

# Powell Skid-Mounted Batch Sodium Hypochlorite System

**The Powell Skid-Mounted Batch Sodium Hypochlorite System is designed to produce sodium hypochlorite in batches using chlorine from 1-ton containers or 150-pound cylinders.**

The Powell Skid-Mounted Batch Sodium Hypochlorite System is based on more than 30 years of experience with bleach operations. The system can be designed to produce 1,000 US gallon or 3,000 gallon batches of bleach. Chlorine from 1-ton containers or 150-pound cylinders is use.

Almost all strengths of bleach can be produced with this batch system. However, the high strength bleach above 11% may have to be cooled during storage in order to keep the product stable. In some cases the cooling tower water may have to be replaced with a small chiller to keep the bleach cool during production, although normally that is not the case.

Once strong bleach is produced, storing in an air-conditioned room at 20°C or 60°F or colder can cool it. Depending on the volumes made, the bleach storage tanks can be chilled with a small plate and frame heat exchanger using a recycle pump and a small chiller.



## **Budgetary Pricing for Typical System**

We will need information about your company and the prospective application in order to provide budgetary pricing for a Powell Skid-Mounted Batch Sodium Hypochlorite System. Please review the “Factors to Define Equipment Needs” below. Please provide the information as completely as possible in order that we may provide budgetary pricing for equipment that is appropriate for your needs. The completed form may be returned to Powell by email at [info@powellfab.com](mailto:info@powellfab.com), or by fax to 989.681.5013.



## Factors to Define Equipment Needs

### 1. Information About Company Requesting Budgetary Pricing

If you are an agent requesting information about Powell equipment on behalf of another company, please provide the information requested below about your company.

Contact Person:

Company Name:

Subsidiary of:

Address:

City:

State:

Zip:

Country:

Phone:

Fax:

e-mail:

Website:

### 2. Information About End User of Powell Continuous System

Please provide the information requested below about the company that will be the end user of the Powell equipment.

Company Name:

Subsidiary of:

Address:

City:

State:

Zip:

Country:

Phone:

Fax:

e-mail:

Website:

Number of years under company name listed above:

Other names company does business under:

Number of years at location listed above:

Incorporated in the Country of:

Company description and level or experience with sodium hypochlorite, i.e. bleach?

Type of product/products manufactured or sold:

Name of product/products manufactured or sold:

Country in which equipment will be located:

Port equipment will be shipped to:



### 3. System Requirements

#### 3.1 Type of Project

- Market Entry
- Existing Process Replacement
- Expansion

#### 3.2 Bleach Skid Location

- Inside
- Outside
- Highest Temperature
- Lowest Temperature

#### 3.3 Bleach Market

- Where will the bleach you produce be sold?
  - Industrial
  - End User

#### 3.4 Bleach Strength Required

- What is the bleach strength required?
  - % by weight

#### 3.5 Bleach Flow Rate

What is the maximum flow rate in US gallons of the highest strength bleach you wish to produce?

What is the maximum flow rate in US gallons of the lowest strength bleach you wish to produce?

### 4. Raw Materials

#### 4.1 Chlorine

What is the pressure of the liquid chlorine in the system or from the storage vessel?  
psig (pounds per square inch)

What is the highest ambient temperature the storage vessel will experience?

#### 4.2 Caustic Soda (Sodium Hydroxide)

What type of caustic soda is to be used?

- Membrane
- Diaphragm
- Mercury

#### 4.3 Water

What type of water is available for the process?

Well Water	Hardness
City Water	Hardness
Soft Water	
Demineralized Water	

Cooling Water Service Available?

Yes  
No



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