

Disinfection



Pulsafeeder Pumps are used in Municipal Water Treatment, Wastewater Disinfection and in the manufacturing of Disinfectants. Pulsafeeder offers a wide variety of designs and materials that are perfectly suited for these chemicals and more.

Water and Wastewater Disinfection

Sodium Hypochlorite

When sodium hypochlorite (bleach) comes in contact with bacteria, it oxidizes molecules in the cells of the germs and kills them. Even though this simple but harsh chemical has been used for more than a hundred years, it is prone to causing problems for pumps by “off-gassing.” Metering pumps should be specifically designed to address this issue by passing the gas bubbles through the pump head, minimizing the likelihood of loss-of-prime due to off-gassing.

Pulsafeeder offers several solutions for mitigating the issues caused by off-gassing with the Pulsar and PulsaPro pumps, featuring the Hypo-Valve configuration. Hypo-Valve leverages several decades of experience to handle this exact problem and to help operators avoid issues in the future. Learn more about our PulsaPro with HypoValve or Pulsar with HypoValve hydraulic diaphragm metering pumps and get connected to an expert by submitting the Contact Us form below.

Hydrogen Peroxide

Used in removing metals (such as iron and manganese), and over the last ten years, it has become an increasingly popular choice for disinfection in municipal plants, because it is biodegradable, and leaves no residual compounds behind once it is used. Some chlorine-based chemicals (in some industrial applications) can leave behind organic chlorides that can produce carcinogenic compounds – requiring further treatments throughout the process.

When used as a disinfectant at high concentrations (approximately 30-percent), hydrogen peroxide oxidizes immediately and is consumed upon contact with water. It is an effective chemical for preventing the accumulation of bacteria in plant piping, and it also eliminates many odors from water. When dosed at 30-percent concentrations or higher, Hydrogen Peroxide is harmful to people – so the pumps dosing this chemical must be highly reliable to ensure that no leaks occur.

Pulsafeeder diaphragm metering pumps are known for safely handling dangerous chemicals and for repeatable, high-precision dosing. When you need a safe, reliable pump to keep your process flowing, Pulsafeeder offers the experience and options to make things simpler. Learn more about **PulsaPro**, **Pulsa** or **Pulsar** metering pumps and get connected to an expert by submitting the Contact Us form below.

Defoamers

Foam is created in water treatment plants when surfactants and other treatment elements are added. Often, this can reduce plant efficiency and be disruptive to the treatment process. In water treatment plants, where critical disinfection is performed, the precise application of defoamers is required.

Pulsafeeder pumps are used by municipalities around the world, in a wide range of materials, with integrated control features, to safely and accurately meter nearly any chemical. Learn more about **PulsaPro**, **Pulsa** or **Pulsar** metering pumps and get connected to an expert by submitting the Contact Us form below.

PH Control

Disinfection and cleanliness of water is critical for consumption, and also for returning wastewater safely back to the environment. By adding chemicals such as sulfuric acid and sodium hydroxide, pH adjustment is an important part of the operation in wastewater treatment systems. Precise application of these chemicals allows for dissolved waste to be properly separated and removed before the effluent is returned to natural bodies of water.

For more than 50 Years, Pulsafeeder has been a leader in water and wastewater treatment, with experience to solve any problem. Learn more about **PulsaPro**, **Pulsa** or **Pulsar** metering pumps and get connected to an expert by submitting the Contact Us form below.

When it comes to choosing pumps for disinfection applications, Pulsafeeder offers the widest range of customizable gear and diaphragm pumps to meet any need. Pulsafeeder's local field reps deliver with the shortest lead times and provide uncompromising support.

Disinfectant Manufacturing

Quaternary Ammonium

Quaternary ammonium compounds are commonly used in the manufacturing of household and industrial disinfectants. When safely handling material and accuracy of dosing are critical, Pulsafeeder Diaphragm pumps are a perfect fit. Whether manufacturing detergents or applying high concentration disinfectants, Pulsafeeder can provide pumps that range from highly accurate to cost-effective in order to fit any process. Learn more about **PulsaPro, Pulsa** or **Pulsar, Eclipse, Eco** or **IsoChem Series** metering pumps and get connected to an expert by submitting the Contact Us form below.

Ethanol Alcohol (60%-90%) Isopropyl Alcohols

Ethanol and isopropyl alcohol are commonly used in the manufacturing of disinfectants as well as used as disinfectants themselves. Pulsafeeder gear pumps are ideal in processes involving ethanol and alcohol production and utilization. These thin fluids require a specialized pump that can handle the inherent lack of lubrication they present. Pulsafeeder has decades of experience in handling low-viscosity fluids and commonly offer pumps for Ethanol and Isopropyl Alcohol. Learn more about **Eclipse, Eco** or **IsoChem Series** metering pumps and get connected to an expert by submitting the Contact Us form below.

Sodium Hypochlorite

When sodium hypochlorite (bleach) encounters bacteria, it oxidizes molecules in the cells of the germs and kills them. Even though this simple but harsh chemical has been used for more than a hundred years, it is prone to causing problems for pumps by “off-gassing.” Metering pumps should be specifically designed to address this issue by passing the gas bubbles through the pump head, minimizing the likelihood of loss-of-prime due to off-gassing.

Whether dosing or manufacturing and transferring sodium hypochlorite, the Eclipse mag-drive rotary gear pump can deliver flows from 0-33 GPM and effectively handle the concerns associated with off-gassing. Learn more about **Eclipse** metering pumps and get connected to an expert by submitting the Contact Us form below.

Hydrogen Peroxide

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30-percent concentrations or higher, Hydrogen Peroxide is harmful to people – so the pumps dosing this chemical must be highly reliable to ensure that no leaks occur.

Whether dosing or manufacturing hydrogen peroxide, the Eclipse or ISOChem gear pumps provide the best solution for handling flows from 0-55 GPM. With a sealless mag-drive arrangement, the process fluid is completely isolated, protecting workers and the surrounding environment. Learn more about **Eclipse** or **IsoChem Series** metering pumps and get connected to an expert by submitting the Contact – Disinfection form below.