

WATERWIDE

TECHNICAL UPDATE

Issue 01

December 1996

Thank You!

As the end of 1996 approaches, WATERWIDE has had its most successful year yet again. This is down to YOU, our customers.

Thank you for your business and continued loyalty throughout 1996, and we very much look forward to continuing and further developing our relationship through 1997, supplying you with first rate products and unequalled service.

From all of us on the WATERWIDE team, we wish you all a very Happy Christmas and peaceful New Year.

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Technical Credibility and Service

The competitiveness seen in the 1980's forced companies to focus on cost cutting, the results of which led to a demise in quality of service provided. Out of the ashes however, arose a new breed of company, with a culture, focus and staff who passionately believe in and practice, quality of service and technical credibility. WATERWIDE is one of those companies. We know our future depends on you and to that end, will continue to supply and improve on, products and services which our competitors are still striving to achieve.

Back in the business

After a four year break to start a family, we are pleased to welcome CAROLYN SMITHERS back into the water treatment business. Many of you will remember Carolyn in her previous customer service role and we are delighted to strengthen the WATERWIDE team with her wealth of knowledge and dedication to customer care.

Carolyn will be introducing WATERWIDE to prospective clients as well as supporting our existing client base.

New Products

Within the Health and Safety Executives guidance note HS(G) 70 covering the control of Legionellosis including Legionnaires disease, importance is attached to maintaining water systems in a both clean and treated state. (para 102/4 et al.).

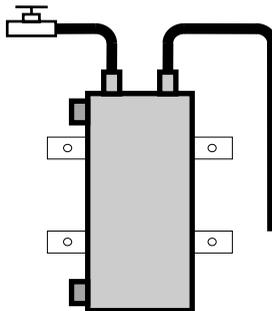
Many older systems contain a variety of scale and corrosion deposits. This has the potential to harbour problematic bacteria, as well as reducing overall efficiency of the plant through reduced flows or heat transfer etc. **DERUSTER 84** is a new and highly effective iron oxide dispersant which will take up iron and calcium salts and disperse many inorganic deposits found within water systems.

DERUSTER 84 can be left to circulate in a system over a long period of time, without any adverse effect to the base metal which is passivated once revealed. Even with heating or chilling load on, **DERUSTER 84** when used in conjunction with a suspended solids separator can be used to clean up old pipework whilst the plant is on line.

Health and Safety

Safe Sampling of boiler waters and other hot water process streams is an important consideration for many companies.

WATERWIDE supplies two types of Sample Coolers for such circumstance. Both types consist of a mild steel, wall mountable body.



The low pressure version (up to 350 psi max.) has a fixed copper coil and brass regulating valve whilst the high pressure version (up to 1000 psi max.) comprises of a stainless steel coil and gun metal regulating valve. Both units are immediately available.

WATERWIDE has it cracked!

This water treatment business is not all clean fun! One of the most recently completed projects in conjunction with a sister water engineering company, has been the clean up of a cattle market waste. Following market day, and before our joint involvement, the stalls were washed down into a collection pit where the straw was separated by a coarse inline filter and the liquor passed to foul sewer, incurring high discharge costs. After detailed consultation, sampling and pilot studies, a new automated plant has been designed and installed. Using WATERWIDE's WC112 primary cracking agent and subsequent caustic neutralisation the split effluent is flocculated and settled with WATERWIDE's WW623L anionic polyelectrolyte. Separating the resultant sludge from the clean liquor, the discharge costs have been reduced by £22,000 per annum, the plant effectively paying for itself in less than the first twelve months of operation.

Technical Forum

Condensate Line Protection

Many steam raising plants maintain boiler efficiency by returning condensate to the hot well. Condensed steam however is extremely aggressive to mild steel pipe runs and can cause serious pipeline corrosion if left untreated. The most common forms of corrosion are due to either oxygen ingress or carbon dioxide. Oxygen problems manifest themselves by way of pitting corrosion in the pipeline. Carbon dioxide induced corrosion is more commonly associated with a 'groove' along the six o'clock position of the pipe line and is derived from the breakdown of the bicarbonate ion in the boiler.

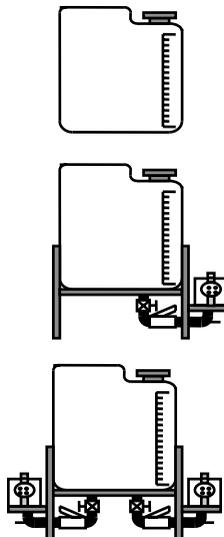
Sectioning a length of the pipe along the three o'clock - nine o'clock position will determine the type of corrosion and hence type of treatment required to nullify the corrosivity of the condensate. Amine treatments are most commonly used to protect condensate returns, being volatile products which flash over with the steam. There are two types of Amine used.

Filming and Neutralising. Filming amines, are hydrophobic compounds which, as the name suggests, film out on the internals

of the pipework, forming a protective barrier between the metal and condensed water. They are commonly used to protect long pipe runs or where there is 'wet' steam. **Neutralising amines** condense out with the steam and protect the pipework by neutralising the acidic carbon dioxide. This minimises corrosion along the six o'clock position. Many new condensate line inhibitors utilise more than one amine to facilitate protection.

Flooded suction prevents air locking

WATERWIDE supply a whole range of chemical dosing pumps and tanks to suit almost any situation.



In order to improve product dispensing, and prevent pump air locking, we now supply a mild steel fabricated, off the floor stand which both houses the pump and allows it to be fed by means of

positive pressure **flooded suction**.

This purpose made stand can accommodate up to four pumps with each dosing line having its own in line filter assembly. Pump types and tank sizes are fully interchangeable as we have a range of stand sizes. The whole unit can be pre assembled and tested prior to delivery, ready for a positioning, fill up and switch on, on site.

WATERWIDE

Products and Services

Boiler Water Treatment

Oxygen Scavengers
Sludge Conditioners
Condensate Line Inhibitors
Alkalinity Builders

Cooling Water Treatment

Corrosion Inhibitors
Scale Inhibitors
Microbiocides
Dispersants
Antifoulants

Effluent Treatment

Primary Cracking Agents
Polyelectrolytes
Neutralising agents

Special Application Products

Rust removers
Defoamers
Fuel Microbiocides

Site Water Surveys

Risk assessments for HSG(70)
Water Audits

Laboratory Services

Water quality testing
Microbiological Analysis
Deposit Analysis
Scanning Electron Microscopy

Equipment

Chemical Dosing Pumps
Sample Coolers
Dosing Pots
Corrosion Test Racks