



RESPONSE VOLUMETRIC FILLERS

Adelphi manufactures the highly regarded Response range of hygienic, versatile and scalable 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, as production demands increase, Response units can be mounted onto our Monobloc Filler/Capper or Automation Base, to create an extremely flexible fully automatic filling solution.

Exceptional filling accuracy of +/-0.25% - a 75% improvement on the industry average of +/-1%



Above: with our standard hopper for filling liquids, oils, gels, creams, pastes, and solids-in-suspension



Left: heated hopper for hot fills.

Below: pipe feed attached, for liquid fills.



“Reliable, good solid pieces of equipment that have lasted. When we’ve looked at other cheaper machines, in the long-term this would have been false economy”.

Eve Taylor (London) Ltd



RESPONSE VOLUMETRIC FILLERS

Versatile & 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 & 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	340mm	340mm
Depth	840mm	840mm
Width without conveyor	343mm	343mm
Weight	41kg	44kg
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 ATEX Filler



CAT II 2 G c T 5 (100 Degrees Celsius) automatic filling machine.

ATEX is the name commonly given to the European Directive for controlling explosive atmospheres. Our Response Filler can be adapted to comply with directive 94/9/EC (also known as 'ATEX 95' or 'the ATEX Equipment Directive') on the approximation of the laws of Members States concerning equipment and protective systems intended for use in potentially explosive atmospheres.

There are three zones relating to ATEX compliancy – Adelphi can adapt our Response base unit or automation system to be Zone 1 (10 – 1,000 hours per year in the explosive atmosphere) and Zone 2 (0-10 hours per year in the explosive atmosphere) compliant. We will provide the relevant documentation to support your purchase and ensure peace of mind.

Our standard Response machines are adapted to adhere to ATEX requirements, and are made with qualified pneumatic components. We engineer-out any possible sources of static build up, and we ensure good earthing via an Earth Point included at the rear. Materials such as stainless steel are used to replace some aluminium and plastic parts, and the machine is raised on different feet to allow grounding. Additionally, the hopper comes with a lid to reduce fumes.

Our ATEX adapted Response fillers can come with various seal and O-ring options, which we will assess to ensure compatibility with your product:

- Fluoroelastomer (VITON)
- EPDM
- Perfluoroelastomer (KALREZ)

We have lodged a technical file (09XT005) with an approved body.

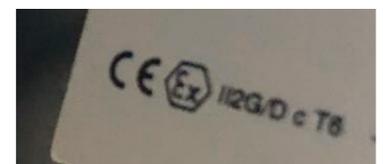
Please note that our ATEX machines do not cover explosive risks from dust; only gas.



The Earth Point



ATEX compliant feet



Look for the 'EX' mark for assurance that our parts are ATEX approved



Response Monobloc Filler

Adelphi's Response Monobloc Filler provides many advantages for customers compared with traditional inline packaging systems.

Key features and benefits:

- Capable of filling 5ml to 250ml containers
- Space-saving design
- Ten-minute strip down time
- Hygienic stainless steel construction; all wetted parts are 316 stainless steel
- Response volumetric filler fill-accuracy +/- 0.25%
- Quick and easy to change parts from one fill-size container to another
- Easy-to-use intuitive HMI touch screen controls for your operator
- Designed to effectively handle liquids, oils, creams, pastes and solids in suspension
- Speed of operation in the region of 35 per minute
- Reduced labour costs

The Response Monobloc Filler can incorporate the following elements to give a complete turnkey packaging line:

- In-feed table
- Bottle blower
- Filler
- Automatic cap placement
- Capper
- Labeller
- Collection table



	Specification
Accuracy	±0.25%
Output (per minute)	30 - 35
Height without hopper / tank	2032mm
Depth	810mm
Width without conveyor	1120mm
Weight (approx)	275 kg (plus Response base unit and hopper)
Air consumption per cycle	7.5 litres at 6 bar
Volume range	5 ml – 250ml
Electrical consumption	Single phase 240VAC, 13A supply
Maximum bottle diameter	85 mm (outer diameter)
Maximum bottle height	250 mm
Maximum cap diameter	45 mm

The Response Monobloc Filler has been designed to work with our Adelphi Response Volumetric Filler, but it can also be configured to incorporate fillers from other suppliers.

Suitable container dimensions:

External diameter up to 85mm
Height up to 250mm
Cap diameter up to 45mm

Response Automation Base

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	1800mm
Depth	1070mm
Width without conveyor	1650mm
Weight	396 kg + Responses
Air consumption per cycle	40 litres per cycle
Volume range	5ml-1 litre



(Above) Automation Base with three Response units fitted; seen from the rear



Automation Base with three Response units fitted; operator's view from the front

"The machine can be adapted quickly to different fill sizes and container types, which benefits us greatly with the variety of products we fill. We also find the change parts on the machine really quick and easy to swap over when we change production runs, so we can keep the machine clean between fills with minimal effort".

Barry M Cosmetics