Activ-Ox®
Chlorine Dioxide Dosing Systems
Why Chlorine Dioxide?
Chlorine dioxide is universally recognised as an excellent biocide and disinfectant for a wide range of applications because of its unique combination of properties.

- **Potency** – It is extremely effective at low dosages.
- **Rapid kill** – Chlorine dioxide disinfects and sanitises in seconds.
- **Not pH sensitive** – Unlike chlorine and bromine, which both become less effective as the pH of water rises.
- **Effective biocide against biofilms** – Able to permeate and penetrate biofilms which are often relatively resistant to other disinfectants and biocides.
- **Potency against legionella** – Chlorine Dioxide is recognised as an effective biocide and disinfectant to control the risk of Legionnaires’ Disease associated with hot and cold domestic water systems, cooling water systems, spa baths, hot tubs and leisure pools.
- **No Halogenated Disinfection By-Products (DBPs)** – CIO₂ works differently to chlorine; its action is one of pure oxidation rather than halogenation, so these halogenated DBPs are not formed.
- **High Selectivity** – Chlorine Dioxide is able to kill microbes without reacting with other contaminants, often resulting in much lower dosage rates which can make it the cheaper alternative.
- **No Taste, Odour and Taint Problems** – Unlike Chlorine which creates unwanted by-products.

Why Activ-Ox Chlorine Dioxide?
Activ-Ox® Feedwater’s patented chemistry and generation process is simpler, safer and more effective than other ways of producing chlorine dioxide and is equally suitable for building services, food & beverage and industrial applications. It can be used to treat anywhere from a few litres of water to thousands of cubic metres per day and has also been incorporated into a unique foam disinfection and cleaning process.

Conventional systems often take many hours to produce chlorine dioxide and the process yield is poor which means that complex generation equipment is required and running costs are high because chemical is wasted. By contrast the patented Activ-Ox chemistry releases chlorine dioxide instantaneously and the process yield is very high, converting around 95% of the pre-cursor chemical to powerful chlorine dioxide.

**Activ-Ox works instantly - competitor products don’t!**

Conventional systems also require the use of a strong, hazardous acid. The Activ-Ox process by contrast uses a special, non-hazardous, food and drinking-water approved activator, Activ-8. The patented Activ-Ox chemistry is so different from the way a conventional chlorine dioxide generator works, you could even activate it with your favourite Cola!

How it works
The Activ-Ox system is operated using an intuitive controller interface which incorporates a large colour screen and graphical menus which enables easy set up and adjustment and displays the system status and useful operational data.

The Activ-Ox system most typically uses a water meter which is installed in the water supply to provide a proportional signal to control the dosage rate, however, 4 other control options are included as standard: Periodic; Timer; Batch and Remote Start.

As well as the 5 standard control modes the system can be upgraded by the incorporation of a ClO₂ probe to monitor or control the dosage based on directly measured readings.

These options mean the Activ-Ox Dosing System is extremely flexible and can be used for a wide range of applications.

The system draws the Activ-Ox precursor chemicals, directly from their supply drums or dosing tanks and injects them into the special reactor tee which is installed in the water system being treated. The chemicals mix and react instantly within the reaction tee and are injected into the water stream. The required chlorine dioxide dosage rate can be set on the unit and adjusted easily in response to the result of a simple water test at the point-of-use outlet.

**The Activ-Ox Family**

<table>
<thead>
<tr>
<th>Activ-Ox Product</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activ-Ox 2100 Dosing Unit</td>
<td>Treats from 0 – 100m³ of make-up water/day</td>
</tr>
<tr>
<td>Activ-Ox 3100 Dosing Unit</td>
<td>Treats from 0 – 500m³ of make-up water/day</td>
</tr>
<tr>
<td>Activ-Ox 4100 Dosing Unit</td>
<td>Treats from 0 – 5000m³ of make-up water/day</td>
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<tr>
<td>Activ-Ox Foam Cleaner</td>
<td>High Cling Foam for Cooling Tower Pack Cleans</td>
</tr>
<tr>
<td>Activ-Ox Spa &amp; Tank Cleaner</td>
<td>Powerful Disinfection for Spa Pools &amp; CWST</td>
</tr>
<tr>
<td>Activ-Ox Shower Head Cleaner</td>
<td>Powerful Disinfection &amp; Descaling for Shower Fittings</td>
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</tbody>
</table>

**Simplicity & Controllability**
- Instant, high yield reaction
- Simple installation
- Easy to set up and adjust
- Automatic operation
- Simple test kit available

**Suitable for...**
- Hospitals
- Hotels
- Nursing homes
- Office blocks
- Legionella control
- Domestic water
- Drinking water
- Breweries
- Dairies
- Food processing
- CIP Systems
- Chemical manufacture
- Agriculture
- Poultry houses
- Off-shore rigs
- And more...

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**Activ-Ox 4100 Example**

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<table>
<thead>
<tr>
<th>Activ-Ox®</th>
<th>Product A</th>
<th>Product B</th>
<th>Product C</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIO₂</td>
<td>90%</td>
<td>80%</td>
<td>70%</td>
</tr>
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**Activ-Ox 4100 Figure**

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**Activ-Ox 4100 Graph**

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Activ-Ox®

The Simple, Safe and Cost effective way to harness the power of Chlorine Dioxide

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