

FABRICATED PRODUCTS



New products for 2015

- A new revolutionary separator that removes 99% of dirt on the 1st Pass of water
- Insulation for Buffer Vessels
- Insulation for our separators

Fabricated Products – Contents

With a local heritage in working with stainless steel, we are the first UK manufacturer to offer superior stainless steel air and dirt separators.

Our services are utilised by many companies within the Water Treatment, Heating & Ventilation Industry throughout the UK, Europe, Scandinavia, the Middle East, Asia and as far as Australia.

Our products are installed worldwide in many commercial and industrial applications such as hospitals, schools, universities, M.O.D bases, petro chemical plants, leisure centres, office blocks etc.

Other aspects of our business include product design and testing, including quality control to British Standards where applicable.

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NEW PRODUCT

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Fabricated Products – The Solution

We manufacture two ranges of Microbubble Air & Dirt Separators. The CleanVent range and the MagVent range for the removal of Air, Dirt, Magnetite and Sludge.

We also manufacture Chemical Dosing Pots, Water Sample Coolers, Buffer Vessels and Hydronic Headers.

Modern boilers have very low water content, making them vulnerable to accumulated deposits (dirt) causing boiler failure. The main reason for appliance breakdown is this dirty water. The water that circulates around any heating (or cooling) system will be contaminated with a variety of damaging debris, including

magnetite (which turns to sludge). Such contamination is always damaging to a heating/cooling system, but to the latest generation of high-output, low-water-content appliances, dirty water is a major hazard. System cleansing and water treatment is now very vital and necessary to the welfare and prolonged existence of the boiler/chiller plant.

Air Separation & Air and Dirt Separation

Both these units must be installed at the hottest part of the system (before the pumps). In a heating system this is the main flow from the boilers. In a chilled water system the unit must be located in the return close to the chiller.

Dirt Separation only

This unit should be installed in the return pipework before the flow of water enters any plant (boilers, pumps, etc.). There is no head restriction on this unit. The maximum flow rates through the range of MagVent & CleanVent is 3m/sec. If these values are exceeded the efficiency is reduced.

Commissioning

The CleanVent and MagVent requires no special commissioning. All units are fitted with a 3 way valve under the auto air vent valve, which should be used when initially filling the system. The same valve is used for draining off floating "scum" that prevents the possibility of dirt clogging the air vent. Maintenance will be required to remove trapped dirt and sludge. This can be done by opening the ball valve at the bottom of the unit. The valve may be opened while the system is under pressure. Scalding is a danger at high pressures and temperatures. Ensure that the water is safely piped to drain before opening the valve. The system pressure will flush the dirt out. Leave the valve open until the collected dirt has been flushed out, repeat this operation every few days. Once the water is clear it may be possible to drain every 6 months or so depending on the size of the system. Most of the dissolved air will be removed in a few days. However this may vary from system to system. In large systems it may take several weeks. Dirt separators can only remove dirt that is circulating.

Flanges

All flanges are drilled to BS 4504 PN16 as standard. Plain ends and other flange ratings are available on request. The CleanVent unit is maintenance free.

Drain Valve

All models are supplied with a ball valve for draining the collected dirt and sludge.



The removal of air and dirt through a single unit



The Solution

The 1Pass combines the removal of air and dirt through a single unit. Installed at the hottest point in the system the 1Pass will eliminate these microbubbles from heating and chilled water systems.

The special design of the filter ensures all dirt including magnetite down to 5 micron and less is removed.

All magnetite and any other debris will be removed very quickly, ensuring the time the dirt remains in the water system concerned, remains at a minimum.



REMOVES 99% OF DIRT IN JUST 1 PASS OF THE UNIT!

Features and Benefits

- Removes air, microbubbles and all types of dirt including magnetite down to 5 micron and less.
- Greatly reduced commissioning times after initial fill.
- Removes 99% of all types of dirt including magnetite on the first pass through the unit.
- Longer system life.
- Cleans and de-aerates the system quicker.
- Low-pressure drop.
- One directional flow.
- Water flows in one side and comes out clean and de-aerated the other.
- Removes microbubbles at 6 bar in heating systems and 4 bar in chilled water for Microbubble removal.
- Maximum Temperature. 110 °c.
- Higher temperature units available on request.
- Tested to 21 bar.
- All stainless steel vessel.

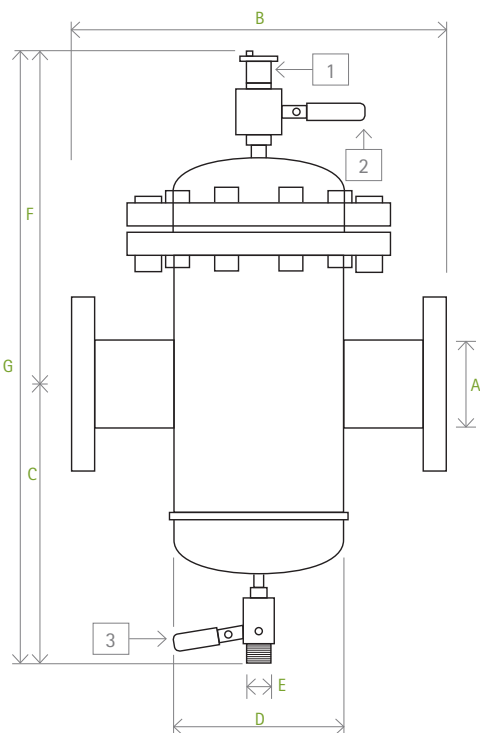
1 Pass Microbubble Air & Dirt Separator

Removes air, microbubbles and all types of dirt including magnetite down to 5 micron and less.

Model No: 1Pass

The Combined Air (Deaerator) & Dirt Separator

Dimensions (mm)								
Model No.	A	B	C	D	E	F	G	Tested to
1Pass-50	50	430	338	170	25	380	718	21 Bar
1Pass-65	65	430	338	170	25	380	718	21 Bar
1Pass-80	80	490	408	220	25	440	848	21 Bar
1Pass-100	100	490	408	220	25	440	848	21 Bar
1Pass-125	125	630	518	325	25	550	1068	21 Bar
1Pass-150	150	630	518	325	25	550	1068	21 Bar
1Pass-200	200	810	695	410	50	625	1320	21 Bar
1Pass-250	250	880	845	510	50	775	1620	21 Bar
1Pass-300	300	1100	945	610	50	875	1820	21 Bar
1Pass-350	350	1500	1020	770	50	950	1970	21 Bar
1Pass-400	400	1500	1195	770	50	1125	2320	21 Bar
1Pass-450	450	1750	1195	920	50	1125	2320	21 Bar



- 1 High Capacity Auto Air Vent
- 2 Fast Bleed Valve
- 3 Drain Valve

Stainless Steel is extensively more resistant to oxidation by water and biocides than carbon steel

EasyTreat Dosing Pots

EASYTREAT

The EasyTreat chemical dosing pot is an innovative water treatment solution for Heating & Cooling water systems that provides the results of high-performance liquid treatment programs, yet is easier to use and is more environmentally responsible.

The full installation and application cost of chemicals are far cheaper than liquids.

With the Quick Sticks, chemicals are provided as solid concentrations in 450g sticks rather than liquid in drums. The Solid concentrates are dissolved as needed inside the EasyTreat dosing pot. The chemical solution is then circulated into the system in the same way as liquid chemicals.

The EasyTreat chemical dosing pots are used for engineered projects. Fully supported by engineering specifications, they offer features and performance unmatched in the industry including high pressure ratings and high temperature ratings.

Features and Benefits

- Closure lid – is easy to open, this is inherently safe, the lid is securely restrained
- The fill opening is a full 116mm in diameter, adding chemical products with ease
- All EasyTreat chemical dosing pots are manufactured out of stainless steel
- Unique design of the filter/basket to enable slow release of chemical
- All EasyTreat chemical dosing pots are rated at 16 bar at 200 degrees Centigrade
- All EasyTreat chemical dosing pots come complete with stainless steel basket
- The short time required to install and use an EasyTreat is unmatched in the industry
- One dose/application from solid chemicals per water system
- All manufactured in the UK
- The EasyTreat can be used for liquid chemicals as well as solid chemicals in heating or cooling systems



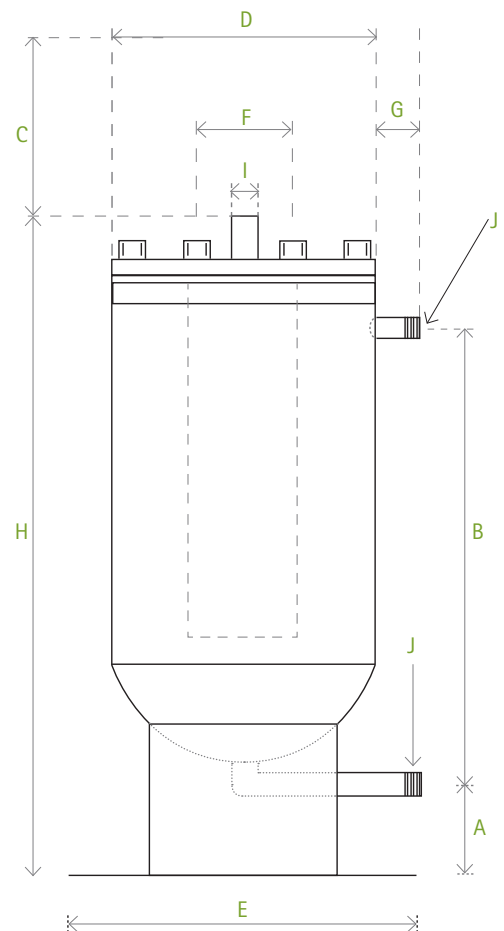
EasyTreat Dosing Pots

Much Easier, Much Safer and Less Complicated

The EasyTreat allows you to apply chemicals to the water system - whereas with the old style dosing pots, the tundish is often more difficult to reach and much higher off the floor leading to health and safety concerns.

Product		EasyTreat 10	EasyTreat 20
Product code		ET10	ET20
Centre bottom connection to floor	A	175	175
Centre to centre connections	B	428	628
Space for chemical addition	C	500	500
Diameter of main body	D	220	220
O.D. of base plate	E	320	320
Stainless filter diameter	F	160	160
Length 1" weld Nipple	G	50	50
Overall Height	H	713	913
1/2" Socket	I	1/2" Socket	1/2" Socket
1" bsp male thread	J	1" bsp male thread	1" bsp male thread
Weight (kg)		25	28
Volume (ltr)		15	25

Each Quick Stick treats approximately 500 litres of water.
Example a 5,000 litre water system will require 10 Quick Sticks.



A view of inside the EasyTreat with a Quick Sticks

Pod Insulation System

Our new innovative Pod Insulation System allows our low conductivity stainless steel units to be even more environmentally friendly. The thermal efficiency properties experienced from this insulation allow your systems to remain working at their optimum level.

The insulation, which is coated in Ventureclad 1577CW foil conforms to all relevant fire and thermal properties making absolutely sure your separators are protected from the atmosphere and do not leak any energy.

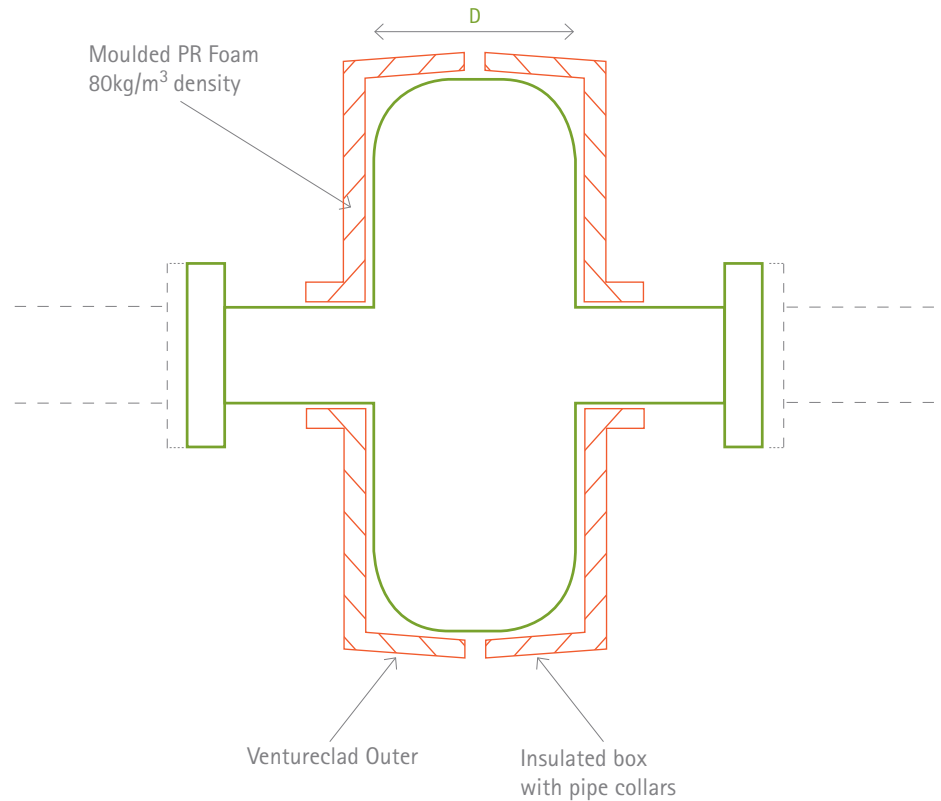
Our insulation is manufactured and moulded around our own very unique stainless steel separators.

POD INSULATION SYSTEM

Features and Benefits

- **Insulation Thickness**
20mm thick moulded Polyisocyanurate Foam
- **Operating Temperature**
-10°C to +120°C
- **Thermal Conductivity**
0.023W/MK
- **Typical Density**
50–60 KG/m³
- **Fire Properties**
BS476 Part 7, 1971 Class 1, Surface spread of flame, BS476 Part 5 1979, Ignitability Class P.
- **Moisture Vapour Transmission**
38°C 88% Relative humidity (cut Surface) – 1.6 Perms/2"
- **External Applications**

Our insulation PODS can be installed inside and outside as they are coated with Ventureclad 1577CW to protect against the elements inside and outside.



Fitting of the Insulation

The insulation cover is moulded around our own units so they fit perfectly and there is no need for any modifications on site.

Remove the Velcro straps holding the jacket together

Put both halves carefully around the separator

Use the 16mm Velcro straps provided to wrap around the insulation and pull tight to fit.

Pod Insulation System

Dimensions (mm)	
Model No.	D
POD-50/65	170
POD-80/100	220
POD-125/150	325
POD-200	410

CHEMICAL DOSING POT

Dosing pots are required in order to feed liquid chemicals such as corrosion inhibitors into closed systems.

Specification

All stainless steel

Welded to BS EN 287

All dosing pots that are designed to PD 5500:2009 category 3 (C E marked) have the following Max working pressures:

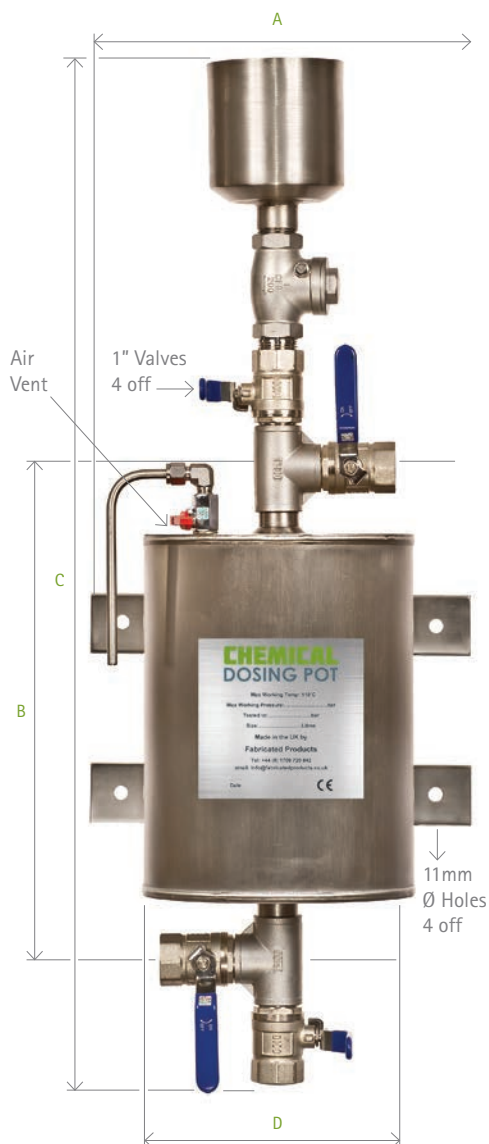
14 bar-3.5 litres to 6 litres inclusive

10 bar- 10 litre to 20 litres inclusive

8 bar-25 litres

25mm valve size connection

Dosing pots that are not designed to the above are available which have max. working pressure of 14 bar throughout the range (3.5 litre to 25 litre).



Chemical Dosing Pot

Model No.	Size (ltrs)	Dimensions (mm)				Max Pressure	Tested to
		A	B	C	D		
DP 3.5	3.5	265	275	730	165	14 bar	21 Bar
DP 5	5	265	355	810	165	14 bar	21 Bar
DP 6	6	265	395	860	165	14 bar	21 Bar
DP 10	10	320	395	865	220	10 bar	21 Bar
DP 11	11	320	395	865	220	10 bar	21 Bar
DP 13.5	13.5	320	490	920	220	10 bar	21 Bar
DP 15	15	320	570	1022	220	10 bar	21 Bar
DP 16	16	320	570	1022	220	10 bar	21 Bar
DP 18	18	320	685	1142	220	10 bar	21 Bar
DP 20	20	320	685	1142	220	10 bar	21 Bar
DP 25	25	377	585	1040	275	8 bar	21 Bar

Quick Sticks Inhibitors

Quick Sticks Inhibitors are an innovative water treatment solution for Heating & Cooling water systems that provides the results of high-performance liquid treatment programs, yet are easier to use and are more environmentally responsible.

With the Quick Sticks, chemicals are provided as solid concentrations in 450g sticks rather than liquid in drums. The Solid concentrates are dissolved as needed inside the EasyTreat dosing pot. The chemical solution is then circulated into the system being treated in the same way as liquid chemicals.

Simple, Effective and Environmentally Responsible Water Treatment

The Quick Sticks System is a next generation water treatment solution for Heating & Cooling systems that provides key benefits against liquid treatment programs:

- Eliminates drum handling, storage, and disposal
- Reduces splash and spill concerns
- More environmentally friendly
- Proven good results
- No more waste water, draining off to empty before adding more liquid chemicals



Quick Sticks

More Environmentally Responsible

Quick Sticks were developed to address the safety and environmental concerns associated with liquid chemicals and offer several benefits associated with green business.

- Maximise energy and water efficiency, therefore helping conserve these precious natural resources and reducing carbon footprint
- Reduced packaging requirements and landfill waste
- Reduced weight, therefore less energy and greenhouse emissions associated with product delivery
- Eco friendly formulas: less hazardous to use, more degradable after discharge and with lower usage requirements
- Minimise waste: 100% consumption of chemical at the point of use; no drum rinsing required
- Eliminates drum disposal concerns

The benefits of a Solid System include:

Simple and Efficient, very Cost Effective

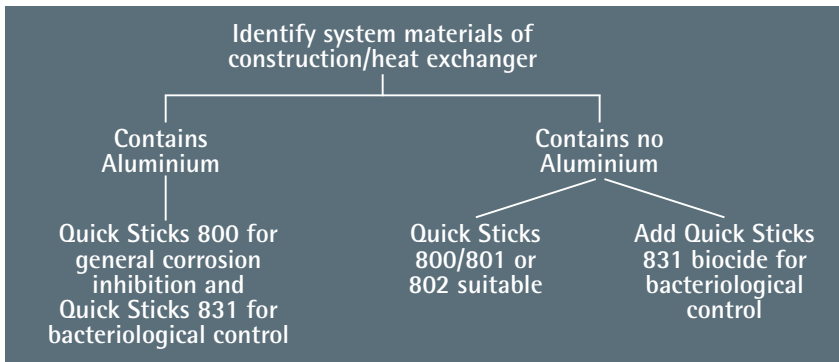
- Solid products contain the same high performance actives as liquid formulas, without the water. The solid system has been proven effective in heating & cooling water systems
- Operator only handles a single 0.450kg piece instead of a 25kg or 200kg liquid drum
- Ideal for use in hard to reach places, such as basements and roof tops
- EasyTreat is specially designed for one application of solid chemicals, not repeated (time consuming) liquid dosing in the inferior tundish type dosing pots
- It's that simple the HVAC installer can add the Quick Sticks chemicals

Reduce Hazards and Risks / Liabilities

- Innovative manufacturing process reduces the hazards associated with liquids
- No manual handling issues as no heavy drums to move around. Typically one case of Quick Sticks weighs 20kg and contains the same amount of active product as a 200L drum (227kg weight)
- Reduced chemical exposure: Product is fully encapsulated in a water soluble film. The dissolution and feed of the product is fully contained in the Solid System
- Cleaner and cheaper chemical workstation and storage area (no chemical containment required)
- No spills, no mess, no special tools

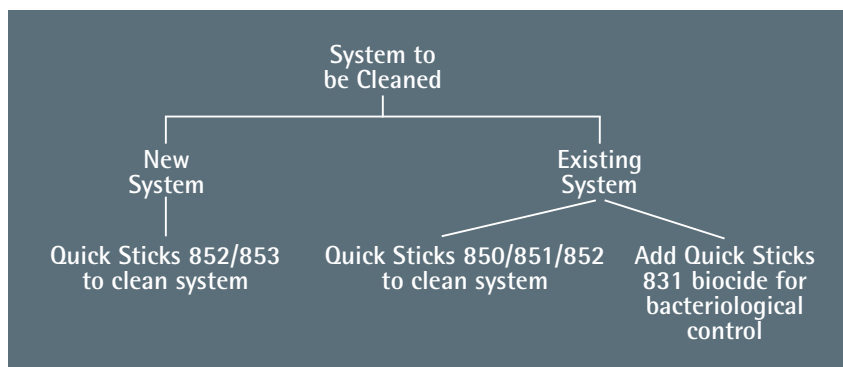
The Solid System provides the proven results of high-performance liquid treatment programs, yet is easier to use and more environmentally responsible. The Solid System minimises energy and water usage whilst reducing environmental concerns.

Quick Sticks Corrosion Inhibitors



Quick Sticks® Inhibitor Range

- Quick Sticks 800 - blend of corrosion inhibitors suitable for systems containing aluminium
- Quick Sticks 801 - organic based inhibitor suitable for multi metal systems-nitrite free
- Quick Sticks 802 - corrosion inhibitor for systems not containing aluminium
- Quick Sticks 831 - is an all-purpose biocide suitable for closed loop systems heating or cooling systems for control of bacteriological corrosion



Quick Sticks Cleaners & Dispersants Range

- Quick Sticks 850 - general dispersant/cleaner for removal of organics/foulants
- Quick Sticks 851 - hi tech polymer program for removal of system debris
- Quick Sticks 852 - hi efficiency pre-commission cleaner suitable for cleaning newly installed systems prior to treatment
- Quick Sticks 853 - alkaline degreaser for cleaning of fouled systems



Deep Water Blue

“Deep Water Blue are specialists in water treatment with many years experience and intimate knowledge of every type of process where water is used for cooling, heating or steam production. These services are recognised by the industry and they are listed in the Royal Society of Chemistry’s “Directory of Consulting Practices”.

Treatment plans ensure you comply with the relevant safety standards and often result in dramatic savings in running costs, as detailed in the return-on-investment reports we can produce.

They troubleshoot all types of heating and cooling systems, steam generation equipment and water supplies in every application including commercial buildings, food manufacture, medical systems and industrial plant.

Expert water treatment consultants analyse how your system behaves over time.”



Quick Sticks Chemical Testing Kit

Stainless Steel Air, Microbubbles, Magnetite & Dirt Separation for the Heating & Ventilation Industry.

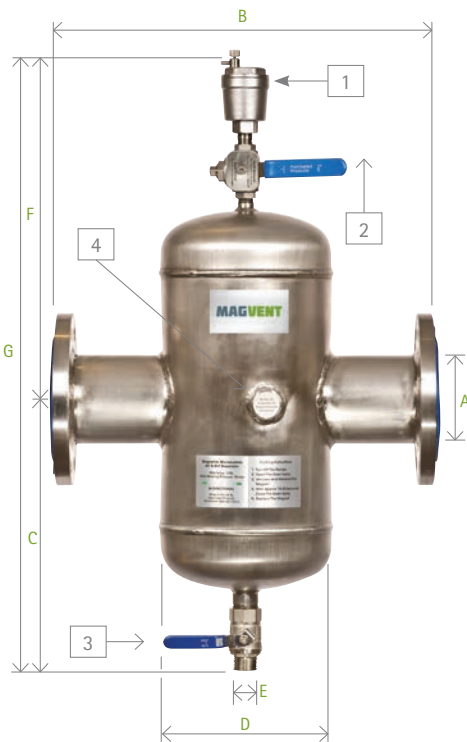
The MagVent range has been developed by Fabricated Products (UK) to remove potentially damaging particles from both hot and chilled water systems. It is comprised of a very fine stainless-steel strainer capable of stopping debris down to 5 micron. Inside the body of our unit is also a high-gauss magnetic rod, these two elements combined together provide a very powerful cleaning device. As the water flows through the unit the magnetite is attracted to the magnetic rod and even the smallest particles down to 5 micron and less are collected. Through simple & cost effective maintenance the magnetic rod is then removed. All magnetite which flows through the unit will be removed 100%.

Features and Benefits

- High-gauss magnetic rod installed to remove all magnetite in the water system
- Reduced commissioning times after initial fill
- An internal stainless steel concentrator to aid removal of air and dirt
- Smooth surfaces with Stainless Steel lead to lower friction
- Stainless will not degrade in service thanks to its excellent resistance to corrosion
- Stainless Steel is extensively more resistant to oxidation by water and biocides than carbon steel, therefore Stainless Steels are not contributing to oxidation sludges



MAGVENT



- 1 High capacity auto air vent
- 2 3-Way Valve / Bleed Valve
- 3 Drain Valve
- 4 Removable high gauss magnetic rod

Model No: MAGCVAD

MagVent Combined Air (de-aerator) & Dirt Separator

Model No.	Dimensions (mm)							
	A	B	C	D	E	F	G	Tested to
MAGCVAD-50	50	430	300	170	25	380	680	21 Bar
MAGCVAD-65	65	430	300	170	25	380	680	21 Bar
MAGCVAD-80	80	490	360	220	25	440	800	21 Bar
MAGCVAD-100	100	490	360	220	25	440	800	21 Bar
MAGCVAD-125	125	630	470	325	25	550	1020	21 Bar
MAGCVAD-150	150	630	470	325	25	550	1020	21 Bar
MAGCVAD-200	200	810	625	410	50	625	1250	21 Bar
MAGCVAD-250	250	880	775	510	50	775	1550	21 Bar
MAGCVAD-300	300	1100	875	610	50	875	1750	21 Bar
MAGCVAD-350	350	1500	950	770	50	950	1900	21 Bar
MAGCVAD-400	400	1500	1125	770	50	1125	2250	21 Bar
MAGCVAD-450	450	1750	1125	920	50	1125	2250	21 Bar
MAGCVAD-500	500	2000	1175	1220	50	1175	2350	21 Bar
MAGCVAD-600	600	2000	1325	1220	50	1325	2650	21 Bar

POD INSULATED READY

MAGVENT



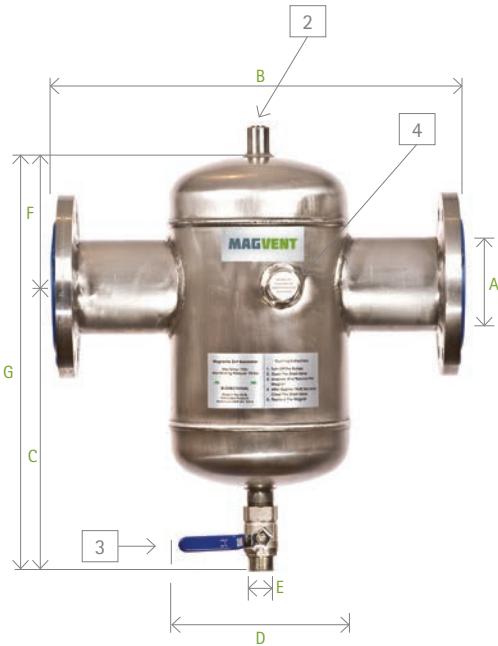
Model No: MAGCVAD-R

MagVent Combined Air (de-aerator) & Dirt Separator - demountable, removable

Dimensions (mm)								
Model No.	A	B	C	D	E	F	G	Tested to
MAGCVAD-R50	50	430	338	170	25	380	718	21 Bar
MAGCVAD-R65	65	430	338	170	25	380	718	21 Bar
MAGCVAD-R80	80	490	408	220	25	440	848	21 Bar
MAGCVAD-R100	100	490	408	220	25	440	848	21 Bar
MAGCVAD-R125	125	630	518	325	25	550	1068	21 Bar
MAGCVAD-R150	150	630	518	325	25	550	1068	21 Bar
MAGCVAD-R200	200	810	695	410	50	625	1320	21 Bar
MAGCVAD-R250	250	880	845	510	50	775	1620	21 Bar
MAGCVAD-R300	300	1100	945	610	50	875	1820	21 Bar
MAGCVAD-R350	350	1500	1020	770	50	950	1970	21 Bar
MAGCVAD-R400	400	1500	1195	770	50	1125	2320	21 Bar
MAGCVAD-R450	450	1750	1195	920	50	1125	2320	21 Bar

Model No: MAGCVD

MagVent Dirt Separator



Dimensions (mm)								
Model No.	A	B	C	D	E	F	G	Tested to
MAGCVD-50	50	430	310	170	25	114	424	21 Bar
MAGCVD-65	65	430	304	170	25	120	424	21 Bar
MAGCVD-80	80	490	379	220	25	141	520	21 Bar
MAGCVD-100	100	490	366	220	25	154	520	21 Bar
MAGCVD-125	125	630	505	325	25	193	698	21 Bar
MAGCVD-150	150	630	491	325	25	207	698	21 Bar
MAGCVD-200	200	810	649	410	50	251	900	21 Bar
MAGCVD-250	250	880	835	510	50	303	1138	21 Bar
MAGCVD-300	300	1100	947	610	50	353	1300	21 Bar
MAGCVD-350	350	1500	1025	770	50	406	1431	21 Bar
MAGCVD-400	400	1500	1262	770	50	432	1694	21 Bar
MAGCVD-450	450	1750	1218	920	50	495	1713	21 Bar

POD INSULATED READY

- 1 High capacity auto air vent
- 2 3-Way Valve / Bleed Valve
- 3 Drain Valve
- 4 Removable high gauss magnetic rod

MAGVENT



- 2 Bleed Valve
- 3 Drain Valve
- 4 Removable high gauss magnetic rod

Model No: MAGCVD-R

MagVent Dirt Separator - demountable, removable

Dimensions (mm)								
Model No.	A	B	C	D	E	F	G	Tested to
MAGCVD-R50	50	430	348	170	25	114	462	21 Bar
MAGCVD-R65	65	430	342	170	25	120	462	21 Bar
MAGCVD-R80	80	490	427	220	25	141	568	21 Bar
MAGCVD-R100	100	490	414	220	25	154	568	21 Bar
MAGCVD-R125	125	630	553	325	25	193	746	21 Bar
MAGCVD-R150	150	630	539	325	25	207	746	21 Bar
MAGCVD-R200	200	810	719	410	50	251	970	21 Bar
MAGCVD-R250	250	880	905	510	50	303	1208	21 Bar
MAGCVD-R300	300	1100	1017	610	50	353	1370	21 Bar
MAGCVD-R350	350	1500	1095	770	50	406	1501	21 Bar
MAGCVD-R400	400	1500	1332	770	50	432	1764	21 Bar
MAGCVD-R450	450	1750	1288	920	50	495	1783	21 Bar

Installation for the MagVent and CleanVent range

Air Separation & Air and Dirt Separation

Both these units must be installed at the hottest part of the system (before the pumps). In a heating system this is the main flow from the boilers.

In a chilled water system the unit must be located in the return close to the chiller.

Dirt Separation only

This unit should be installed in the return pipework before the flow of water enters any plant (boilers, pumps, etc.). There is no head restriction on this unit.

The maximum flow rates through the range of MagVent & CleanVent is 3m/sec. If these values are exceeded the efficiency is reduced.

Commissioning

The CleanVent and MagVent requires no special commissioning. All units are fitted with a 3 way valve under the auto air vent valve, which should be used when initially filling the system. The same valve is used for draining off floating "scum" that prevents the possibility of dirt clogging the air vent. Maintenance will be required to remove trapped dirt and sludge. This can be done by opening the ball valve at the bottom of the unit. The valve may be opened while the system is under pressure. Scalding is a danger at high pressures and temperatures. Ensure that the water is safely piped to drain before opening the valve. The system pressure will flush the dirt out. Leave the valve open until the collected dirt has been flushed out, repeat this operation every few days.

Once the water is clear it may be possible to drain every 6 months or so depending on the size of the system. Most of the dissolved air will be removed in a few days. However this may vary from system to system. In large systems it may take several weeks. Dirt separators can only remove dirt that is circulating.

Flanges

All flanges are drilled to BS 4504 PN16 as standard. Plain ends and other flange ratings are available on request.

The CleanVent unit is maintenance free.

Drain Valve

All models are supplied with a ball valve for draining the collected dirt and sludge.

Stainless Steel Air, Microbubbles & Dirt Separation for the Heating & Ventilation Industry.

The CleanVent range has been developed by Fabricated Products (UK) to remove potentially damaging particles from both hot and chilled water systems. It is comprised of a very fine stainless-steel strainer capable of stopping debris down to 5 micron.

Features and Benefits

- Reduced commissioning times after initial fill
- Can be flushed while fully operational (no need to shut down)
- An internal stainless steel concentrator to aid removal of air and dirt
- Smooth surfaces with Stainless Steel lead to lower friction
- Stainless will not degrade in service thanks to its excellent resistance to corrosion
- Stainless Steel is extensively more resistant to oxidation by water and biocides than carbon steel, therefore Stainless Steels are not contributing to oxidation sludges
- Our stainless steel separators are up to 40% lighter reducing the need for extra supports around the products in the plant room

CLEANVENT



Model No: **CVAD**

Combined unit Air (de-aerator) & Dirt Separator

Model No.	Dimensions (mm)							Tested to
	A	B	C	D	E	F	G	
CVAD-50	50	430	300	170	25	380	680	21 Bar
CVAD-65	65	430	300	170	25	380	680	21 Bar
CVAD-80	80	490	360	220	25	440	800	21 Bar
CVAD-100	100	490	360	220	25	440	800	21 Bar
CVAD-125	125	630	470	325	25	550	1020	21 Bar
CVAD-150	150	630	470	325	25	550	1020	21 Bar
CVAD-200	200	810	625	410	50	625	1250	21 Bar
CVAD-250	250	880	775	510	50	775	1550	21 Bar
CVAD-300	300	1100	875	610	50	875	1750	21 Bar
CVAD-350	350	1500	950	770	50	950	1900	21 Bar
CVAD-400	400	1500	1125	770	50	1125	2250	21 Bar
CVAD-450	450	1750	1125	920	50	1125	2250	21 Bar
CVAD-500	500	2000	1175	1220	50	1175	2350	21 Bar
CVAD-600	600	2000	1325	1220	50	1325	2650	21 Bar

POD INSULATED READY

- 1 High capacity auto air vent
- 2 3-Way Valve / Bleed Valve
- 3 Drain Valve

Model No: CVAD-R

Removable (demountable) unit Air & Dirt Separator



Model No.	Dimensions (mm)							Tested to
	A	B	C	D	E	F	G	
CVAD-R50	50	430	338	170	25	380	718	21 Bar
CVAD-R65	65	430	338	170	25	380	718	21 Bar
CVAD-R80	80	490	408	220	25	440	848	21 Bar
CVAD-R100	100	490	408	220	25	440	848	21 Bar
CVAD-R125	125	630	518	325	25	550	1068	21 Bar
CVAD-R150	150	630	518	325	25	550	1068	21 Bar
CVAD-R200	200	810	695	410	50	625	1320	21 Bar
CVAD-R250	250	880	845	510	50	775	1620	21 Bar
CVAD-R300	300	1100	945	610	50	875	1820	21 Bar
CVAD-R350	350	1500	1020	770	50	950	1970	21 Bar
CVAD-R400	400	1500	1195	770	50	1125	2320	21 Bar
CVAD-R450	450	1750	1195	920	50	1125	2320	21 Bar

Model No: CVA

Air Separator (de-aerator)



Model No.	Dimensions (mm)						Tested to
	A	B	C	D	F	G	
CVA-50	50	430	114	170	390	504	21 Bar
CVA-65	65	430	120	170	384	504	21 Bar
CVA-80	80	490	141	220	459	600	21 Bar
CVA-100	100	490	154	220	446	600	21 Bar
CVA-125	125	630	193	325	585	778	21 Bar
CVA-150	150	630	207	325	571	778	21 Bar
CVA-200	200	810	251	410	649	900	21 Bar
CVA-250	250	880	303	510	835	1138	21 Bar
CVA-300	300	1100	353	610	947	1300	21 Bar
CVA-350	350	1500	406	770	1025	1431	21 Bar
CVA-400	400	1500	432	770	1262	1694	21 Bar
CVA-450	450	1750	495	920	1218	1713	21 Bar
CVA-500	500	2000	595	1220	1230	1825	21 Bar

POD INSULATED READY

- 1 High capacity auto air vent
- 2 Fast bleed Valve
- 3 Drain Valve

CLEANVENT

Model No: CVD Dirt Separator



Dimensions (mm)								
Model No.	A	B	C	D	E	F	G	Tested to
CVD-50	50	430	310	170	25	114	424	21 Bar
CVD-65	65	430	304	170	25	120	424	21 Bar
CVD-80	80	490	379	220	25	141	520	21 Bar
CVD-100	100	490	366	220	25	154	520	21 Bar
CVD-125	125	630	505	325	25	193	698	21 Bar
CVD-150	150	630	491	325	25	207	698	21 Bar
CVD-200	200	810	649	410	50	251	900	21 Bar
CVD-250	250	880	835	510	50	303	1138	21 Bar
CVD-300	300	1100	947	610	50	353	1300	21 Bar
CVD-350	350	1500	1025	770	50	406	1431	21 Bar
CVD-400	400	1500	1262	770	50	432	1694	21 Bar
CVD-450	450	1750	1218	920	50	495	1713	21 Bar
CVD-500	500	2000	1230	920	50	595	1825	21 Bar
CVD-600	600	2000	1429	1220	50	621	2050	21 Bar

POD INSULATED READY

Model No: CVD-R Dirt Separator - demountable, removable



Dimensions (mm)								
Model No.	A	B	C	D	E	F	G	Tested to
CVD-R50	50	430	348	170	25	114	462	21 Bar
CVD-R65	65	430	342	170	25	120	462	21 Bar
CVD-R80	80	490	427	220	25	141	568	21 Bar
CVD-R100	100	490	414	220	25	154	568	21 Bar
CVD-R125	125	630	553	325	25	193	746	21 Bar
CVD-R150	150	630	539	325	25	207	746	21 Bar
CVD-R200	200	810	719	410	50	251	970	21 Bar
CVD-R250	250	880	905	510	50	303	1208	21 Bar
CVD-R300	300	1100	1017	610	50	353	1370	21 Bar
CVD-R350	350	1500	1095	770	50	406	1501	21 Bar
CVD-R400	400	1500	1332	770	50	432	1764	21 Bar
CVD-R450	450	1750	1288	920	50	495	1783	21 Bar

- 3 Drain Valve
- 4 Bleed Valve

The Coalescence of Microbubbles In Heating & Chilled Water Systems

In June 2013 we launched our new improved magnetic air & dirt separator, the MagVent.

The new design of the separator means you can remove and replace the magnet in less than 15 seconds. No lengthy shut down or drain down is necessary.

By opening the drain valve at the bottom of the separator the dirt and magnetite is simply flushed away under the system water pressure.



To coalesce:

1. To grow together; fuse.
2. To come together so as to form one whole; unite:

Fabricated Products Separators remove dirt, air & microbubbles in heating systems up to 60 metres head of water above the unit.

The explanation for this is straightforward; our exceptional filter allows no direct passage of water straight through the unit. Due to the multitude of fine wires, it is impossible for the flow water to pass directly through. Therefore, all microbubbles eventually come into contact with the filter and the coalescence process takes place.

In the event of increasing head of water the microbubbles do decrease in size. However just because the microbubbles are getting smaller this does not mean

they cannot be removed, the bubbles will collide to make one larger bubble and then rise to be vented.

Above 60 metres the efficiency of the unit is reduced.

The principle above is the same for chilled water systems except 40 metre head of water applies.

Our Separators have been tested & they can remove microbubbles down to 20 microns (0.02mm) in size at six bar with a water temperature of 10 degrees centigrade.

Fabricated Products has adopted and is registered and audited under the ISO 9001 Quality Assurance International Standard.

MagVent the next generation of Separators.

Crystal Clear, Clean and Efficient reasons to install Stainless Steel Air Dirt Separators & Chemical Dosing Pots. Your existing and future projects are the next good reason to use them.

100% British manufactured & designed

Product Benefits

Stainless Steel: Safe, Clean, Efficient and Hygienic

Reduced Lifecycle Costs

- MagVent & CleanVent have a longer life and a resistance to corrosion offering limited degradation in service, there is therefore reduced downtime and little costs required for inspection, maintenance and repair
- There is no requirement for any extra coatings on the product
- MagVent & CleanVent are highly resistant to micro bacteria attacks, they have little likelihood of any deposits adhering to the surface ensuring low cleaning costs
- Their exceptional strength, toughness and impact strength mean they are resistant to stress corrosion, cracking, fatigue and erosion

Reduced Energy Costs

- The smooth surface of the new stainless products give reduced friction and require less energy to pump the water around the system, reducing utility bills
- The thermal properties of the stainless products are far superior allowing them to retain more heat, reducing the need to constantly heat the system.
- As the surface of the product is smooth and clean, this keeps an increased and more efficient flow of water

Lighter Weight

- There is approx 40% reduction in the product weight, giving improved handling, easier installation and reduced health and safety issues
- Lighter components can be used which therefore need less structural work

Environmentally Friendly and 100% Recyclable

- The Stainless products have hygienic properties which reduce micro bacteria and also have very low bacteria colonisation, ensuring an easy cleaning and environmentally friendly product
- The durability and abrasion resistance mean that the products are effective for long term use and do not cause environmental pollution
- Due to the high value of the stainless materials, the product can be recycled and some of the initial cost can be recovered on recycling

Clear Advantage of Stainless over Carbon Steel

- Extensively more resistant to oxidation by water and biocides, therefore NO contribution to sludge and aeration
- Increased oxygen through aeration causes carbon steel to corrode, however stainless steel will NOT corrode
- Smooth stainless surfaces offer low adhesion of deposits and therefore sludge and magnetite is easily washed and removed 100%
- Stainless is inert in water offering better quality water resulting in minimal bacterial slime, low energy consumption and low cleaning costs

British Design & Manufacture

- Fabricated Products are the first and only company in the UK to design and manufacture these superior products
- Fabricated Products specialise in their manufacture, use and maintenance
- They are manufactured in the heart of the UK with over 100 years heritage working with stainless steel

Low Velocity / Loss Headers with Magnetic options

Stainless Steel Air and Dirt Separation offers ultimate stability

Hydronic Balancing is the process of optimising the distribution of water in a building's heating or cooling system, it provides the intended indoor climate at optimum energy efficiency and minimal operating cost.

Now available in both models

MAGVENT
CLEANVENT

British Made
& Manufactured



Safety

A well balanced hydraulic water system is highly important for HVAC and process systems with separated circuits or several groups and pumps. The successful removal of air and dirt also contributes towards the achievement of optimum system performance. Hydraulic balancing and air and dirt separation are combined in the Hydronic Header.

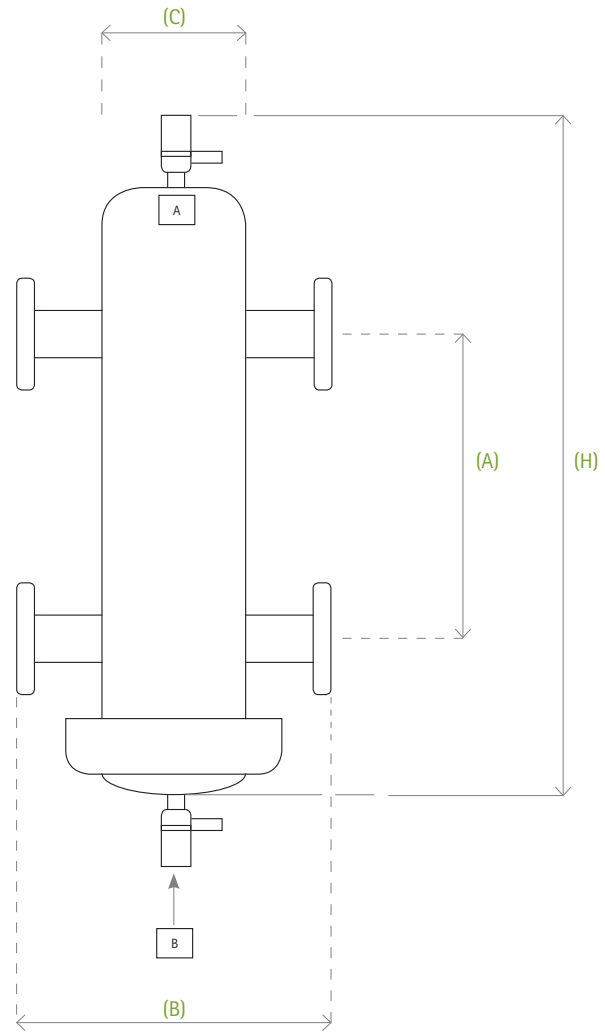
Magnetic Low Velocity/Loss Headers are an extended development from Magnetic Microbubble Air & Dirt Separators. The use of LV/LH's has developed as the norm to be specified in particular with condensing boilers and boilers of low water content where Magnetite and sludge particles can easily damage the system.

Some Hydronic Headers end up being manufactured on site. Whilst this doesn't make them totally ineffective, it means that they will not have the vital factory produced internal membranes which allow microbubbles to rise to the top and magnetite and dirt to fall to the bottom.

Features and Benefits

- All Stainless Steel construction
- The Hydronic Header can be used for both new build projects and for renovating heating, cooling and process systems
- Trapped dirt can be discharged while the system is in operation
- The Hydronic Header is suitable for water and water/glycol mixtures (max. 50%)
- The standard Hydronic Header is suitable for a temperature range of 0 to 110°C and for an operating pressure of 0 to 10 bar. The flange connection is PN 16
- Other sizes, materials, pressures and temperatures are available on request
- Custom-made solutions and OEM applications
- Fabricated Products offers not only standard products. If required, we work with customers to produce custom-made solutions. These are based on users' specific requirements. If considered necessary, these can also be supplied as OEM products.

All Magnetite
which flows
through the unit
will be removed
100%



- A** The automatic air eliminator at the top plus a quick bleed valve
- B** The 1" BSP drain valve at the base for periodic flushing of sludge

Stainless Steel Hydronic Air & Dirt Separation in ultimate stability

	Dimensions (mm)								
	HY50	HY65	HY80	HY100	HY125	HY150	HY200	HY250	SSHY300
Connection PN16 -DN	50	65	80	100	125	150	200	250	300
(H)	830	910	1010	1300	1550	1800	2330	2900	3400
(B)	430	430	490	490	630	630	810	880	1100
(A)	250	310	370	470	570	680	880	1110	1300
(C)	150	150	200	200	300	300	400	500	600
Primary Flow 1.5m/s	3.5	5.5	7.5	13	20	30	50	80	113

Buffer Vessel Construction – Horizontal & Vertical

Buffer vessels are available for use in chilled water and thermal storage applications.

Installation

Unless specifically ordered for outside, positioning of the vessel must be indoors. The base must be level and adequate to support the unit. Vessels ordered specifically with inspection covers, please ensure enough room exists to gain access to the opening.

Pipe work connected to the vessel must be supported to prevent unnecessary strain on the buffer vessels connections.

Isolation valves are to be installed to enable servicing and maintenance.

Ensure adequate venting for air removal during filling and venting.

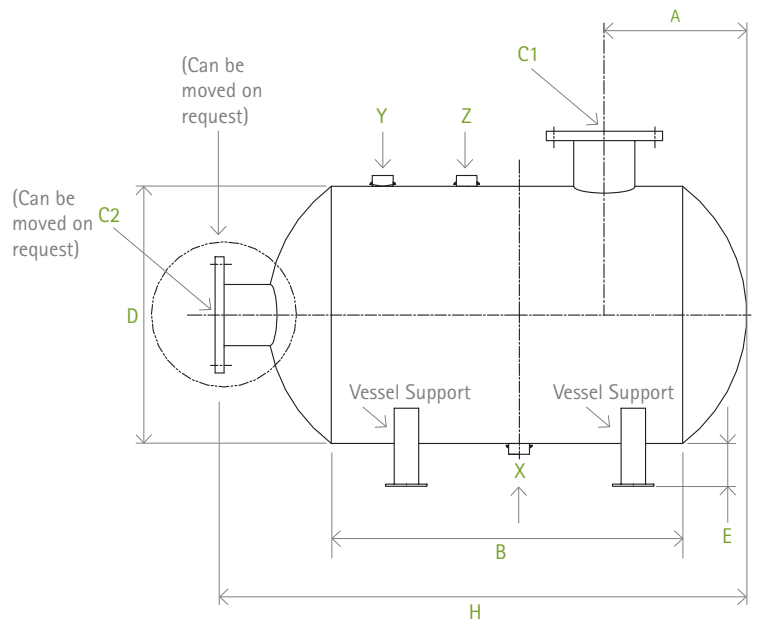
Commissioning & Operation

Do not operate the buffer vessel at pressures or temperatures in excess of those specified. Do not subject the vessel to any vacuums.

If the vessel is open vented and shares a common vent with other vessels install a 3-way valve.

Upon initial system fill open all isolation valves connected to the vessel. Check all flanges and screwed joints for tightness.

All liquid is to be drained from the vessel when the unit is out of operation (long periods) to prevent freezing or corrosion.



Horizontal Buffer Vessel

Model No.	Dimensions (mm)								
	Size (ltrs)	Body Length		Flanged Connections		Vessel Ø	Leg Height	Total Length	BSP
		A	B	Side	Top				
			C1	C2			H	X,Y,Z	
BV200-H	200	335	800	50	50	508	150	1165	25
BV350-H	350	335	1500	80	80	508	150	1865	25
BV500-H	500	390	850	80	80	762	150	1330	25
BV850-H	850	390	1600	100	100	762	150	2130	25
BV1000-H	1000	390	1900	100	100	762	150	2430	25
BV1250-H	1250	420	1600	100	100	914	150	2195	25
BV1500-H	1500	420	2000	150	150	914	150	2645	25
BV2000-H	2000	485	1400	150	150	1220	150	2180	25
BV2500-H	2500	485	1800	150	150	1220	150	2570	25
BV3000-H	3000	485	2300	200	200	1220	150	3130	25
BV3500-H	3500	485	2700	200	200	1220	150	2530	25



Vertical Buffer Vessel

Buffer vessels can be manufactured in carbon steel or stainless steel and are manufactured to the pressure directive PD5500; 2009.

The drawing and chart are for guidance only, buffer vessels can be manufactured to any size from 10 litre to 100,000 litre, connections can be situated anywhere you require, diameter and height can be altered to suit your particular requirements.

Insulation Specifications

Reliable condensation control with closed-cell nitrile Rubber insulation

Material type CLASS 1

Mean density 50-55kg/m³

Temperature range -40 to 105

Thermal conductivity At 40 mean temperature = 0.039 W m/k

Fire Classification ASTM E84

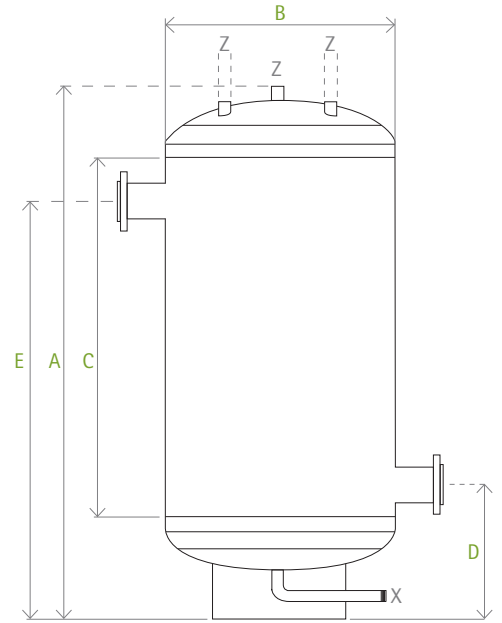
Meets requirements of classification BS 476 Part6/7 & P: not easily ignitable

0°C – 0.034 W/mK,

0°C – 0.034 W/mK,

40°C – 0.039 W/mK : DIN 52613

The insulation is applied in 50mm thick sections



Vertical Buffer Vessel

Dimensions (mm)									
	Size (ltrs)	Vessel Height	Vessel OD	Body Length	Floor to flange centre	Floor to flange centre	Drain	BSP Sockets	Dry Weight
Model No.	A	B	C	D	E	X	Z	kilos	
BV100	100	1000	406	579	396	755	25	25	60
BV200	200	1230	508	774	416	970	25	25	93
BV500	500	1400	762	809	481	1070	25	25	146
BV750	750	1960	762	1369	481	1630	25	25	209
BV1000	1000	1840	912	1178	516	1474	25	25	206
BV1250	1250	2230	912	1568	516	1864	25	25	258
BV1500	1500	1600	1210	780	590	1150	25	25	283
BV2000	2000	2100	1210	1220	590	1590	25	25	365
BV2500	2500	2540	1210	1730	590	2100	25	25	438
BV3000	3000	2080	1512	1166	662	1608	50	25	563
BV3500	3500	2360	1512	1446	662	1888	50	25	626
BV4000	4000	2650	1512	1736	662	2178	50	25	690
BV4500	4500	2180	1812	1142	714	1636	50	25	732
BV5000	5000	2380	1812	1342	714	1836	50	25	785
BV6000	6000	2350	2012	1273	730	1783	50	25	1037
BV8000	8000	2990	2012	1913	730	2423	50	25	1079
BV10000	10000	3640	2012	2563	730	3073	50	25	1269
BV15000	15000	3570	2512	2090	950	2820	50	25	1628
BV20000	20000	4600	2512	3120	950	3850	50	25	2009

Fabricated Products offer a complete range of expansion vessels to meet the requirements of most heating or cooling systems.



Heating Expansion Vessels

Technical Specification 8 – 140 litres

Max. working pressure:	8 to 35 litres / 3 bar 50 to 140 litres / 6 bar
Test Pressure:	1.5 x max working pressure
Max. flow operating temp:	120°C
Max. vessel operating temp:	70°C
Factory air pre-charge:	1.5 bar – nitrogen

Materials

Component	Material
Shell	Carbon Steel
Connections	Carbon Steel
Diaphragm	Synthetic rubber compound
Coating	Powder epoxy

Technical Specification 200 – 800 litres

Max. working pressure:	6 bar
Max. operating temp:	120°C
Max. vessel operating temp:	70°C
Factory air pre-charge:	1.5 bar – nitrogen

Potable Water Expansion Vessels – Vertical Range

Technical Specification

Max. working pressure:	10 bar
Max. operating temperature:	70°C
Factory air pre- charge:	4.0 bar – nitrogen
Replaceable bladder – sizes:	50 litres and larger except 140 litres size
System water connection thread: 140 litre size:	BE EN ISO 228 – male parallel BE EN 10226 – male taper

Materials

Component	Material
Shell	Carbon Steel
Connections	Carbon Steel
Bladder	Synthetic rubber compound
Coating	Powder epoxy



Water Sample Coolers

If there is a requirement to sample hot or boiling waters, the installation of sample coolers is essential.

Safety

To ensure compliance with health and safety regulations. **The health and safety act 1974** requires employers to provide a safe method of sampling water in boiler plants.

Accuracy

A significant portion of any heated water sample will be lost into the atmosphere as steam flashes off, which means that the resultant sample will not be representative.

Convenience

Opening of drain plugs or loosening of pipe can be extremely difficult regardless of the safety hazard.

Application

Sample coolers should be installed whenever it is necessary to obtain a sample of water from a system where the operating temperature exceeds 60°C i.e. steam boilers, steam and condensate mains, closed heating circuits and water systems.

Specifications

All Stainless steel

Welded to BS en 287

Fixed coil

10mm Stainless coil type 304 1.00mm wall thickness, annealed condition.

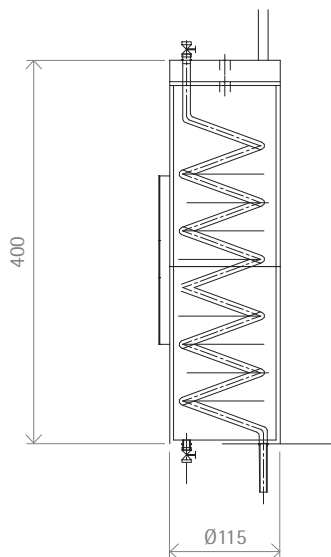
Suitable for pressures up to and including 139 bar @ 336°C

Max. Working pressure for the shell 14 bar

Coolant inlet and outlet 1/2" b.s.p.

Sample flow controlled by a 3/8" (10mm) valve. Cooling water by a 1/2" valve

(No valves are supplied with the sample coolers)



Fixed Water Sample Cooler



British Standards Publication.

BS 8552:2012 Sampling and monitoring of water from building services closed systems code of practice.

Addresses the particular issues of sampling water from closed-circuit heating and cooling systems in buildings and related infrastructure.

The purpose of sampling a closed-circuit water system is to provide information about the current condition of that system and/or the water within it.

That might include, but is not limited to-

- water treatment status,
- water quality,
- bacteriological contamination
- corrosion activity

Confidence in the results obtained, which are crucially dependent on consistent sampling and analysis protocols, is extremely important to industry.

BS Standards Publication BS 8552; 2012 The Building Services Closed systems code of practise

States sampling of the water system is required "Periodically through the life of the system. At least every three months"

B.S.P. Screwed Dirt Separators

Dirt-Code MAG-SCVD, CVD-V, MAG-CVD-VCOMP

Function

In heating and air conditioning systems, the circulation of water containing impurities may result in rapid wear and damage of components such as pumps and control valves. It also causes blockages in heat exchangers, heating elements and pipes, resulting in a lower thermal efficiency of the system.

The dirt separator separates off these impurities, which are mainly made up of sand and rust particles. These are collected in a large collection chamber that requires low frequency cleaning procedures, from which they can be removed even while the system is in operation.

This device is capable of efficiently removing even the smallest particles, with extremely limited head loss.

The threaded connection product is available in versions for installation on horizontal or vertical pipes.

Dirt Separators

Product Range

CVD-V

Vertical dirt separator BSP and compression connections available

Compression = 22mm & 28mm

BSP Female = 3/4" 1"



CVD-V

SCVD-BSP

Dirt Separator range for horizontal pipes, also available in MagVent connections sizes available

BSP Female 3/4" to 2"

Compression = 22mm & 28mm



SCVD-BSP

MAGVENT CLEANVENT

Performance

Medium: water, non-hazardous glycol solutions excluded from the guidelines of directive 67/548/EC

Max. percentage of glycol: 50%

Max. working pressure: 10 bar

Working temperature range: 0-110°C

Materials

Body: brass EN 1982 CB753S

Dirt collection chamber: brass EN 12165 CW617N

Top plug: brass EN 12164 CW617N

Internal element: PA66G30

Hydraulic seals: EPDM

Drain cock: brass EN 12165

CW617NEPDM

Connections

Main: 3/4", 1", 1 1/4", 1/2", 2"

Ø22mm and Ø28mm with

compression ends for copper pipe

Top: 1/2" F (with plug)

Drain: Hose Connection

B.S.P. Screwed Air Separators

Air Separators

Function

De-aerators are used to continuously remove the air contained in the hydraulic circuits of heating and cooling systems. The air discharge capacity of these devices is very high. They are capable of automatically removing all the air present in the system down to micro-bubble level, with very low head losses.

The circulation of fully deaerated water enables the equipment to operate under optimum conditions, free from any noise, corrosion, localised overheating or mechanical damage.

The threaded connection product is available in versions for installation to horizontal pipes.

Product Range

SCVA - CleanVent de-aerator for horizontal pipes with drain
Sizes 3/4" - 2"

Installation

CleanVent Air Separator units may be used in both heating and cooling systems, to ensure the progressive removal of air which is continuously formed. The units should preferably be installed after the boiler and on the pump suction side, as these are the points where the formation of micro-bubbles is greatest. Deaerators must be installed in a vertical position and preferably upstream of the pump where, due to the high speed of the medium and the ensuing drop in pressure, air micro-bubbles develop more easily.

The flow direction of the medium is not important.

The amount of air which can remain dissolved in a water solution is a function of pressure and temperature. This relationship is governed by Henry's Law, the physical phenomenon of the air content release of the fluid to be quantified. As an example, at a constant absolute pressure of 2 bar, if the water is heated from 20°C to 80°C, the amount of air released by the solution is equal to 18 per m3 of water. According to this law it can be seen that

the amount of air released increases with temperature rise and pressure reduction. The air comes in the form of micro-bubbles of diameters in the order of tenths of a millimetre.

In heating and cooling systems there are specific points where this process of formation of micro-bubbles takes place continuously in the boiler and in any device which operates under conditions of cavitation.

SCVA



Materials

- Body: brass EN 12165 CW617N
- Internal element: PA66G30; stainless steel (compact version)
- Float: PP
- Float guide: brass EN 12164 CW614N
- Stem: brass EN 12164 CW614N
- Float lever: stainless steel
- Spring: stainless steel
- Hydraulic seals: EPDM

Performance

- Medium: water, non-hazardous glycol solutions excluded from the guidelines of directive 67/548/EC
- Max. percentage of glycol: 50%
- Max. working pressure: 10 bar
- Max. discharge pressure: 10 bar
- Working temperature range: 0-110°C

Connections

Main: 3/4", 1", 1 1/4", 1 1/2", 2"

Rubber Pump Flexes

All rubber bellows are suitable for L.T.H.W. and chilled water systems.

UNI Type EPDM rubber bellows 'Union'

Rating

16.0 Bar.g
Temp. -Minus 10/90°

Construction

EPDM double sphere with textile cord & steel wire reinforcement.

Connections

Galvanised carbon steel female union.
Burst Pressure
48 bar



Dimensions (mm)			
Model No.	Nom Size	Length	Unit WT
UNI.15.BSP	DN15 - 1/2"	200mm	2.0 Kgs
UNI.20.BSP	DN20 - 3/4"	200mm	2.2 Kgs
UNI.25.BSP	DN25 - 1"	200mm	3.3 Kgs
UNI.32.BSP	DN32 - 1 1/4"	200mm	3.7 Kgs
UNI.40.BSP	DN40 - 1 1/2"	200mm	4.4 Kgs
UNI.50.BSP	DN50 - 2"	200mm	5.4 Kgs
UNI.65.BSP	DN65 - 2 1/2"	240mm	6.7 Kgs
UNI.80.BSP	DN80 - 3"	240mm	8.8 Kgs

UT Type 'Untied'

Rating

16.0 Bar.g
Temp. -Minus 10/90°C

Construction

EPDM single sphere with 4-textile cord layers reinforcement. A single sphere membrane reinforced EPDM rubber with wire-reinforced collars.

Connections

Carbon steel swivel flanges drilled to BS4504 PN16 Zinc Plated finished.
Burst Pressure
48 bar



Dimensions (mm)			
Model No.	Nom Size	Length	Unit WT
UT.32.16	DN32 - 1 1/4"	130mm	2.6 Kgs
UT.40.16	DN40 - 1 1/2"	130mm	3.4 Kgs
UT.50.16	DN50 - 2"	130mm	4.7 Kgs
UT.65.16	DN65 - 2 1/2"	130mm	5.6 Kgs
UT.80.16	DN80 - 3"	130mm	7.4 Kgs
UT.100.16	DN100 - 4"	130mm	7.9 Kgs
UT.125.16	DN125 - 5"	130mm	10.3 Kgs
UT.150.16	DN150 - 6"	130mm	12.8 Kgs
UT200.16	DN200 - 8"	130mm	18.4kgs

All Rubber Pump Flexes and Bellows are to be installed strictly in accordance with our installation instructions, which are available on request and at www.fabricatedproducts.co.uk

T-Type 'Tied'

Rating

16.0 Bar.g
Temp. -Minus 10/90°C

Construction

EPDM single sphere, with 4-textile cord layers reinforcement. A single sphere membrane reinforced EPDM rubber with wire-reinforced collars.

Connections

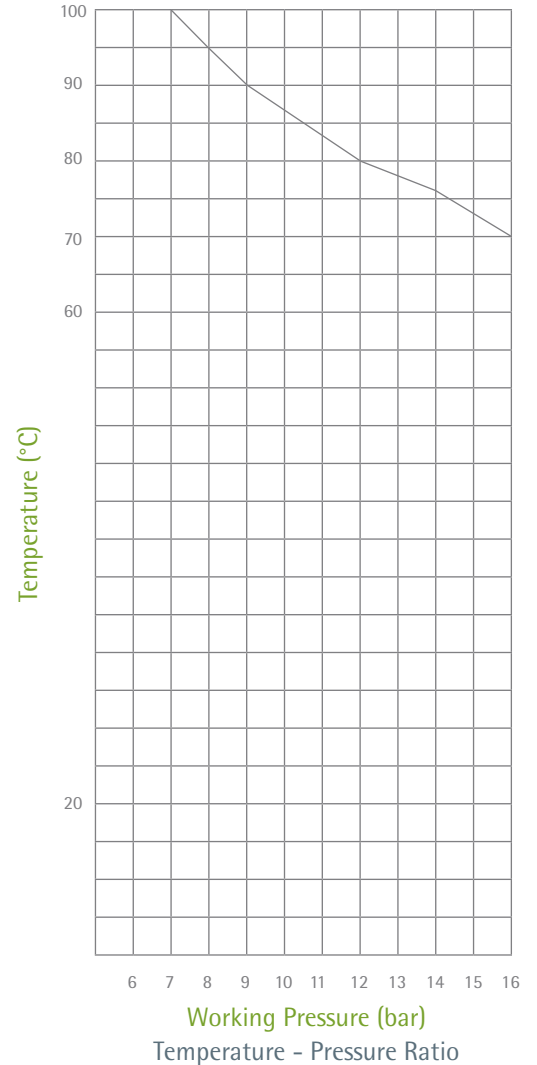
Carbon steel tied flanges drilled to BS4504 PN16 Zinc Plated finished.

Accessories

Tie-rod restraints with rubber
'Top-Hat' noise isolation washers / adjustment nuts.
Burst Pressure
48 bar



Dimensions (mm)			
Model No.	Nom Size	Length	Unit WT
T.32.16	DN32 - 1 1/4"	130mm	4.0 Kgs
T.40.16	DN40 - 1 1/2"	130mm	5.2 Kgs
T.50.16	DN50 - 2"	130mm	7.2 Kgs
T.65.16	DN65 - 2 1/2"	130mm	8.1 Kgs
T.80.16	DN80 - 3"	130mm	9.4 Kgs
T.100.16	DN100 - 4"	130mm	11.1 Kgs
T.125.16	DN125 - 5"	130mm	13.6 Kgs
T.150.16	DN150 - 6"	130mm	16.5 Kgs
T.200.16	DN200 - 8"	130mm	22.5 Kgs



All Tied and Untied rubber bellows are rated at the following pressure temp.

16 Bar @ 70°C

12 Bar @ 80°C

9 Bar @ 90°C

Pressure & Temperature Gauges

HVAC Bi / Metal Dial Thermometers

- Vertical Immersion & centre back type
- Immersion length 50mm or 100mm
- Bezel chrome plated
- Case material mild steel
- 100mm diameter
- Internal material brass and bronze
- Socket & tube material Brass
- Connection 1/2" Temperature gauge
- Glass Window
- Temperature range 0 to 120 degrees Centigrade (Heating)
- -30 to 50 degrees Centigrade (Chilled water)
- Dual Scale reading Accurate + / -1%

HVAC Pressure Gauges

- Quality Bourdon Movement
- Pressure gauges range 0 to 4, 7 & 10 bar
- BS EN837-1
- Black Steel Case
- Bezel chrome plated
- Direct mounting
- 100mm diameter
- Glass window
- 3/8 bsp Bottom connection
- Standard Brass Internals
- Dual Scale reading Accurate + / -1%



Brass gauge cock with polypropylene handle. 3/8" bsp female connections
 Max working pressure 10 bar



Ring Pattern Syphon 3/8" bsp polished brass & mild steel
 Max working pressure 10 bar



"U" Pattern Syphon 3/8" bsp polished brass & mild steel
 Max working pressure 10 bar



Model No.	Description	Temp Range C & F	Stem Length	Mounting/Material
PG04	3/8" Press. Gauge 0 to 4 bar	-	-	Bottom
PG07	3/8" Press. Gauge 0 to 7 bar	-	-	Bottom
PG10	3/8" Press. Gauge 0 to 10 bar	-	-	Bottom
TG120CB50	1/2" Press. Temp Gauge	0 to 120 degrees	50mm	Centre back connection
TG120CB100	1/2" Press. Temp Gauge	0 to 120 degrees	100mm	Centre back connection
TG120B50	1/2" Press. Temp Gauge	0 to 120 degrees	50mm	Bottom connection
TG120B100	1/2" Press. Temp Gauge	0 to 120 degrees	100mm	Bottom connection
TG3050CB50	1/2" Press. Temp Gauge	-30 to 50 degrees	50mm	Centre back connection
TG3050CB100	1/2" Press. Temp Gauge	-30 to 50 degrees	100mm	Centre back connection
TG3050B50	1/2" Press. Temp Gauge	-30 to 50 degrees	50mm	Bottom connection
TG3050B100	1/2" Press. Temp Gauge	-30 to 50 degrees	100mm	Bottom connection
SYRINGGMS	3/8" Ring Pattern Syphon	-	-	Mild Steel
SYPRINGBRASS	3/8" Ring Pattern Syphon	-	-	Brass
SYPUBRASS	3/8" "U" Pattern Syphon	-	-	Brass
SYPUMS	3/8" "U" Pattern Syphon	-	-	Mild Steel
BGCOCKFF	3/8" Brass gauge cock	-	-	Brass with Polypropylene hand/bsp/F/F connections

MicroVent

MICROVENT

To remove trapped air you should fit a MicroVent at the highest points of the heating or chilled water systems.

Air collects at the highest point within a system. However, a system will often have several high points. Trapped air can obstruct the flow of water at these points or even stop it altogether. If air is not removed, it can lead to commissioning problems, frequent manual venting also deteriorating pump

performance and boiler efficiency. Eventually, this will cause damage to expensive system components and lead to system and process malfunctions or even total failure.

MicroVent automatic air vents are designed to remove free air and trapped air bubbles quickly and effectively. If a system has to be drained, the MicroVent ensures fast and reliable venting.

The Solution

The MicroVent is the reliable and worry-free solution ideal for:

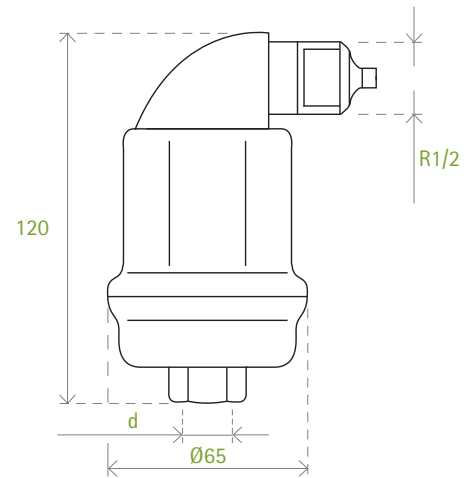
- Filling and venting systems
- Making and keeping the high points in pipe systems air-free
- Preventing air pockets from forming

The Benefits

The combination of the characteristics listed below ensures that the automatic MicroVent will not leak during its very long life:

- The exceptional valve construction means that the valve closes completely
- The unique valve seat has a very long life expectancy
- The robust floats are made of solid plastic so cannot rupture
- The significant gap between the valve and the water (at least 40mm) prevents valve contamination which is one of the main causes of leaks
- The 1/2" connection prevents the pipette effect
- At the base of the MicroVent there is a wire mesh to stop debris from entering the unit

Stainless Steel Automatic Air Vent that removes trapped air from heating or chilled water systems.



Design

Max. Pressure
10 bar-g

Max. Temperature
110°C

Design Standards
Factory Standards

Net Weight
Factory Standards

Material

Body
Stainless Steel Air

Vent
Stainless Steel

Seal
EPDM

Float
PE

Test

Leakage Test
Yes

Appearance Test
Yes

Factory Air Test
Yes

Factory Water Test
Yes

Factory Test Certificate
Yes

Size

d
1/2" BSP



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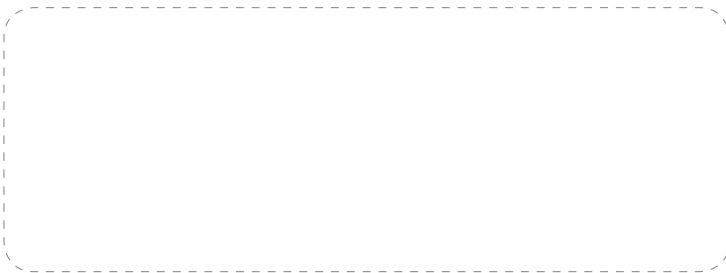
Global Service

Our services are utilised by many companies within the Water Treatment, Heating & Ventilation Industry throughout the UK, Europe, Scandinavia, the Middle East, Asia and as far as Australia.

Our products are installed worldwide in many commercial and industrial applications such as hospitals, schools, universities, M.O.D bases, petro chemical plants, leisure centres, office blocks etc.

Other aspects of our business include product design and testing, including quality control to British Standards where applicable.

Your local distributor:



PASS

EASYTREAT

MAGVENT

CLEANVENT

**CHEMICAL
DOSING POT**



Certificate Number 9663
ISO 9001

Our new stainless steel air & dirt separators have been tested by BSRIA for flow resistance, air, microbubble and dirt removal capabilities. BSRIA report 56273/1

