

Trial Results



Humidity Control in Air Conditioned Buildings

Humidity control is an important aspect of air conditioning and can be provided in a variety of ways. SteamKLEAR eliminates scale, providing immediate benefits to humidification units.



Trial site: Orange Telecomms. St James building Bristol

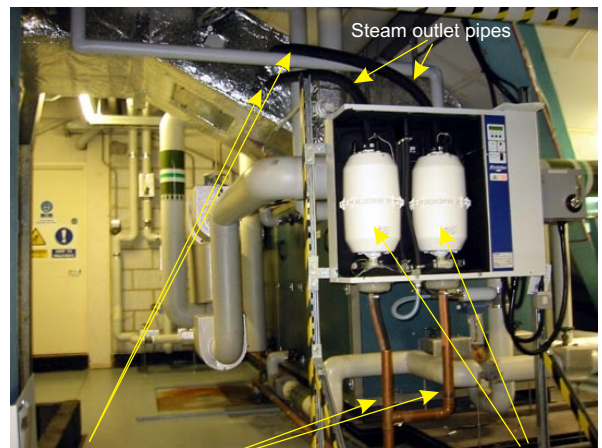
Elyo Services had already installed Savastat LC load compensation controls to the heating boilers in the Orange buildings following a successful trial which demonstrated savings of over 20%.

Elyo suggested a trial to evaluate the possible benefits of fitting the SteemKLEAR unit to the humidifiers serving this building. Past experience had established that because of scale build-up in the humidifier vessels, they had to be replaced every 3-4 months. SteemKLEAR units were fitted and steam output monitored by the Elyo Service supervisor. **RESULT - After 7 months the humidifier vessels are scale free and have continued to operate efficiently without any replacement parts or loss of service. Payback would be achieved within 4 months.**



Typical stand-alone steam generator type humidifier unit.

This model - ElectroVap MC has 2 steam vessels producing around 44kg of steam per hour.



Pipes to air duct Blow down pipes Steam generating vessels

The ElectroVap MC humidifier is designed to provide steam to an air handling system or directly into a space in order to raise the relative humidity. The unit is an electrode boiler type humidifier.

Minerals in the water allow electric current to pass between stainless steel plates that are immersed in water, all enclosed within a cylinder. The passage of this electric current causes the water in the cylinder to boil and produce steam. The steam then passes into the air handling system or duct via a stainless steel distribution pipe. Alternatively it may be passed directly into the space via a Fan Distribution Unit. Optimum water conductivity is maintained by partial drain and inlet cycles controlled by the microprocessor.



Where there is no water treatment / softening the manufacturers suggest the steam vessel is replaced when output falls significantly. In the case of the Orange building this was around every 3-4 months. Downtime, labour and parts probably amount to £150 per vessel. One SteemKLEAR S38 model fitted in this instance provided an immediate and long term solution.



Various Hydropath units are available to treat limescale problems in Humidifiers, Hot water boilers, Heating systems, Steam boilers, process boilers - call for details

