



FEBRUUS

CONTINUOUS PURIFICATION SENTINEL

SENTINEL
RANGE BROCHURE

INTRODUCING

The Sentinel dosing range

4i Water Services understands that you are looking for a robust system that is able to provide accurate proportional dosing.

Sentinel Range:

- ECO Sentinel
- Medi Sentinel
- Agri Sentinel
- Process Sentinel
- Pool Sentinel
- Mobile Sentinel

4i Water Systems is a highly accredited water treatment company that specialise in Chlorine Dioxide generation and Dosing Systems (CDU). We have developed a robust system that provides proportional dosing to 99.9998% accuracy and that can be remotely monitored and controlled from a variety of platforms and can be easily integrated into any BMS systems.

The Sentinel System has been developed over a number of years insuring the system removes the issues other have suffered from in the past and keeping up with modern technology available. Installation benefits include:

- Remotely monitored and operated
- Highly accurate precision dosing
- Leak detection
- Smart flushing technology
- Small installation footprint
- BMS Link-up
- DWI-Approved Method
- BS 8558:2011 Approved method of continuous disinfection
- Water authority approved

We have been able to consistently prove, through an innovative range of precision dosing systems, to insure that we remain industry specialists & market leaders.



KEY STAGES

The following is a brief outline to the key stages of the Sentinel System that helps to ensure 100% activated Chlorine Dioxide with no residual by-product.



ANALYSIS

The flow rate is analysed and the data is sent through to the mixing chamber. This information is stored and relayed in real time via BMS, SMS text, Email, or Cloud Based

DOSE VERIFICATION

A probe is fitted to ensure that the required rate is being dosed and relays that information back to the Controller

INCOMING WATER

1

2

3

4

TREATED WATER OUT

Back flow Protection

No slug dosing

FLOW RATE & PRECISE MONITORING

Using a precision water meter the flow rate is measured and the information is relayed through the controller.



GENERATION & DOSING

Using stepper motor technology, the acid and base agents are mixed in a mixing chamber to form CLO₂. The activated CLO₂ is then gradually injected into the incoming water supply.

COMPARISON CHART

4i Blended Chlorine Dioxide versus other common treatments

	Thermal	Chlorine Based Disinfectants	Copper Silver Ionisation	Ozonisation	Ultraviolet	4i Chlorine Dioxide
Used on domestic hot & cold water systems	✓	✓	✓	✓	✓	✓
Approved for Primary Disinfection	n/a	✓	✗	✗	✗	✓
Chemical Utilised	None	✓	✓	None	None	✓
By-Product	None	Various	None	Bromate	Ozone	None
pH Dependant	None	Yes	None	None	None	None
Taste and Odours	None	✓	None	Yes	Potential	Not > 0.8ppm
Impact on System Equipment	Yes	Minimal	Minimal	Yes	Potential	Minimal
Approved for Drinking Water	✓	✓	✗	✗	✓	✓
Breaks down Biofilm	✓	✗	✓	✓	✗	✓
Effective against Legionella	Prevents Growth	✓	✓	✓	✓	✓
Effective against Pseudomonas	✗	✗	✓	✗	✗	✓
Regular Flushing Required	✓	✓	✓	✓	✓	✓
Effective against Scaled pipework or hard water	✗	✗	✗	✗	✗	✓

As the chart shows, Chlorine Dioxide is an effective and powerful disinfectant for treating water systems in a wide variety of systems.



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