALTIC PUMPS	
FILLING HEADS	1- 10ml
OUTPUT	Up to 12,000 syringes / hour
OPTION	Vacuum filling and stopper inserting

SCV500RAT

Syringe Filling & Closing Machine







Standard executions

- Manual positioning of the box
- Automatic extraction and positioning of the nest.
- Micromatric dosage adjustment.
- Stainless steel dosing syringes, rotating piston type.

Advantages

- Compact construction
- Reputable service
- Highest dosing accuracy
- Superior construction 5 land 6.000 syringes/hour

Main characteristics

- Slim and compact design
- "High speed machine" technology and design
- Designed in modular system and prepared for max. 5 pumps.
- Output from 6,000/h(2 land) up to 8,500/h(5 land)

Construction features

- Automatic feeding and insertion of rubber pistons.
- Automatic reinsertion of nest into box.
- Manual discharge of box.

- Few size parts-short charge over time.
- Modular construction is suitable for different kind of feeding systems.
- Manual, semi automatic or fully automatic infeed systems
- Buffer systems

Support frame completely lined with stainless steel panel. Cams driven mechanical movements ; reducing gears and bearings with life long lubrification, all protected from liquids leakages. Minimize precence of operative groups over the syringes area, for a better efficiency of laminar flow

Optional equipments

- Ceramic dosing syringes, rotating piston type.
- Dosing syringes, rotating piston type, in CIP and SIP execution. Fixed or movable laminar flow
- Nitrogen immission during filling.

- Nest centering device for 0.5ml syringes



MACHINE DESCRIPTION	Fully automatic filling and closing machine to process disposable,		
	nested syringes		
SYRINGES SIZE RANGE	0.5ml – 50ml nested syringes		
INFEED	X-Y table		
DOSING VOLUME	0.1ml – 50ml depending on selected pump size		
DOSING SYSTEM	Rotary piston pumps		
TIME PRESSURE FILLING SYSTEM			
PERISTALTIC PUMPS			
FILLING HEADS	1- 10ml		
OUTPUT	Up to 6,000 syringes / hour		
OPTION	Vacuum filling and stopper inserting		







Fully automatic filling and closing machine for nested disposable syringes of all leading syringe suppliers. Format range up to 50ml. An output up to 6,000 syringes/hour can be reached with the 5 land model.

High dosing accuracy by means of servo driven rotary piston pumps and therefore individual adjustment of dosing characteristics dependent on the product. Nested vials can also be processed easily on the SCV500R.

The SCV500R is also available for use with isolator technology and vacuum filling and stopper inserting(optional).

FSP machines for filling and stoppering disposable syringes are designed and built in conformity with GMP standards.

Conceived to fulfill the highest quality requirements of pharmaceutical industries, they can be set to cover a wide range of formats to satisfy the needs of every customer.

SCV500RA

Syringe Filling & Closing Machine







Standard executions

- Manual positioning of the box
- Automatic extraction and positioning of the nest.
- Micromatric dosage adjustment.
- Stainless steel dosing syringes, rotating piston type.

Advantages

- Compact construction
- Reputable service
- Highest dosing accuracy
- Superior construction 5 land 6,000 syringes/hour

Main characteristics

- Slim and compact design
- "High speed machine" technology and design
- Designed in modular system and prepared for max. 5 pumps.
- Output from 6,000/h(2 land) up to 8,500/h(5 land)

Construction features

- Automatic feeding and insertion of rubber pistons.
- Automatic reinsertion of nest into box.
- Manual discharge of box.

- Few size parts-short charge over time.

- Nest centering device for 0.5ml syringes

- Modular construction is suitable for different kind of feeding systems.
- Manual, semi automatic or fully automatic infeed systems
- Buffer systems

Support frame completely lined with stainless steel panel. Cams driven mechanical movements ; reducing gears and bearings with life long lubrification, all protected from liquids leakages. Minimize precence of operative groups over the syringes area, for a better efficiency of laminar flow

Optional equipments

- Ceramic dosing syringes, rotating piston type.
- Dosing syringes, rotating piston type, in CIP and SIP execution. Fixed or movable laminar flow
- Nitrogen immission during filling.

MACHINE DESCRIPTION	Fully automatic filling and closing machine to process disposable,		
	nested syringes		
SYRINGES SIZE RANGE	0.5ml – 50ml nested syringes		
INFEED	X-Y table		
DOSING VOLUME	0.1ml – 50ml depending on selected pump size		
DOSING SYSTEM	Rotary piston pumps		
TIME PRESSURE FILLING SYSTEM			
PERISTALTIC PUMPS			
FILLING HEADS	1- 10ml		
OUTPUT	Up to 6,000 syringes / hour		
OPTION	Vacuum filling and stopper inserting		



A fully automatic filling and closing machine to process disposable, nested syringes. Format range up to 10ml An output up to 2,500 syringes / hour can be reached with the 2-lane model. High dosing accuracy by means of continuous operation rotary piston pumps. The SCV200R can be quickly retrofitted to process vails. The SCV200R is also available for use with isolator technology and vacuum filling and stopper

The SCV200R is also available for use with isolator technology and vacuum filling and stopper inserting(optional)

SCV200R

Syringe Filling & Closing Machine

Advantages

- Compact construction
- Reputable service
- Highest dosing accuracy
- Superior construction 2 land 2,500syringes/hour

Construction features

Support frame completely lined with stainless steel panel. Cams driven mechanical movements ; reducing gears and bearings with life long lubrification, all protected from liquids leakages. Minimize presence of operative groups over the syringes area, for a better efficiency of laminar flow

Optional equipments

- Ceramic or stainless steel dosing syringes, rotating piston type.
- Dosing syringes, rotating piston type, in CIP execution.
- Nitrogen immission during filling.
- Nest centering device for 0.5ml syringes
- Fixed or movable laminar flow

MACHINE DESCRIPTION	Fully automatic filling and closing machine to process disposable,
	nested syringes
SYRINGES SIZE RANGE	0.5ml – 50ml nested syringes
INFEED	X-Y table
DOSING VOLUME	0.1ml – 50ml depending on selected pump size
DOSING SYSTEM	Rotary piston pumps
TIME PRESSURE FILLING SYSTEM	
PERISTALTIC PUMPS	
FILLING HEADS	1- 10ml
OUTPUT	Up to 2,500 syringes / hour
OPTION	Vacuum filling and stopper inserting

The semi automatic syringe filling and closing machine has been specifically developed for the small batch production of prefilled disposable syringe in SCF-Hypak@ trays. In two-laned version up to 600 syringes per hour can be filled and closed The indexing of the tray is controlled over a servo driven x-y table. Continuously operating rotary piston pumps ensure high filling accuracy: for 0.2 to 1ml \pm 1% to 0.5% and from 1ml \pm 5%

SCV100

Semi-Auto Syringe & Vial Filling Closing Machine

90 100

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As well as vials

Vials with standard or lyo-stoppers can be easily processed on the SCV100R without major change over procedures. The X-Y table allows easy processing of special containers in magazines according to customer requirements

Syringe filling

- 1ml ~ 3ml nest syringe : 1-land, 2-land, 5-land, 10-land
- 5ml ~ 10ml nest syringe : 1-land, 2-land, 4-land, 8-land

OPTION

- Vacuum filling
- Vacuum Rubber-stoppering
- Isolator technology

For single and double chamber syringes

A thoroughly designed concept assures the sterility throughout the entire process. Size change overs are easy. All settings such as dosing volume, filling needle movement and stopper position are easily reproduceable. The number of size parts has been reduced to a minimum. These can be exchanged toolless

MACHINE DESCRIPTION	Fully automatic filling and closing machine to process disposable, nested syringes
SYRINGES SIZE RANGE	0.5ml – 50ml nested syringes
INFEED	X-Y table
DOSING VOLUME	0.1ml – 10ml depending on selected pump size
DOSING SYSTEM	Rotary piston pumps
TIME PRESSURE FILLING SYSTEM	
PERISTALTIC PUMPS	
FILLING HEADS	1- 10ml
OUTPUT	Up to 600 syringes / hour
OPTION	Vacuum filling and stopper inserting

SP300 CC/OC CLOSE TYPE

PFS Plunger Rod & Back Stop Assembly System

Automatic Syringe Den ester for Removing Syringes from Nest

- 1- land infeed chute for approx 1 nest
- Intermittent nest transport.
- Pneumatic-controlled vertical and horizontal shaft for removing syringes
- Syringe pick-up rail for one complete row of syringes.
- Discharge chute for empty nests (option).
- Infinitely adjustable speed

Fully Automatic Rotary Plunger Rod Inserting Machine

Plunger rod insertion module single lane version, with plunger rod infeed, pick-up and Swiveling unit, gripper movement unit, vibratory sorting bowl dia. 550mm for plunger rods, finished in stainless steel, with height adjustable foot.

Inclined infeed chute for plunger rods with min/max, accumulation sensor. Plunger rod inserting plungers.

Syringe rotation drive with slip clutch, speed and torque allow fine adjustment Without automatic product outfeed systems.

Technical Data

SYRINGE SIZE RANGE	1 to 10ml
PLUNGER ROD	1 to 10ml
BACKSTOP	1 to 5ml
CAPACITY	18000 syringe/h

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Automatic Syringe RE-NESTER

Automatic Syringe Pick-up Robot System

Fully –automatically infeed and outfeed conveyor for tub transporting systems. Automatically 3-Axis robot handling system.

- Sturdy basic machine frame with height adjustable machine feet and enclosed substructure.
- Infinitely adjustable machine speed via frequency controlled motor.
- Integrated control cabinet..
- Fill & Pack standard 2-line display for indicating operating status.
- Tub counter.
- Cumulative fault function-repeat fault causes machine stop.
- Machine substructure completely paneled in stainless steel.
- Stainless steel machine table top cover.

Pick-up Robot systems

- Axies 3Axis drive
- Work range: dia 1130mm
- Vision (Option)
- Conveyor tracking + Manager (Option)

MACHINE DESCRIPTION	Fully Automatic syringe Re-Nester
SYRINGES SIZE RANGE	1ml ~ 10ml nested syringes
INFEED	X.Y. Z table
OUTPUT	Up to 18000 syringes / hour
OPTION	Vision systems

Semi automatic or fully-automatic feed systems can be used dependent on output requirments The bags are closed by welding (high-frequency, heat), or cap, e.g.

3-Chamber Bag Filling M/C

Chamber Bag Filling Machine

Product information

- Filling volume : 100ml 1500ml
 Dosing system : Mass- flow or Rotary piston pump
 Volume : Up to 1,000bags/hour
 N² / Vacuum system

Other items

- CIP, SIP systemLaminar flow device
- Belt conveyorVacuum system

Technical Data

	001/4000	0.01/0000	001/5000	001/40000	
ITPE	SCV100R	SCV200R	SCV500R	SCV1000R	
MACHINE DESCRIPTION	Fully automatic filling and closing machine to process disposable, nested syringes				
SYRINGES SIZE RANGE	0.5ml – 50ml	0.5ml – 50ml	0.5ml – 20ml (50ml)	0.5ml – 20ml	
	nested syringes	nested syringes	nested syringes	nested syringes	
INFEED	X-Y table	X-Y table	X-Y table	X-Y table	
			infeed and discharge	infeed and discharge	
			conveyor belt	conveyor belt	
DOSING VOLUME	0.1ml – 50ml	0.1ml – 50ml	0.1ml – 20ml	0.1ml – 20ml	
	depending on	depending on	depending on	depending on	
	selected pump size	selected pump size	selected pump size	selected pump size	
DOSING SYSTEM	Rotary piston pumps, Time pressure filling system, Peristalic pumps				
FILLING HEADS	2-lane	2-lane or 5-lane	5 and 10 lane	10 lane	
OUTPUT	Up to 600	Up to 2,500	Up to 6,000	Up to 12,000	
	syringes / hour	syringes / hour	syringes / hour	syringes / hour	
	(2-line)	(5-line)	.(5-line)	(10-line)	
	Vocum filling and stopp	or incorting			
UFTION	vacuum ming and stopper inserting				

Upstream equipment

- Various bag decontamination systems
- Semi and fully automatic bag unpacker
- Semi and fully automatic Tyvek removal

Secondary packaging

- Denester
- Labeling and plunger rod inserting machine
- Renester
- Syringe transport system
- Assembling machine for syringes, safety device and other applications

MONOBLOCK liquid filling and capping machine

LMF series

Filling and stopper machine for disposable vials are designed and built in conformity with GMP standards. Conceived to fulfill the highest quality requirements of pharmaceutical industries, we can be set to cover a wide range of formats to satisfy the needs of every customer.

LMF series

Monoblock liquid filling and capping machine

Design

Monoblock with compact size Less conveyor movement to reduce the dust particle from conveyor. Multi-function capping application

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Applications

- Vial filling
- Eye-drop filling
- Cartridge filling
- Small volume of syrup filling

Features

Designed Monoblock system for liquid filling and capping machine. Servo driven system enhance easy control and data memorizing function. Applied GMP standards to fulfill the highest requirement of pharmaceutical industries. Less change parts required except alignment starwheel

Consisting of

- Container accumulating turn table (Alternative inline conveyor connect)
- Starwheel and box movement transfer system without conveyor movement.
- Accurate filling control by servo driven
- Nozzle up-down movement with N2 gas fill or vacuum suction to prevent tail drop.
- Inner cap inserting system / bowl feeder with linear vibratory guide, pick & place
- Outer cap supply system / bowl feeder with chute or pick & place.
- Multi-function capping system / press-on, screw, alu-cap seaming.

Model	LMF 50	LMF 100	LMF 150	LMF 200
No of nozzle	2	4	6	10
Capacity /min	50 vials	100 vials	150 vials	200 vials

Capacity shall be changed according to product viscosity and size.

Items

- Monoblock liquid filling and capping machine (Vial, Eye-drop, Cartridge, Syrup)
- Pre-filled syringe filling machine (Pre-filled syringe assembly machine)
- Chamber bag filling and wrapping machine (Single chamber, Double chamber, 3 chambers)
- Rotary filling and capping machine (Cartridge filling and assembly machine)

Partial Pictures & Descriptions

Turn table Alternative using turn table or direct connect inline conveyor

Inner cap feeder Bowl feeder, linear vibratory guide, Vacuum pick & place into container neck press on inner cap

Transfer system Box movement transfer plate with jaw shape. No change parts required servo driven ensure smooth movement .

Nozzle Easy maintenance and cleaning N2 gas fill, anti drop suction (Alternative) Custom designed moving nozzle (Optional)

Dosing system Rotary piston pump Peristaltic pump

Outer cap chute Bowl feeder, feeding chute, alternative pick & place system for custom design.

Filling nozzle Servo driven up & down control anti drop suction function

Multi function capping Servo driven bottom rotate system Press on capping, plastic screw cap alu-cap seaming

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