

The Watermark

The Newsletter From

Automated Water & Effluent Ltd

Autumn 2014

CHEMICAL DOSING POTS

Its that time of year when our water treatment customer's think about chemical treatment for closed hot water systems. The traditional method of dosing corrosion inhibitor is by a chemical dosing pot or shot feeder which is a steel pressure vessel incorporated into the heating systems pipe circuit work. The chemical dosing pot is usually installed inside a plant room or boiler house.

The chemical dosing pot is included in the pipe work circuit so it is in the water flow, isolating valves are fitted to interrupt the flow so the chemical dosing pot can be drained of water by a drain valve which is then closed. The top mounted fill valve is then opened so the chemical dosing pot can be refilled with the chemical reagent via the funnel mounted on top of the chemical dosing pot. The fill valve must be closed, check the drain valve is closed the isolating

valves are re-opened introducing the shot dose of inhibitor in to the system. Traditionally the dosing pots have been manufactured in mild steel which is then shot blasted and power coated.

We are delighted to introduce our new dosing pots which are manufactured in all stainless steel, the benefits are a longer life, no corrosion on the outside case or chipped paint and just a better product made in a superior material.

Our chemical dosing pots are supplied complete with valves and a stainless steel funnel several sizes are usually available during the winter months from stock.



WWEM Exhibition

At The Telford International Centre

We would like to thank all the visitors who stopped by our stand at the recent Water, Wastewater and Environmental Monitoring exhibition (WWEM) at the Telford International Centre in Telford Shropshire. The WWEM exhibition is focused on measurement, testing and analysis for the water and wastewater and environmental industry. It was nice to see you all we made some new contacts and caught up with some old friends who dropped by. If you need any additional information after the exhibition, please contact Mandy Wardle our office manager either by phone on 01785-254597 or by emailing sales@awe-ltd.co.uk.



We had on show some prototypes of new instruments which will be available during the new year when final testing and evaluation are completed. More about that exciting new product in the watermark in 2015.

Hello From Leon



We are pleased to introduce Leon Morgan, who many of our regular customers will have already spoken to. Leon joined us recently to strengthen our sales team and will be at our Stafford facility, Leon's hobbies include sport, military history, cooking, reading, films and going out and socialising.

INHIBITOR DOSING PUMPS

There is usually more than one way of doing a job and adding corrosion inhibitor in to a sealed system be it LPHW (low pressure hot water) or chilled water is an example. The traditional method of dosing corrosion inhibitor is by a chemical dosing pot or shot feeder however another option is to use a dosing pump.

We stock a wide range of dosing pumps some with high pressure outputs from a simple HY-BL 12-1.5 which is 0 - 1.5 Ltrs/hr against 12 bar pressure or AT1-BX18-2 which is 0-2 ltrs/hr against 18 bar through to stainless steel piston pumps with very high pressures and flow rates. We can also supply offer stainless steel injection quills and non return valves.

The interesting part is how to control the dosing pump, this can be either by a simple shot dose timer, where pushing a button runs the pump for pre-set time and hence doses a known volume. By a seven day timer again where a preset run time is set at regular time intervals hence a known dose is added say on Tuesday morning at 9.00 am.

By conductivity control where a preset conductivity value is maintained the addition of fresh water into the system will cause the conductivity to decrease and start the inhibitor dosing pump. Be sure to check the conductivity of the feed water and inhibitor to make sure that there is measurable difference to control from and use the low conductivity set point as an alarm if the conductivity drops too low as this could be caused by leaks in the system.



**Below Flow
proportional feed
water dosing system**



**Above Conductivity
monitoring system
rated at 120oC**

By fitting a flow meter to the make up water the inhibitor can be dosed proportional to make up water flowing through the flow meter.

We are able to design and supply any of the listed systems, your chosen system can be built into a simple skid with a bunded area for the chemical drum so no pouring chemical into a funnel.

New Conductivity Cell.

The Model PSE 01 Conductivity cell is specially designed small and compact stainless steel electrolytic conductivity cell ideal for monitoring solutions with very low conductivity's directly in tanks, vessel and large bore pipe work. The Model PSE 01 Conductivity measuring cell has cell constant of $K=0.1$ allowing measuring ranges with AWE instruments of 0 - 2.0 μS and 0 - 20.0 μS to be achieved.

The cells can be fitted with optional automatic temperature compensation. Typical applications include anion, cation and mixed bed demin water monitoring as used in the semi conductor washing and power generation industries.



If you need data sheets on the PSE-01 stainless steel conductivity cell or any of our surface or panel mounting conductivity controllers then please contact Mandy Wardle by telephone **01785 254597.** or e-mail sales@awe-ltd.co.uk.

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