










# Dispensing

## Complete Systems

Loctite® brand complete dispensing systems, available from Henkel, are designed to offer the total package for fluid delivery. Whether you use a Loctite® brand adhesive product, or any other brand, these complete systems are ready for immediate operation and offer the manufacturing flexibility and reliability you're looking for. Selection of a Loctite® brand complete dispensing system is based on the product being used, package size, and process requirements.

	<b>Loctite® Bond-A-Matic® 3000 Dispenser 0-15 psi</b>	<b>Loctite® Bond-A-Matic® 3000 Dispenser 0-100 psi</b>	<b>Loctite® Shot Miser™ Dispense System</b>	<b>Loctite® Dial-A-Seal® Applicator</b>	<b>Loctite® Pump-A-Bead™ II Dispenser</b>	<b>Loctite® Press-Pak™ 1000 Dispenser</b>	<b>Loctite® Analog Syringe Dispensing System</b>	<b>Loctite® Digital Syringe Dispensing System</b>	<b>Loctite® Foot Pedal Dispenser</b>
									
<b>Item #</b>	982719	982722	98116	998400	986000	98006	98021	97006	98049/ 98050
<b>Dispense Patterns</b>	DT, DR, B	DT, DR, B	DT, DR, B	N/A	B	B	DT, DR, B	DT, DR, B	DT, DR, B
<b>Used To Dispense</b>	G, IA, LC, RC, TL	G, IA, LC, RC, TL	G, IA, LC, RC, TL	PS	AG	AG RC, TL	G, IA, LC, RC, TL	G, IA, LC, RC, TL	G, IA, LC,
<b>Package Types and Sizes</b>	250 ml bottle, 1 lb. bottle, 1 L bottle, 2 kg bottle, 200 g squeeze tube	250 ml bottle, 1 lb. bottle, 1 L bottle, 2 kg bottle, 200 g squeeze tube	250 ml bottle, 1 lb. bottle, 200 g squeeze tube	50 ml and 250 ml tubes and 1L bottle	850 ml cartridges	1 liter Press-Pak™ containers	10 ml, 30 ml, 55 ml syringes*	10 ml, 30 ml, 55 ml syringes*	10 ml, 30 ml, 55 ml syringes*
<b>Viscosity Range</b>	Low	Medium to High	Low to Medium	Medium to High	High	Medium to High	Low to Paste	Low to Paste	Low to Paste

AG = Anaerobic Gasketing  
B = Beads  
DR = Drops  
DT = Dots  
G = Gel Adhesives

IA = Instant Adhesives  
LC = Light Cure/Acrylics  
PS = Pipe Sealants  
RC = Retaining Compounds  
TL = Threadlockers

\*Syringe Accessories sold separately. See page 8 for more information.

## Loctite® Bond-A-Matic® 3000 Dispenser, Items 982719, 982722

Loctite® Bond-A-Matic® 3000 dispensing systems are reliable, low cost pneumatic systems for dispensing single-component adhesives. These systems arrive ready to dispense, complete with a 2 liter pressure reservoir and a Loctite® Vari-Drop™ Applicator. These units have 0-15 psi (982719) or 0-100 psi (982722) pressure regulators, well suited for low viscosity (<3,000 cP) and high viscosity (>3,000 cP) fluids, respectively. The reservoirs accommodate all Loctite® brand product bottles and tubes in 200 gram, 250 ml, 1 pound, 1 liter, and 2 kg packages.

### Features

- Improves dispensing control, eliminates waste, and reduces operator fatigue
- PTFE lined, black feed line provides a light and moisture barrier to ensure no-clog dispensing of light sensitive acrylics and moisture sensitive instant adhesives
- Dispensing Needle Assortment allows you to select the needle to deliver the bead or dot size needed for your application
- Easy to read pressure gauge
- Adjustable pressure regulator

### Theory of Application

Operation of this unit is easy. An operator will place a bottle of product in the reservoir and tighten the three handles on the cover. The unit is then pressurized to the appropriate setting for optimal flow control. The product is dispensed through a hand held Loctite® Vari-Drop™ Applicator which, when depressed, allows material to flow. A fully depressed finger switch maximizes flow. By adjusting the flow screw on the finger switch, a consistent flow can be set for repeatable dispensing.

### Technical Specifications

Air Input:	Clean, dry air not to exceed 125 psig and filtered with a maximum of 50 microns
Air Output:	982719: 0 to 15 psi, 982722: 0 to 100 psi
Max. distance from system to dispense point:	48 inches
Size:	12.875" H x 9.875" W x 13.25" D
Weight:	18 lbs.



### Typical Fluids Handled

Cyanoacrylate Adhesives, Silicone Adhesives, Light Cure Adhesives, Anaerobic Adhesives

### List of Loctite® Brand Parts Supplied

- (1) Loctite® Bond-A-Matic® Reservoir with ¼" Tank Fitting
- (1) Loctite® Vari-Drop™ Applicator Kit
- (1) Needle Sample Kit
- (1) ¼" Feed Line and Spring Strain Relief
- (1) Anti-Bubble Tip & Sleeve
- (1) Tube of Silicone Grease
- (1) Manual

### Additional Information

For Spare Parts and Accessories, see pages 55-56.  
For Fluid Compatibility Selector Chart, see page 38.  
For Dispense Tips, see page 54.

## Loctite® Dial-A-Seal® Applicator, Item 998400

The Loctite® Dial-A-Seal® Applicator is a touch-actuated, all-pneumatic applicator for dispensing high viscosity Loctite® brand thread sealing products onto threaded pipe fittings and nipples. This dispenser has a quick turn turret, equipped with cavities for ¼", ⅜", ½", ¾", and 1" male pipe threads. It is recommended specifically for applying Loctite® brand PST® Thread Sealants, Vibra-Seal®, and Anti-Seize products. The applicator is fed directly from a 50 ml tube, 250 ml tube, or 1 liter bottle.

### Features

- Applicator is fed directly from a 50 ml tube, 250 ml tube, or one liter bottle
- A quick turn turret equipped with cavities for ¼", ⅜", ½", ¾", and 1" male pipe threads
- Up to 0.7 ml of product can be dispensed per shot
- Rear located product volume adjustment knob
- Suggested settings for each diameter fitting are given in a table on the outside casing of the unit

### Theory of Operation

A turret head with a cavity for each size of pipe thread is attached to the output of an air actuated, positive displacement pump. The operator presses a fitting down into the correct cavity. The downward motion of the turret depresses a switch that actuates the pump. A metered amount of material is dispensed on the part. The operator can then assemble the part or dispense an additional shot.

### Typical Fluids Handled

Loctite® 565™ PST® Thread Sealant, Loctite® 567™ PST® Thread Sealant, Loctite® Vibra-Seal® Thread Sealant, Loctite® brand Anti-Seize Products



### Technical Specifications

Air Input:	Requires filtered (40 micron) lubricated air, 60 psi min.
Turret Sizes:	¼", ⅜", ½", ¾", and 1"
Dimensions:	7.6" W x 12.5" L Height with 50 ml tube is 12" Height with one-liter bottle is 16.5"

### List of Parts Supplied

- (1) Loctite® Dial-A-Seal® Applicator
- (1) Stand for 1 Liter Bottle
- (1) Empty 1 Liter Bottle
- (1) 1 Liter Bottle and Cap
- (1) 50 ml Tube Adapter
- (1) Empty 50 ml Tube with Dispense Cap
- (2) Elbow Fittings
- (1) Tube Vent
- (1) Feed Tube
- (1) Tube Adapter
- (1) Manual

### Additional Information

For Spare Parts and Accessories, see pages 55-56.

## Loctite® Pump-A-Bead™ II Dispenser, Item 986000

The Loctite® Pump-A-Bead™ II Dispense System applies continuous beads of traceable Loctite® brand anaerobic gasketing materials onto part surfaces. This all-pneumatic system dispenses materials packaged in de-aerated 850 ml cartridges with a viscosity range of 500,000 to 1,000,000 cP. Integration with robotic tracing equipment or other suitable motion control platforms is also possible. The dispense valve can be mounted up to 12 feet from the base unit. A pneumatic signal from the station starts the pump and opens the dispense valve.

### Features

- Air piloted control signal initiates dispensing
- Air-driven reciprocating positive displacement piston pump
- Poppet-type dispensing valve can be mounted onto a robotic arm
- Anti-drip feature
- Capable of dispensing 0.5 cc per second.
- Visual signal will indicate "Product Cartridge Empty"
- Easily integrated into robotic dispensing stations

### Theory of Operation

A full cartridge of material is loaded into the system and the unit is switched to operate mode. Upon demand for dispensing, i.e., pneumatic signal, material is fed from the cartridge to an oscillating pump where the pressure is elevated to greater than 650 psi. The material is forced through a high-pressure hose to the dispense valve where material is dispensed onto the part. Upon removal of the pneumatic signal, the pump resets and the dispense valve closes.

### Typical Fluids Handled

Loctite® brand Gasket Eliminator® and other Loctite® brand Flange Sealants.



### Technical Specifications

Air Input:	All-pneumatic system, 60 to 100 psi, filtered to 40 microns
Compatible Materials:	Loctite® brand de-aerated anaerobic gasket materials up to 1,000,000 cP viscosity
Pumping Rate:	.5 cc per second
Size:	16.2" H x 36" W x 10" D
Weight:	80 lbs.

### List of Loctite® Brand Parts Supplied

- (1) Pump-A-Bead™ II      (1) Poppet Valve Applicator  
(1) Manual

### Additional Information

For Spare Parts and Accessories, see pages 55-56.  
For Fluid Compatibility Selector Chart, see page 51.  
For Dispense Tips, see page 54.

## Loctite® Press-Pak™ 1000, Item 98006

The Loctite® Press-Pak™ 1000 dispenser is a freestanding, pumpless, all-pneumatic dispensing system for use with fluids packaged in 1 liter Press-Pak™ packages. Fluid is dispensed from the Press-Pak station to a remote valve, which can be mounted a significant distance from the Press-Pak™. The Press-Pak™ dispensing system is typically used in conjunction with the Loctite® Poppet Valve, Item 986300, to dispense Loctite® anaerobic gasketing materials onto flange surfaces.

### Features

- No pump, and therefore no dynamic seals to wear out or leak
- 625 psi of product pressure to accommodate long distances to the dispense valve
- Fully collapsible, poly-film adhesive package leaves no residual adhesive and no plastic cartridges to dispose of
- All-pneumatic systems require no electric or hydraulic power
- Robust steel and stainless steel construction with easy access service panels
- Top loading, easy-to-clean, PTFE-lined dispensing chamber
- Front mounted, industrial-grade controls
- Easy-to-read fluid level indicator
- Optional pneumatic or electrical low level outputs and/or automatic low level switch-over capabilities
- Complete operations, setup, troubleshooting, and spare parts documentation package

### Theory of Operation

The Loctite® Press-Pak™ 1000 is a pumpless new generation system designed specifically for anaerobic flange sealants, abrasive-filled adhesives, and solder pastes. The dispenser compresses tubular, poly-film packs, delivering pressurized material downstream to a remote dispense valve.

### Typical Fluids Handled

Any fluids packaged in 1 liter Press-Pak™ packages.



### Technical Specifications

Air Input:	60 psig clean filtered air @ 1.0 CFM
Output:	Pressures to 625 psig, flow rates to 1.0 ml/sec
Size:	54" H x 14" W x 16" D
Weight:	622 lbs.

### List of Loctite® Brand Parts Supplied

- (1) Press-Pak™ 1000 Dispenser  
(1) Manual  
(1) Feed Line Kit  
(1) Reducer Union, 3/8" tube x 1/4" tube  
(1) Silicone Grease

### Options

986300      Loctite® Delrin® Body Poppet Valve

### Additional Information

For Dispense Tips, see page 54.

# Loctite® Analog Syringe Dispensing System, Item 98021

The Loctite® Analog Syringe Dispense System is a semi-automatic dispensing system for fluids and pastes packaged in 10 or 30 ml syringes. It is intended for dispensing either dots, drops, or beads. Syringe dispensing offers quick and easy set up and clean up, resulting in minimal downtime. Use of Loctite® brand pre-filled syringes offers additional online production ease and convenience.

## Features

- Adjustable pressure regulator from 0-100 psi
- Four timer ranges: 0.01-1, 0.1-10, 0.2-20, 0.3-30 seconds; Preset to 0.01-1 seconds
- Illuminated function switches
- Momentary or maintained dispense cycles
- Vacuum suck-back feature to prevent dripping
- Requires minimal bench space

## Theory of Operation

The system is a pressure-time-vacuum dispense system. It consists of a plastic disposable syringe filled with product, an air regulator and pressure gauge to control pressure, and an electrical timing circuit to control the dispense cycle. The vacuum suck-back feature allows the operator to control stringing, dripping, or drooling between dispense cycles. When the dispense cycle is initiated by pressing the foot switch, a pulse of air, either timed or manually controlled, is transmitted to the top of the syringe barrel. This pushes a controlled amount of product out of the dispense tip attached to the syringe. The amount of product dispensed is controlled by the amount of pressure applied to the product, the length of the dispense cycle, the size of the dispense needle, product viscosity, and temperature.

## Technical Specifications

Input Voltage:	110-120 VAC 60 Hz, ½" amp
Air Input:	35-100 psi
Air Output:	0-100 psi
Vacuum Range:	1-15 inches Hg
Dimensions:	2.5" W x 9.25" H x 8.6" D
Weight:	4.75 lbs.

## Typical Fluids Handled

Any product packaged in a 10 ml, 30 ml, or 55 ml syringe (including pre-packaged syringes with 25 ml fill).



*Air Line Adapter and Stand sold separately.  
See page 8.*

## List of Loctite® Brand Parts Supplied

- (1) Analog Syringe Dispenser with Power Cord
- (1) Needle Sample Kit
- (1) Foot Switch with Cord Lock
- (1) Manual

## Air Line Adapters (Required for syringe dispensing)

- For 10 ml syringe dispensing: order 97208 or 97216
- For 30 ml syringe dispensing: order 97245 or 97294
- For 55 ml syringe dispensing: order 97245 or 98416

## Additional Information

- For Syringe Dispensing Accessories, see page 8.
- For Spare Parts and Accessories, see pages 55-56.
- For Dispense Tips, see page 54.

## Accessories

Syringe Finger Switch Assembly 985678 (for use with 98021 only).

Used in place of the foot switch to allow finger actuation while holding the syringe barrel.



Rental and repair services are available for our full line of dispensing and curing equipment. Our equipment leasing program allows customers the opportunity to fully evaluate a process and the equipment prior to making a capital investment. For more information, call your Henkel Adhesives and Sealants Specialist at:

**1-800-LOCTITE (562-8483)**

## Loctite® Digital Syringe Dispensing System, Item 97006

The Loctite® Digital Syringe Dispensing System accurately dispenses adhesives or other fluids, with viscosities ranging from water-thin to paste-like consistencies, for a variety of assembly and repair applications. This system is effective at delivering precise dots of adhesive in a timed mode, or can be used on demand for beads or potting, in a continuous mode. Typical applications are the assembly of electrical components, wire tacking, circuit board repair, and the locking of fasteners.

### Features

- Precision air pressure regulator for precise application of small dots
- Digital display of dispense pressure, 0-100 psi
- Digital timer display, for precise timer settings
- Vacuum suck-back feature to prevent dripping during idle time
- “Stand-up” design, requires minimal bench space
- Quick pressure setup feature
- Process monitoring – air pressure sensor detects  $\pm 10\%$  variation from set pressure and alerts operator if detected.
- Operates in a timed or continuous mode

### Theory of Operation

The Loctite® Digital Syringe Dispensing System precisely regulates the air pressure applied to an adhesive or fluid contained within a 10 or 30 ml syringe. During idle time an adjustable vacuum is applied to the syringe barrel, preventing the adhesive or fluid from dripping from the needle. The system will automatically detect pressure fluctuations greater than 10% from the set pressure and alert the operator. This condition must be corrected before another dispense cycle can occur, ensuring the precise amount of adhesive or fluid is dispensed each time.

### Typical Fluids Handled

Any fluid products packaged in a 10 ml, 30 ml, or 55 ml syringe (including pre-packaged syringes with 25 ml fill).

*Air Line Adapter and Stand sold separately. See page 8.*



### Technical Specifications

Power Supply:	90-260 VAC; 47-63 Hz
Air Supply:	Min. 30 psi
Pressure Regulator:	0-100 psi
Dispense Time Range	0.01-99.9
Size:	5.7" W x 9" H x 10.2" D
Weight:	6.17 lbs.

### List of Loctite® Brand Parts Supplied

(1) Digital Syringe Controller	(1) Foot Switch
(1) Power Cord	(1) Manual

### Air Line Adapters (Required for syringe dispensing)

For 10 ml syringe dispensing: order 97208 or 97216  
 For 30 ml syringe dispensing: order 97245 or 97294  
 For 55 ml syringe dispensing: order 97245 or 98416

### Additional Information

For Syringe Dispensing Accessories, see page 8.  
 For Spare Parts and Accessories, see pages 55-56.  
 For Dispense Tips, see page 54.

## Loctite® Foot Pedal Dispenser, Items 98049, 98050

The Loctite® Foot Pedal Dispenser is a manually controlled, pneumatic dispenser for use with 10 ml and 30 ml syringes. The unit is capable of dispensing dots, drops, or beads of fluids ranging from water-thin liquids to high-viscosity pastes. The dispense cycle is controlled by a manual foot pedal and an adjustable pressure regulator. The easy-to-use system offers quick and easy set up and clean up, resulting in minimal downtime. The unit is available as a basic unit (98049), and with a vacuum suck-back feature (98050) to prevent dripping when dispensing low viscosity fluids. Syringe barrels and air line adapters are sold separately. The basic unit (98049) can also be used (in conjunction with a reservoir) to operate Loctite® brand dispense valves 97112, 98009, and 98013.

### Features

- Simple hands-free operation
- Adjustable pressure regulator, 20-100 psi
- Easy-to-read pressure gauge
- Available vacuum suck-back, 1-15 in Hg, to prevent dripping
- Designed as floor unit to eliminate the need for bench space

### Theory of Operation

When the foot pedal is actuated, a pulse of air is transmitted through an air line adapter to the top of the syringe barrel, pushing a controlled amount of material out of the dispense tip. The amount of product dispensed is controlled by the amount of air pressure applied to the product, the length of time the foot switch is depressed, the size of the dispense tip, the product viscosity, and the temperature.

### Technical Specifications

Air Input:	60 – 100 psi
Air Output:	20 – 100 psi
Vacuum Range:	98049: not equipped with vacuum 98050: 1– 15 inches Hg
Dimensions:	8" W x 5" H x 5" D
Weight:	98049: 3.7 lbs. 98050: 4.1 lbs.



### Typical Fluids Handled

Any fluid packaged in a 10 ml, 30 ml, or 55 ml syringe (including pre-packaged syringes with 25 ml fill).

### List of Loctite® Brand Parts Supplied

(Air Line Adapter sold separately)	
(1) Foot Pedal Dispenser	
(1) Manual	

### Air Line Adapters (Required for syringe dispensing)

For 10 ml syringe dispensing: order 97208 or 97216  
 For 30 ml syringe dispensing: order 97245 or 97294  
 For 55 ml syringe dispensing: order 97245 or 98416  
 (see “Syringe Accessories” on page 8 for descriptions)

### Additional Information

For Syringe Accessories, see page 8.  
 For Dispense Tips, see page 54.

# Loctite® Shot Miser™ Dispense System, Item 98116

The Loctite® Shot Miser™ Dispense System (98116) includes a reservoir, controller, and dispense valve. This economical system is designed for both manual and timed dispensing of all single component products with viscosities ranging from 0-80,000 cP. All wetted components are inexpensive and disposable, resulting in low maintenance cost and minimal downtime. The reservoir accommodates all Loctite® brand bottles in 50 ml, 250 ml, 500 ml, and 1 pound package sizes. The operating manual and controls are printed in both English and Spanish. The Loctite® Shot Miser™ reservoir, controller, and dispense valve are available as a complete system (98116), and also sold separately for integration with other dispensing systems (see Options below).

## Features for Reservoir

- 1 liter internal capacity reservoir, directly accepts product bottles listed above
- Adjustable pressure regulator, 0-100 psi
- Easy-to-read pressure gauge (units in psi and bar)
- A pressure/vent valve and hand-tight lid knobs allow for easy, no-tool bottle changeover
- Removable reservoir stand allows for smallest possible footprint
- Tank fitting accommodates ¼" diameter product feed tube

## Features for Controller

- Electro-pneumatic timer/controller for dispense valve
- Timed and continuous dispense modes
- Multiple range, adjustable timer (0.1 sec to 99 minutes)
- Foot switch actuated
- Rugged all-steel enclosure, with flat top and bottom for easy stacking
- Directly interfaces with any Loctite® brand automatic dispense valve (excluding 97116)

## Dispense Valve

- Pneumatically actuated automatic dispense valve
- Capable of dispensing drops and beads
- Pinch-tube disposable fluid path for fast, easy, and low cost maintenance
- ¼" diameter product feed tube
- Adjustable valve stroke for enhanced shot size control
- Replaceable pneumatic actuator
- Integral Luer-Lok fitting accepts all Loctite® brand dispense tips

## Theory of Operation

The container of adhesive is placed in the product reservoir and the system is pressurized using a pneumatic air source. The controller's analog adjustable timer controls the opening and closing of the dispensing valve. The dispense cycle is initiated by the pneumatic foot pedal. This causes the internal solenoid to open and allow air pressure to pull on the actuating piston of the dispense valve. The piston pulls away from the pinch tube channel in the valve, opening the flow path, and allowing adhesive to pass. At the end of the timed cycle, pressure is then automatically reapplied to the piston, closing the flow path. The amount of dispensed adhesive is controlled by adjustment of air pressure, valve open time, and the size of the dispensing needle.

## Technical Specifications

Pneumatic supply:	60-100 psi minimum
Electrical power:	120 VAC - 50/60 Hz
Fluid Pressure:	100 psi max.
Reservoir	
Size:	12" Dia. x 13.3" H (6" Dia. without stand)
Weight:	8.5 lbs.
Controller	
Size:	4" H x 6" W x 5.5" D
Weight:	3.5 lbs.
Dispense Valve	
Size:	6" H x 5" W x 1.7" D
Weight:	0.5 lbs.

## Typical Fluids Handled

All Loctite® brand adhesives, sealants, primers, activators, lubricants.

Save Adhesive -  
Lowest Cost  
Complete Dispense System



## List of Loctite® Brand Parts Supplied

- (1) Shot Miser® Reservoir with stand
- (1) Shot Miser® Controller with foot switch
- (1) Shot Miser® Dispense valve with ¼" diameter product feed tube
- (1) Valve Air Line
- (1) Dispense Tip Sample Kit
- (1) Manual

## Additional Information

For Spare Parts and Accessories, see pages 55-56.  
For Dispense Tips, see page 54.

## Options

The following components are also sold separately:



**Loctite® Shot Miser™ Valve Controller – 98079**  
See page 12 for more information.



**Loctite® Shot Miser™ Dispense Valve – 98085**  
See page 48 for more information.



**Loctite® Shot Miser™ 1 Liter Reservoir – 98090**  
See page 12 for more information.

# Loctite® Brand Syringe Accessories

PRODUCT	ITEM #	DESCRIPTION	CONTENTS
	97208	10 ml Syringe Air Line Adapter	2 Air Line Adapters (syringe barrel sold separately)
	97245	30 and 55 ml Syringe Air Line Adapter	2 Air Line Adapters (syringe barrel sold separately)
	98117	3 ml Syringe Air Line Adapter and Filter	Adapter and Filter
	98118	10 ml Syringe Air Line Adapter and Filter	Adapter and Filter
	97216	10 ml Syringe Starter Kit	5 Caps 5 Pistons 4 Clear Barrels 1 Black Barrel 5 Tips 1 Air Line Adapter
	97294	30 ml Syringe Starter Kit	
	98416	55 ml Syringe Starter Kit	
	97207	10 ml Clear Syringe Barrel Kit	20 Barrel Caps, 40 Pistons, 40 Barrels, 40 Barrel Tips
	97244	30 ml Clear Syringe Barrel Kit	10 Barrel Caps, 20 Pistons, 20 Barrels, 20 Barrel Tips
	98314	55 ml Clear Syringe Barrel Kit	5 Barrel Caps, 10 Pistons, 10 Barrels, 10 Barrel Tips
	97263	10 ml Black Syringe Barrel Kit for UV Adhesives	20 Barrel Caps, 40 Pistons, 40 Barrels, 40 Barrel Tips
	97264	330 ml Black Syringe Barrel Kit for UV Adhesives	10 Barrel Caps, 20 Pistons, 20 Barrels, 20 Barrel Tips
	98315	55 ml Black Syringe Barrel Kit for UV Adhesives	5 Barrel Caps, 10 Pistons, 10 Barrels, 10 Barrel Tips
	984650	Air Line Filter for Syringe Dispensing to prevent product back flow	1 Filter Assembly with 2 Hose Crimps
	97215	Cartridge-Syringe Adapter, for downloading adhesive from 300 ml cartridges into syringe barrels	3 Syringe Filler Adapters 1 Tube of Silicone Grease
	984625	Syringe Stand for 10 and 30 ml syringe barrels	1 Stand (syringe barrel and air line adapter sold separately)