CLEANVENT

Combined Air （Deaerator） & Dirt Separator.

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

Dimensions （mm）								
Model No.	A	B	C	D	E	F	G	Tested to
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	555	410	50	640	1195	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

Deaeration

The word Deaeration describes the removal of dissolved gases from liquids such as air from water. When water is heated or the pressure reduced gas microbubbles are released into the system. Microbubbles can be the cause of major problems such as pump failure, corrosion and energy loss.

The Solution

As an aid to system cleaning 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 Concentrator capable of stopping debris down to 5 micron. Through simple & cost effective maintenance the dirt can be flushed away to removing all the damaging particles in the system.

Features and Benefits

- It is comprised of a very fine stainless-steel Concentrator capable of stopping debris down to 5 micron.
- Greatly reduced commissioning times after initial fill.
- Longer system life (through air and dirt elimination)
- Low-pressure drop
- Bi-directional flow
- Maximum Temperature - 110 °c. (Higher temperature units available on request)
- Max working pressure - 10 bar (Higher MWP available on request)
- Tested to 21 bar
- All stainless steel construction.
- Air collects in the air chamber before being automatically vented
- Floating dirt can be removed by opening the valve situated under the air vent.
- The same valve is used for releasing air when filling the system
- Large collector ensures that flushing is only required now and then
- 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, sludge's etc;
- Thermal properties of stainless steel. They are far superior to iron or carbon steel.
- Maximum flow rate up to 3m/sec

Stainless Steel: Safe, Clean, Efficient and Hygienic

- Stainless is highly resistant against micro bacteria attacks plus lower bacteria colonization
- Hygienic and cleanable material (Smooth surface internally & externally). Due to their very high passive film (protecting the surface)
- Lower adhesion of deposits (dirt and sludge) with the smooth internals of Stainless Steels. Sludge & magnetite is washed/ removed from the collection chamber far easier than the inferior iron/ carbon steel
- Stability, Stainless Steel is basically inert in water. Leaching of alloying elements is within safe limits. As a result, they provide better quality water. No turbidity problems. All resulting in less bacterial slime, low energy consumption, low cleaning costs, good for conveying wet solids.
- Excellent durability and abrasion resistance, as Stainless Steels are resistant to crevice corrosion, cavitations and wear in pure and polluted waters as well as in atmosphere (even polluted), they are cost effective for long term use and do not cause environmental pollution.

CleanVent location

This combined unit (model ref CVAD) 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.

The static head must not exceed 60 metres in a Heating system.

Maximum static head must not exceed 40 metres in a chilled water system.

N.B. if the static head is greater than these figures the efficiency of the CleanVent & MagVent is reduced

Commissioning

The CleanVent requires no special commissioning. All units are fitted with a fast bleed valve, which should be used when initially filling the system. The same valve is used for draining off floating scum and also prevents the possibility of dirt clogging the air vent. Maintenance will be required to remove trapped dirt and sludge. Opening the ball valve at the bottom of the unit does this. 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 and age 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 BS4504 PN16 as standard. 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.