Get ahead of steam on the high seas

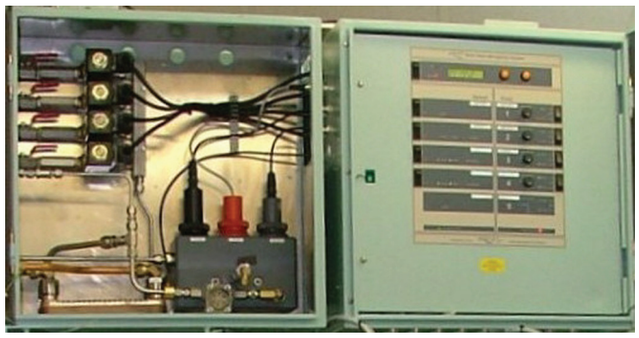
Land based boilers both new and existing can benefit from an automated system to reduce scale build up and corrosion on boiler tubes which lead to costly repairs and premature boiler failures.

Many years ago the marine industry recognised that to consistently maintain boiler feedwater at the required optimum condition the addition of treatment chemicals must be automatically monitored and adjusted. Manual retrospective corrections at the discretion of an operator as traditionally carried out on land based boiler plant means pH, conductivity and oxygen content cannot always be fully optimised. This accelerates build up of scale and corrosion of water tubes. The Marine Industry sought a solution now accepted as the De facto standard on cruise ships and marine vessels and a version is now available for land based boilers.

The '**Aquanet**' Dosing on Demand (DOD) boiler feedwater chemistry control system was developed as the answer. It has proved robust enough to cope with the difficult on-board conditions, vibration, high ambient temperature and humidity whilst maintaining optimum feedwater quality control: minimising waste, reducing costs and maximising boiler efficiency throughout the lifetime of the boiler.

The microprocessor based monitoring and control system is fully compliant with all current legislation and boiler operational standards. The '**Aquanet**' is a standalone monitoring and control solution with an additional Scada or PC based interface enabling remote access, calibration and control with data storage and report generation 24Seven.

The automatic 'Boiler Water Management' system ensures that the boilers are adequately protected



without overdosing. This in turn saves on chemicals, energy, water costs and down time whilst preventing scale and oxygen damage throughout the lifetime of the boiler.

In brief, the '**Aquanet**' system independently samples water optionally from the feed pump discharge and each boiler in sequence, cooling the sample, testing the pH, conductivity and determining the dissolved oxygen levels. Based on the results the control system fine tunes the chemical dosing pumps and adjusts the surface blowdown rate to maintain the correct chemical and TDS levels in accordance with the recommendations of BS2486:1997 & BS EN12953-10:2003 and the boiler manufacturer thus ensuring that the boilers are fully protected.

The need for land based boilers to be fitted with an automated dosing on demand control system is further heightened with the recent release of HSE Guidance Notice INDG 436 & SAFed Guidance on safe operation of boilers BG01, enabling 72 hour unmanned boiler operation.

For further information on the '**Aquanet**' system and how to reduce your boiler plant capital and operating costs e-mail **chris.reid@controls4steam.co.uk** Telephone **01254 841769** or visit **www.controls4steam.co.uk**

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