



**BURT** | PROCESS  
EQUIPMENT.

Partners In Global Water Quality

# CHEMPLUS

Chemical Metering Systems



Reliable, Compact Systems with Complete Flexibility in Customization

# CHEMPLUS

## Chemical Metering Systems

### ChemPlus Chemical Metering Systems

The Burt Process ChemPlus has revolutionized the concept of chemical dosing systems by providing a fully engineered, pre-packaged, corrosion resistant system that provides complete flexibility in customization. ChemPlus gives engineers and systems designers the ultimate in flexibility with the latest advances and widest range of proven technologies. Burt Process draws on over 50 years of experience in specifying and manufacturing chemical processing equipment to provide a feed system design that meets the most rigorous chemical metering demands.



### Applications

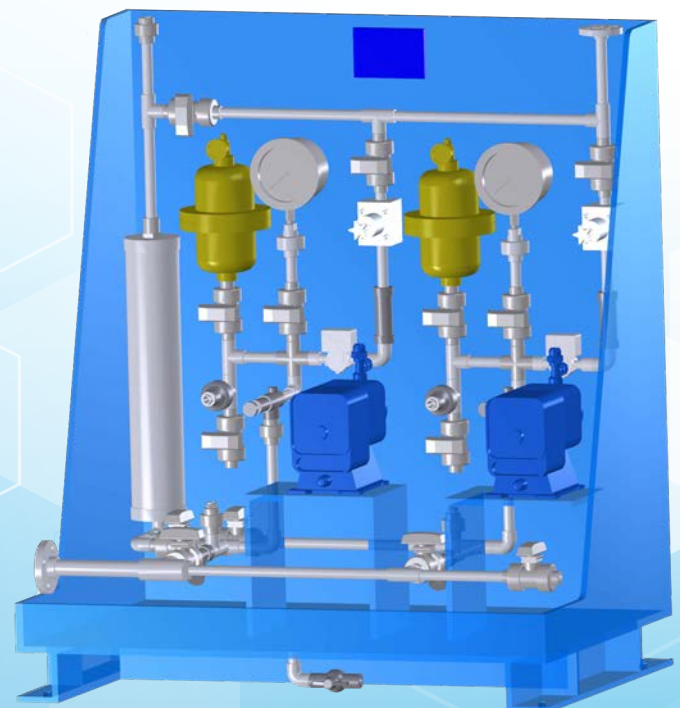
**Municipal Water:** Disinfection, Sodium Hypochlorite, pH Adjustment, Fluoride, Coagulation & Flocculation

**Municipal Wastewater:** Fume Scrubbers, pH Adjustment, Odor Control, Residual Disinfectant Management

**Food & Beverage:** Clean-In-Place, Clean-off-Line, Sterilizer Water Treatment

**Institutional:** Cooling Tower Waste Treatment, Boiler Water Treatment, Closed Loop Systems

**Other Applications:** in Swimming Pools & Water Parks, Mining & Agriculture, Utilities & Dairy Industry, Pulp & Paper, Oil & Gas



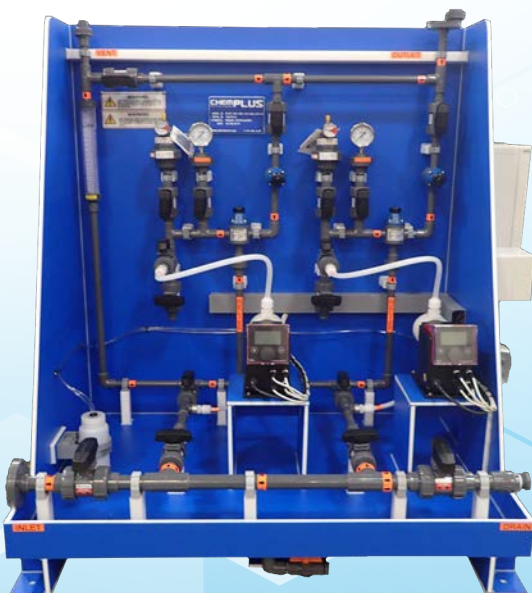
ChemPLUS pre-engineered systems offer a wide range of component options, pump selection and piping arrangements needed to customize chemical metering system solutions.

- Wide range of pump technologies include:
  - Solenoid or Motor Driven Diaphragm Pumps
  - Gear, Peristaltic, Progressing Cavity & more
- Rugged Acid, Caustic & Solvent Resistant Construction
- Complete System Fabrication, Assembly & Test
- Skid & Containment Basin constructed of 1/2" HDPE, Wall or Floor mountable
- Simplex, Duplex, Triplex or Custom Designs
- Piping materials in PP, PVC, CPVC, PVDF, or SS
- Standard & Custom Control Options Available

## Fully Customizable Pre-Packaged Skids



ChemPlus Simplex System



ChemPlus Duplex System



ChemPlus Triplex System

# CHEMPLUS

Chemical Metering Systems

CHEMICAL FEED

## Standard System Configurations

Simplex w/selectable components

Duplex arrangements include:

- Redundant suction & discharge
- Redundant discharge only
- Lead/Backup, single pipe system

Triplex arrangements include:

- Redundant suction & discharge
- Redundant discharge only

## Documented Factory Testing

- ✓ 120-Minute Hydrostatic Pressure Test
- ✓ Pressure Relief Valve Preset & Tested
- ✓ Back Pressure Valve Preset & Tested
- ✓ Pulsation Dampener Charged & Tested
- ✓ Completed Pre-Shipment Check List
- ✓ Documented Inspection Report

Pressure Gauge w/Guard  
2.5" or 4.5" from 0-160 PSI



**BURT PROCESS EQUIPMENT**

P.O. Box 185100, Hamden, CT 06518  
Toll Free: (800) 426-3856 Main: (203) 287-1985

### Hydrostatic Procedure/Test & Device Setting Report

Customer/Job		
BPE Order	1129914	
Equipment		1 Skid, s/n: 1129914A
Test Date	7-10-13	

#### Test Procedure:

1. After fabrication, assembly and cleaning, piping and components shall be pressurized to the test pressure shown below.
2. The following method(s) shall be used:
  - a. Fill equipment with ambient temperature water as the hydraulic medium, vent all air, and pressurize per the chart below. Maintain this test for a minimum of **120** minutes while examining all joints for leaks. Verify and record the pressure at beginning & end of the test.
3. This test shall be considered satisfactory when no leaks or drop in pressure is observed for a minimum of **120** minutes.

General Plumbing	Hydro Test Pressure	Actual Test Pressure
Suction & Discharge Piping-PVC	100 psi	_____ psi
Pressure Relief Valve	Pressure Relief Setting	Actual Relief Pressure
1/2" PVC, Adjustable	75 psi	_____ psi
Back Pressure Valve	Pressure Setting	Actual Back Pressure
1/2" PVC, Adjustable	25-30 psi	_____ psi

This is to certify that the above system pipe, fittings, hose, & components have passed hydrostatic testing per the procedure indicated and pressures recorded above.

Inspected By: \_\_\_\_\_

Single Piece 1/2" HDPE Corrosion Resistant  
Wall or Floor mountable with containment

# System Features & Options



ChemPlus Nameplate  
[Customized for OEMs]

Pipe Labeling  
Provided with chemical  
name & flow direction

Piping  
Schedule 80 PVC, CPVC or  
Fusion-Welded PVDF

Selectable Pump Options  
Pump options include Solenoid, Mechanical  
or Hydraulic Diaphragm, Gear, Peristaltic  
or Progressing Cavity

Back Pressure [anti-syphon] Valve  
Two port flow through design & field adjustable from 15-150 psi

Pulsation Dampener  
Removes 99% pulsation, sizes include 4,  
10, 36 & 85 cubic inch

Pressure Relief Valve  
Two or three port flow through design available & field adjustable  
to 15-150 psi

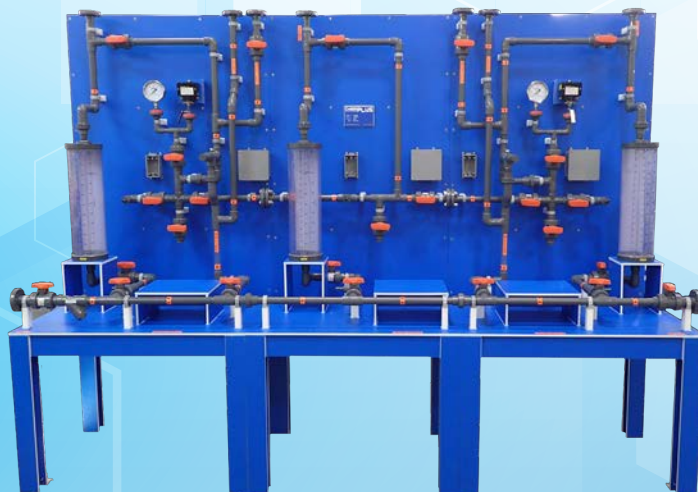
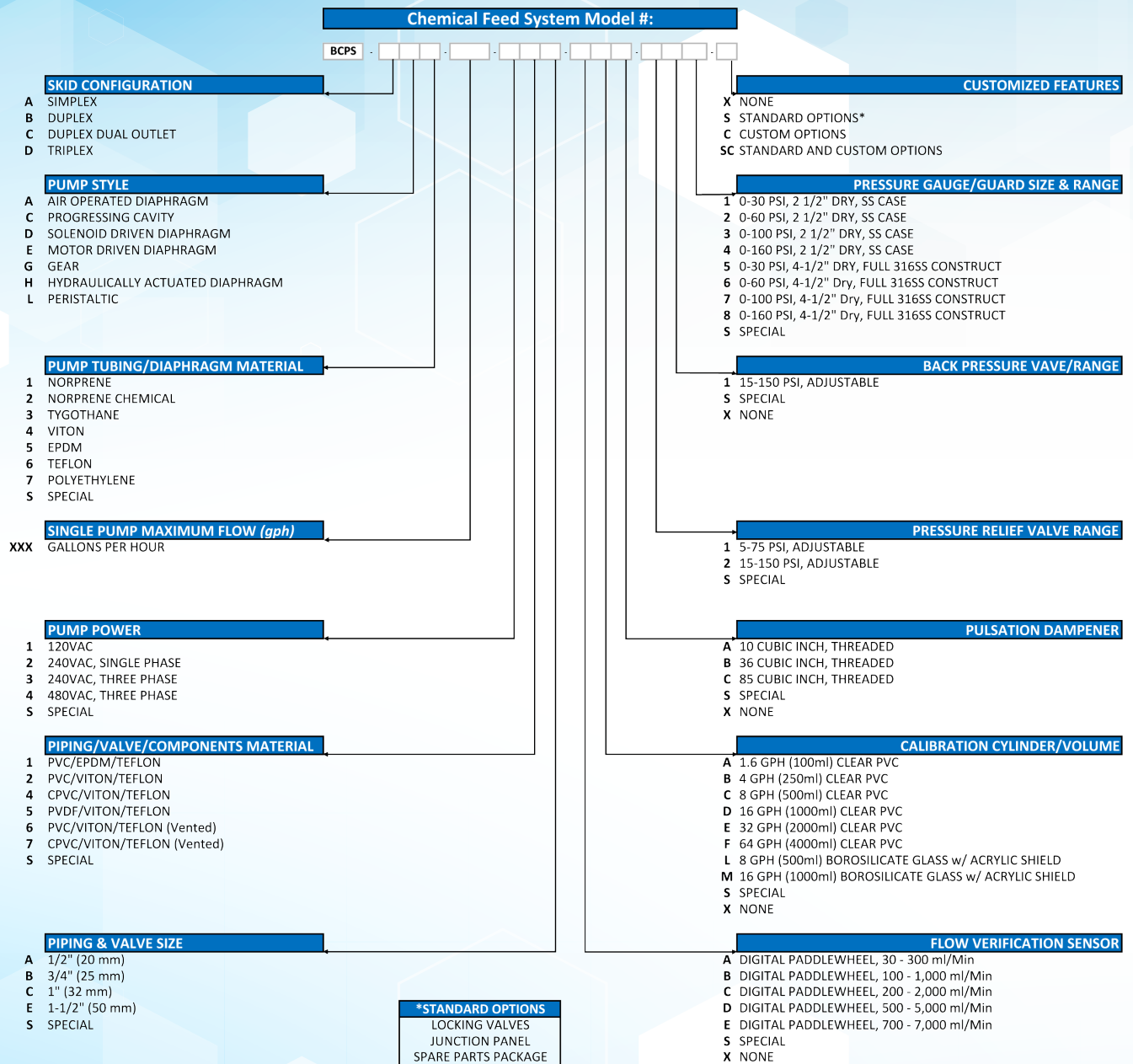
Calibration Column  
Sized for either 30 or 60 second draw down  
& available in Clear PVC, PP or Glass

Manual Ball Valves  
True union design available vented or with lockout handles

Visual Flow Indication  
Excellent diagnostic tool, Rhythmic rising & falling  
of ball indicates positive flow

Skid  
basin & drain with valve





## System Options

- Flow or Pressure Verification Sensors
- Conduit Box for Power & Control Signals
- Splash Guard Covers
- ChemPlus Nameplate may be customized
- HDPE or FRP Outdoor Shelters
- Elevated Support Legs or Stand
- Custom Controls & Instrumentation

# Custom ChemPlus Systems

Choose from a variety of standard ChemPlus Systems, or the Burt Process team of highly qualified design engineers can develop a system to meet your specific application needs. All systems are assembled at our facility on fabricated skids with electrical connections and controls as required.



## Control Panels

Burt Process Equipment provides complete industrial control panel design and UL 508A fabrication services as part of our product offering. Burt Process control panels provide the highest quality in workmanship coupled with optimum control in standard and custom enclosures. Interface modules available for Modbus, GENIbus, BACnet, Profibus, PROFINET and GSM/GPRS [wireless communication]. All panels are UL 508A listed.

### Control Panel Options

- UL Type 4X FRP or stainless steel enclosures for corrosive environments
- Microprocessor based controllers
- Explosion proof rated panels for hazardous environments
- PLC (Programmable Logic Controller) and HMI (Human Machine Interface)
- PC Interface and data acquisition systems



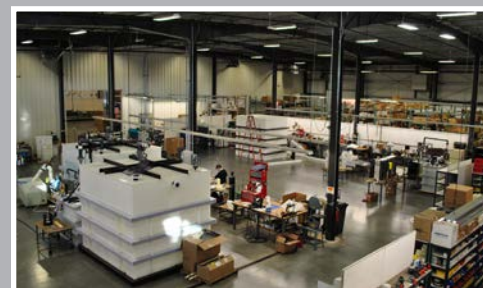
Send your specifications,  
we'll provide the solution.

Corporate  
Headquarters  
100 Overlook Drive  
Hamden, CT 06514  
Tel. (203) 287-1985



### Our Services

- System Engineering
- System Installation and Upgrades
- Programming Updates
- PLC and PC Controls Integration
- Start-up, Testing, Training
- Documentation
- Maintenance & Technical Support
- Preventive Maintenance Contracts and Agreements
- Instrumentation Calibration
- Pump Equipment Repair
- On-Site Equipment Evaluations



### Our Products

- pH Neutralization Systems
- High Purity Water Generation Equipment
- Rainwater Recovery Systems
- Chemical Feed Systems
- Pump Transfer Stations
- Wet Process Benches
- Metal Finishing Components and Systems
- Pumps
- Tanks and Mixers
- Process Instrumentation and Controls
- Plastic Valves, Fittings and Tubing



[www.BurtProcess.com](http://www.BurtProcess.com)