

Water Treatment Dosage & Control Equipment – The Need

Water Treatment Products Limited, being a major supplier of chemicals to the Water Treatment Industry, realises the importance of *complete* solutions.

To that end we are pleased to be able to offer a complete range of **Dosage and Control Equipment** as we feel it is vital to be aware of the role it plays in the success of all modern Water Treatment programmes.

❖ **Cooling Towers**

- Water Treatment Chemicals provide protection against
 - Scale
 - Corrosion
 - Bacteriological Fouling
 - Suspended Solids
- To ensure that protection is achieved, the chemicals must be applied at the required rates and the concentration levels of the re-circulating water caused by evaporation loss must be effectively controlled.

❖ **Steam Boilers**

- Water Treatment Chemicals provide protection against
 - Scale
 - Corrosionwithin the boiler shell and also the steam and condensate system.
- To ensure that protection is achieved, the chemicals must be applied at the required rates and the concentration levels of the boiler water caused by evaporation loss must be effectively controlled.

❖ **Closed Heating Systems**

- Water Treatment Chemicals provide protection against
 - Scale
 - Corrosion
 - Bacteriological Fouling
 - Suspended Solids
- To ensure that protection is achieved, the chemicals must be applied at the required rates and any losses from the system monitored and compensated for.

❖ **Once Through/Potable Systems**

- Water Treatment Chemicals provide protection against
 - Scale
 - Corrosion
 - Bacteriological Fouling
 - Suspended Solids
- To ensure that protection is achieved, the chemicals must be applied at the required rates in proportion to variable flow rates.

❖ **Dosage Rates**

- In all the applications described above, chemicals need to be applied at specific rates. Too high a rate can lead to adverse conditions occurring and will result in an unnecessarily high running cost. Too low a rate will result in inadequate protection being achieved and detrimental running conditions.
- Accuracy and control of dosage rates can only be achieved using proven technology in the form of modern and reliable **Dosage Pumps**.

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❖ Concentrations

- Concentration of treated water will occur in any system subject to evaporation loss, e.g. Cooling Towers and Steam Boilers. If this concentration is allowed to increase – uncontrolled – it will reach a level whereby the Water Treatment Chemicals are unable to function and hence protection will be lost.
- **Water Treatment Controllers** and **Blowdown Valves** achieve control of concentration in such systems.

❖ Economy

- All water treatment programmes have a cost. The ability to accurately predict and – more importantly - *control* costs is an essential tool in either maintaining existing, or gaining new, customer accounts.

❖ Efficiency

- Whilst the cost of the water treatment programme will always be important to any end user, the relative impact of that cost can often be very small when compared to system operating costs and/or plant replacement costs.
- An effective **Dosage and Control System** will ensure optimum operating conditions are maintained resulting in maximum efficiency being achieved.

❖ Health & Safety

- Health and Safety will always be a prime consideration – particularly in the industrial and commercial climate we operate in today.
- Any breach of Health and Safety regulations – whether minor or major – can have extreme consequences, both on operators and suppliers.
- The installation of a **Dosage and Control System** tailored to a system's needs will ensure that responsibilities and accountabilities are fully met.

❖ Chemical handling

- Allied to Health and Safety, it is important to recognise the risks involved with handling any chemical substance, particular those with a hazardous rating.
- **Dosage and Control Equipment** provides a means of minimising chemical handling and therefore maximising safety for operators and suppliers alike.

❖ Access

- **Dosage and Control Equipment** can automatically and safely introduce chemicals and control treated water conditions without the need to enter hazardous or inaccessible areas.

❖ Legislation

- In recent years, a number of different legislative aspects now dictate the use of suitable **Dosage and Control Equipment Systems**.
- Legislation such as the **Approved Code of Practice and Guidance (L8)** and **COSHH** specifically call for **Dosage and Control Equipment** to be employed.

Water Treatment Products Limited can meet the requirements and implications of all the above points and are happy to advise or elaborate in any specific area.

Full details of the Product Range available are included within the web site, but if you would like further details on any aspect please contact us.