



## RESPONSE VOLUMETRIC FILLERS

Adelphi manufactures the highly regarded Response range of filling machines, ideal for small to medium batch production environments.

### Response benchtop filler

Adelphi manufactures the highly regarded Response benchtop volumetric filling machine, and can deliver reliable after sales support wherever you are in the world. This pneumatically driven filler is suitable for filling liquids, creams or solids in suspension thanks to its versatile filling head design.

The Response is adaptable, accurate, hygienic and easy to use. It is available in single or twin-head configurations, with a comprehensive range of nozzles, hoppers and other accessories available to meet your individual requirements.

These machines are ideally suited to those wanting to start automating a previously manual filling process, and those that don't currently require the output levels offered by a fully automated solution. However, once production demands increase, Response units can be mounted onto an Automation Base to create an extremely flexible fully automatic filling machine.

**(Below left) heated hopper for hot fills. (Below right) pipe feed attached, for liquid fills.**



**(Above) with standard hopper for filling creams, pastes, and solids in suspension**



### Versatile and accurate

The Response features a revolutionary head designed to handle liquids, creams, pastes, and solids in suspension efficiently. A variety of nozzle designs are available, including cut-off nozzles for a clean fill with no dripping. The forward and backward stroke can be varied independently to optimise filling characteristics, and it has the ability to fill volumes of 5ml to 1000ml, with an accuracy  $\pm 0.25\%$ , using one of three interchangeable honed pump sets.

### Simple and safe to use

Volumes are accurately and easily set by means of a hand wheel and digital counter, and the unit can be set to single shot or continuous operation. All controls are within easy reach of the operator at the front of the unit, with a foot switch as an option. With quick-release fittings and the need for just a single tool, strip-down for cleaning is quick and easy. All access is from the front of the machine without the need to remove the cover, and all moving parts are enclosed at all times. The unit is fully CE Marked.



### Hygienic

The Response is designed to minimise cleaning time and to meet the highest standards of hygiene. A 304 stainless steel monocoque construction with curved and sloping surfaces meets GMP requirements, and all contact parts are manufactured in 316L stainless steel, PTFE and Viton. The innovative pumping system is designed to be clean and lubricant free, and all hose/hopper connections are triclover as standard.

	Specification	
MODEL	SINGLE HEAD	TWIN HEAD
Accuracy	$\pm 0.25\%$	$\pm 0.25\%$
Output (per minute)	< 40	< 80
Height without hopper / tank	340 mm	340 mm
Depth	840 mm	840 mm
Width without conveyor	343 mm	343 mm
Weight	41 kg	44 kg
Air consumption per cycle	5 litres at 6 bar	5 litres at 6 bar
Volume range	5 ml- 1 litre	5 ml-100ml

### Accessories

#### Standard Nozzles

A wide variety of interchangeable nozzles are available for different products. A remote nozzle for dosing into or over food etc. can also be supplied.

#### Special Nozzles

Cut-off nozzles for a clean fill with no dripping are available, and are attached to the Response using the same fixings as any other nozzle. They are pneumatically operated and powered through the accessory ports on the front of the machine.

#### Hoppers & Tanks

Available in 316L stainless steel and in standard 20 litre and 50 litre sizes, our hoppers can be supplied plain, insulated for cold products or electrically heated for hot fills. All are connected with hygienic Tri-Clover type fittings.

#### Counter

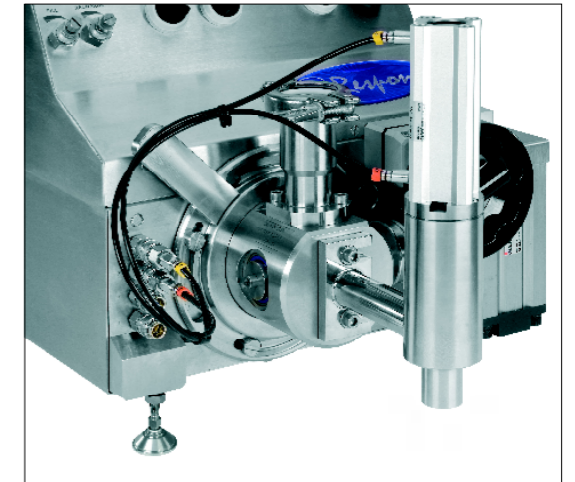
A counter attachment is available to control multiple shots.

#### Mixers & Stirrers

We can supply a variety of mixers and stirrers, free standing or lid mounted, in a variety of sizes.

#### Other Accessories

- Diving nozzles
- Remote cut-off nozzle
- Level control sensor fitted to hopper
- Spinning table for filling irregular shaped jars
- 2-speed filling system
- Stainless steel benches and trolleys
- Bag and pouch filling system





## Response automation system

With the addition of an Automation Base, your Response fillers can be combined to create a fully automated filler with up to eight heads. By doing so you have the option of increasing output whilst retaining the ability to run your Response units individually as production demands dictate. Alternatively you may choose to simply run as an automated filler but without the need to write off your investment in bench top fillers. More information is available on request.

### Key features and options

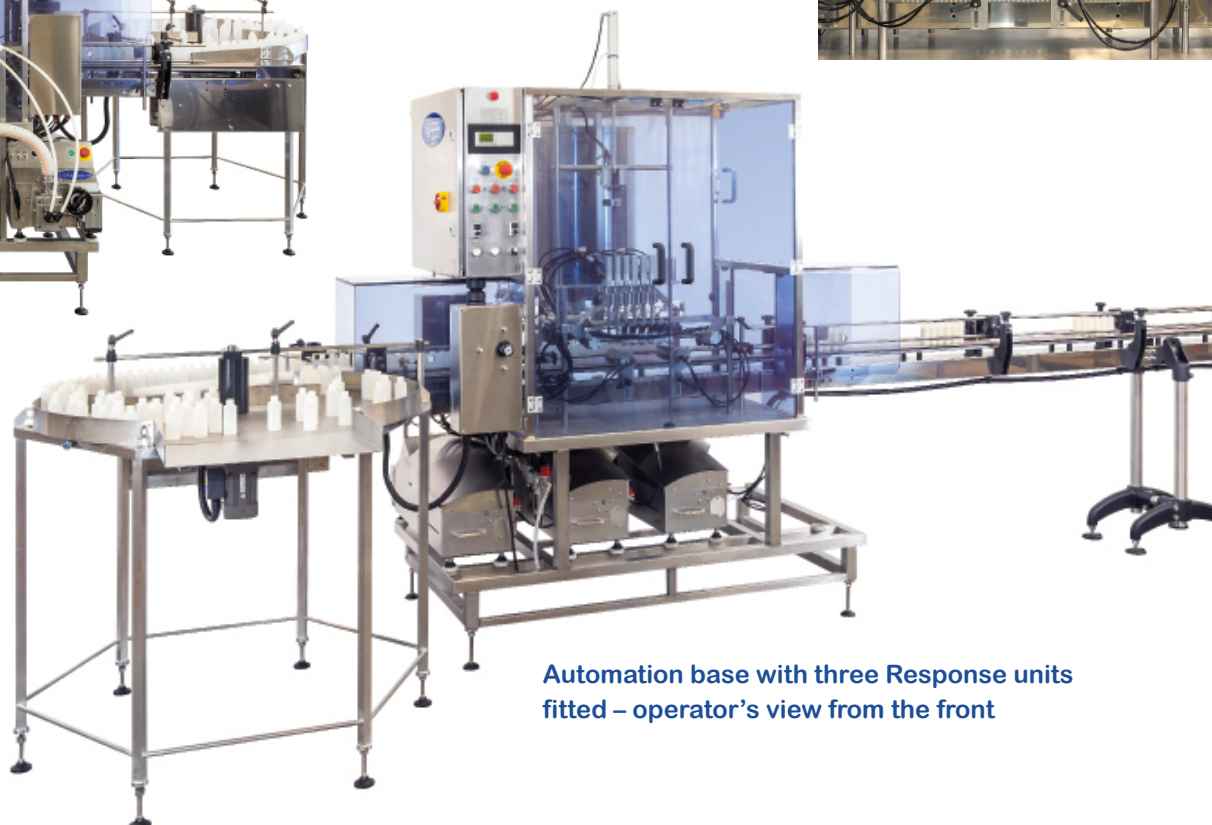
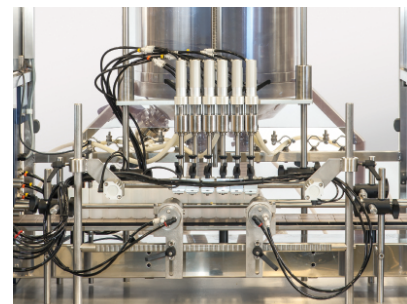
- Variable speed conveyor with adjustable guides, rails, and delrin or stainless steel slats
- Logic controls for gating and sensing systems and up to four Response fillers
- Neck location system
- Pneumatic cut-off nozzles to ensure a clean fill with no dripping
- 'Rise while fill' or 'bottom up fill' of container, into neck or fixed nozzle fill system
- Fully interlocked guarding around operating area
- Frame mounted hopper or tank with up to four triclover outlets, manifold and heated jacket
- Other bespoke additions depending on your requirements

	Specification
MODEL	AUTOMATION BASE
Accuracy	±0.25%
Output (per minute)	Dependent
Height without hopper / tank	1800 mm
Depth	1070 mm
Width without conveyor	1650 mm
Weight	396 kg + Responses
Air consumption per cycle	40 litres per cycle
Volume range	5 ml–1 litre



(Above) automation base with three Response units fitted, seen from the rear

(Right) close-up of filling area



Automation base with three Response units fitted – operator’s view from the front