



DRY CHLORINE



CONTINUOUS



30 - 200 GPL



Sodium Hypochlorite Dry Chlorine System

Some systems are simply built. Ours are engineered.

We are the leading manufacturer of continuous systems engineered to produce premium quality sodium hypochlorite while utilizing dry liquid or vapor chlorine and sodium hydroxide. We build our systems from the ground up to provide state-of-the-art and efficient machines for producers looking to considerably reduce raw materials, energy consumption, and labor costs.

Our systems include a caustic dilution process, recycle pump, recycle tank, heat exchangers, chlorine reactor, and an industrial control system which provides high-tech, robust components suitable for your process conditions.

The Sodium Hypochlorite Dry Chlorine System is a highly engineered solution that ensures long service life. We provide custom engineered equipment and unparalleled customer support.

Advantages



Capacity

Produces as much as 818 m³ of 200 g/L available chlorine of sodium hypochlorite in 24-hours.



Accuracy

An accuracy of ± 2 g/L available chlorine is produced.



Efficiency

Engineered to convert chlorine to sodium hypochlorite with 99.5% efficiency while minimizing chlorate formation.

Custom Solutions

- Available in various production rates to meet project capacity requirements
- Engineered to have a repeatable final product strength with less than 1% variance
- Has a turndown ratio of 10:1
- Product strength and residual caustic levels are controlled at very high tolerances

System Performance

- Fully assembled, programmed and electrically and hydrostatically tested
- Skid mounted design engineered for transport in ISO container when applicable
- Meets international and domestic standards
- Cooling towers can be used instead of mechanical refrigeration to reduce energy costs

Process Design

- Automated operation and can be started or stopped at any moment
- A touch screen HMI (Human Machine Interface) to easily view all critical process data
- Easily networked to other Powell equipment or an existing DCS system
- Utilizes VPN devices to provide a secure, remote connection, for troubleshooting, programming updates, and training

Automation



Raw Materials & Utilities



Liquid chlorine minimum 8.6 bar or
Vapor Chlorine minimum 1 bar



Sodium Hydroxide up to 50% at
5.5 - 6.2 bar



Softened water at 5.5 - 6.2 bar



Three phase for motors
Single phase for control system



Clean, dry, oil-free instrument air
6.2 bar minimum



Cooling water of 29.4°C maximum