



Engineered Water Systems

**Custom-Built Systems
for Precise Water Treatment Control**



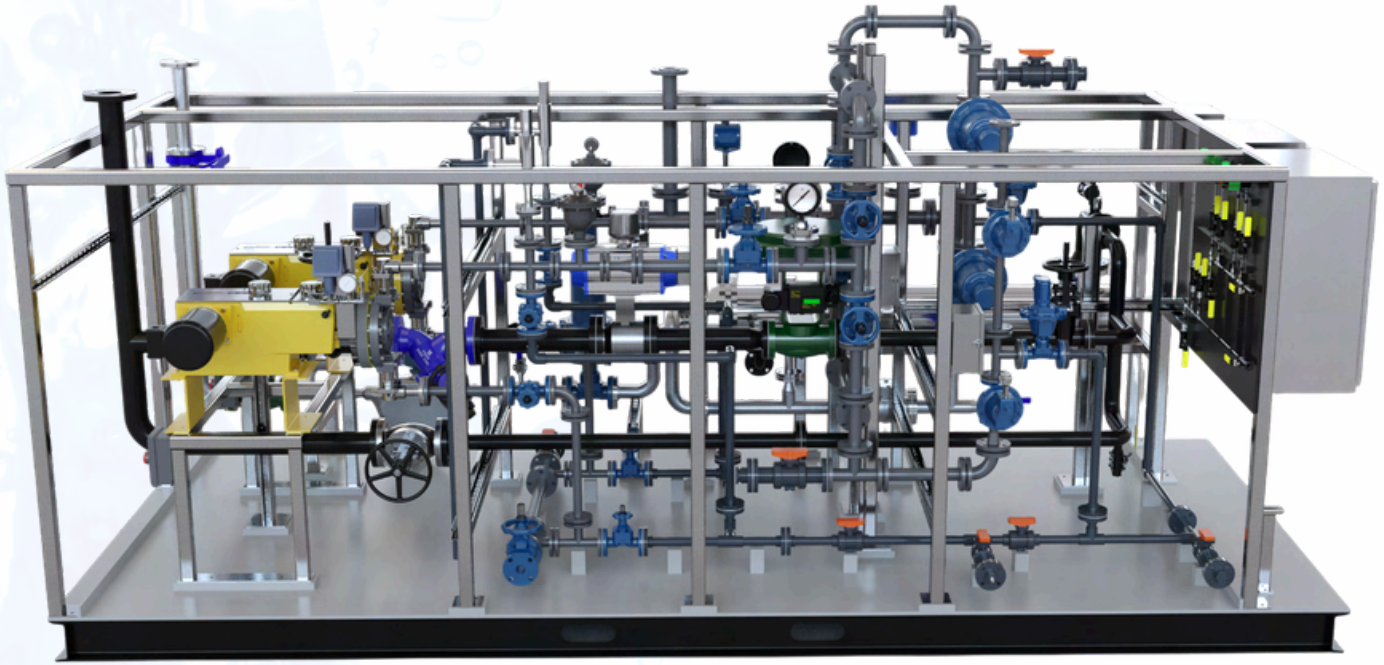
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Burt Process Overview

Founded in 1970 Burt Process Equipment is a worldwide leader in the design, manufacturing, distribution, and service of high purity and corrosion resistant equipment and systems. BPE provides proven solutions for many industries including the life science, semiconductor, chemical processing, institutional, academic markets, on top of many others.



Products

- pH Neutralization Systems
- Wastewater Treatment
- Filtration Equipment
- High Purity Water Generation Equipment
- Rainwater Reclaim Systems
- Custom Plastic and Stainless-Steel Fabrications
- UL Listed Custom Control Panels
- Chemical Feed Systems
- Wet Process Benches
- Pump Transfer Stations
- Tanks and Mixers
- Process Instrumentation and Controls

Services

- System Engineering & Design
- Skid Mounted Equipment
- Turnkey Installations and Upgrades
- Controls Integration
- Start-up, Testing, Training
- Documentation
- Maintenance & Technical Support
- Instrumentation Calibration
- Pump Equipment Repair
- Transportation & Rigging

Industry-Recognized



Certifications

NFPA 70E



Memberships



Engineering & Design Capabilities

Collaborative, End-to-End Engineering Solutions
Built Around Your Process

Our Approach

Burt Process Equipment takes a hands-on approach to developing proven industrial systems, supported by a highly qualified team of mechanical, chemical, and electrical engineers, along with project managers, programmers, and CAD designers. We provide complete, turnkey engineering services from the initial consultation, working closely with clients to design customized solutions tailored to their specific needs. Our specialty is customized equipment, and our engineers collaborate with clients at every step of the process.



Our Services

- Preliminary Site Reviews
- Process Design
- Specification Writing
- CAD Drawings Including 3-D System Design
- Project Management
- Complete Mechanical Design
- Electrical Designs to Meet UL and NFPA Standards
- Software Development in Both PLC and PC Platforms
- Complete FAT and SAT Testing

Divisions

BURT PROCESS
EQUIPMENT

BURT ENGINEERED
SYSTEMS

BURT TOOLS &
AUTOMATION

 **ProFlow**
Division of Burt Process Equipment

pH Neutralization

PHX

Burt Process Equipment's pH Plus Family of advanced pH adjustment modules and systems represent the industry's best and most complete line of pH monitoring and controlling equipment. The pH Plus Series is the result of forty-three years of experience and engineering development in the field of industrial wastewater treatment.



System Features

- PLC/HMI Control for Setpoints and Status
- Customer Specified PLC/HMI Capabilities
- Optional UL508A Listed Controls
- Flow Monitoring Equipment
- Batch Collection Tanks
- Pump Transfer Stations
- Liquid Level Controllers
- Secondary Containment



ACS

The Assured Compliance System (ACS) treats continuous flow streams employing hybrid batch technology developed by Burt Process Equipment. Unlike typical continuous flow systems, the ACS provides assurance of a properly treated waste stream through the use of freeboard and flow diversion should an out of range pH condition occur.

System Features

- Flow Rate of Up to 300 GPM and a pH of 1-14
- Heavy-Duty Gear Mixer
- Recirculation Loop Reagent Injection
- Easily Maintained Wet-Tap with Self-Cleaning pH Probe
- High Efficiency Proportional Metering Pumps
- Large Out of Spec Retention Volume



Available Options

- Single or Dual Stage Treatment
- Additional Diversion Storage Tanks
- Pump Transfer Lift Stations
- Instantaneous & Total Flow Monitors
- Effluent Temperature Monitor
- Redundant pH Probes
- PLC Control Packages
- Effluent Sampling Systems
- HMI/SCADA Interface
- Bulk Reagent Transfer Systems

pH Neutralization

BPN - Burt Process Neutralization

The BPN series systems are fully automated, skid-mounted pH neutralization units engineered to safely treat wastewater with pH levels from 2 to 12. Designed for flexible flow rates, they deliver precise, dependable control across a wide range of industrial applications. Available in both single and dual-stage models, BPN ensures compliance and reliability in every process.

System Features

Durable Treatment Tank: Constructed from fusion-welded natural polypropylene for long-lasting, reliable performance.

Reagent System: Includes dual 70 gal or 120 gal HDPE tanks with BPE level controls and precision dosing pumps to ensure accurate chemical delivery.

U-Trap & Monitoring Components: Wet well and instrumentation are engineered to meet or exceed local regulatory compliance requirements.

Agitation System: Properly sized 316 SS wetted mixers, mixer rails, and AVS baffles are included to ensure thorough and reliable tank agitation.

Reagent Piping: Double-contained piping is provided to prevent leaks during operation and to meet EH&S standards.

Skid-Mounted Design: BPN systems are mounted on epoxy-coated HRS skids, allowing for fully pre-wired and pre-plumbed system delivery.



Advanced pH Options

In addition to pH neutralization, offerings include multi-stage metal precipitation systems for removing heavy and precious metals, cyanide destruction systems using chemical oxidation for safe, compliant discharge, and fully integrated Bio Kills and Effluent Decontamination Systems (BSL 1-4) designed for complete waste neutralization. Each solution is tailored to site-specific flow profiles and permitting requirements.

Pump Lift Stations

Lift Stations Built for Performance and Reliability



Burt Process Equipment custom pump lift stations deliver engineered solutions for applications beyond standard designs.

Built to handle challenging wastewater, industrial effluent, and process fluids, these systems can be tailored with specialized pumps, non-standard basin configurations, and advanced controls to meet exact project requirements.

Designed for seamless integration into treatment processes and regulatory compliance, Burt Process lift stations provide reliable performance, long service life, and cost-effective operation in demanding environments.

Lift Station Materials

- **Polypropylene (PP):** High-temp, chemical-resistant, strong
- **PVDF:** Premium, highly chemical-resistant
- **HDPE:** Cost-effective, chemical-resistant
- **Stainless Steel (304/316):** Durable, sanitary, high-temp
- **Fiberglass (FRP):** Corrosion-resistant, versatile
- **Lined Stainless/Carbon Steel:** Lined for specialty waste
- Other options are available as well

Configure Your Systems:

Create the lift station your project requires. Customize key components, confirm your selections, and send your design to our engineers for review and support.

Consult with an Engineer!

Example Pump Options



Self-Priming



Air Operated Diaphragm



Vertical

Pump Lift Stations

Burt Process Equipment designs and manufactures pump lift stations that reliably move wastewater, industrial effluent, and process liquids where gravity alone is not enough. Whether your application fits a proven standard design or requires a fully customized solution, our team delivers systems engineered for performance, longevity, and ease of operation.



Custom Engineered Pump Lift Stations

- Non-standard basin sizes, geometries, and materials
- Specialized pump selections (corrosion-resistant, solids-handling, high-head)
- Advanced controls with PLCs, VFDs, and remote monitoring
- Redundant systems for critical processes
- Integration with upstream and downstream treatment equipment
- Compliance with municipal, industrial, and environmental regulations

This hybrid approach keeps systems efficient and cost-effective while ensuring performance in challenging applications.

Our Standard

- Pre-engineered, field-proven designs
- Durable basin construction (FRP, HDPE, SS, PP, or coated steel)
- Duplex or triplex pump configurations
- Submersible pumps for wastewater and industrial service
- Integrated level controls and float systems

When your application requires more than a catalog solution, Burt Process can extend or modify our standard lift station designs or develop a fully custom system to match your exact requirements.



**Standard when it works. Custom when it matters.
Built to perform either way.**

Solvent Systems

Safe. Compliant. Engineered for Your Process.

Burt Process solvent collection systems are designed to safely manage solvent-based waste streams while helping facilities maintain compliance, operational efficiency, and operator safety.

Designed to fit your Facility

Compact layouts | Custom materials | Controls



Proven Platform

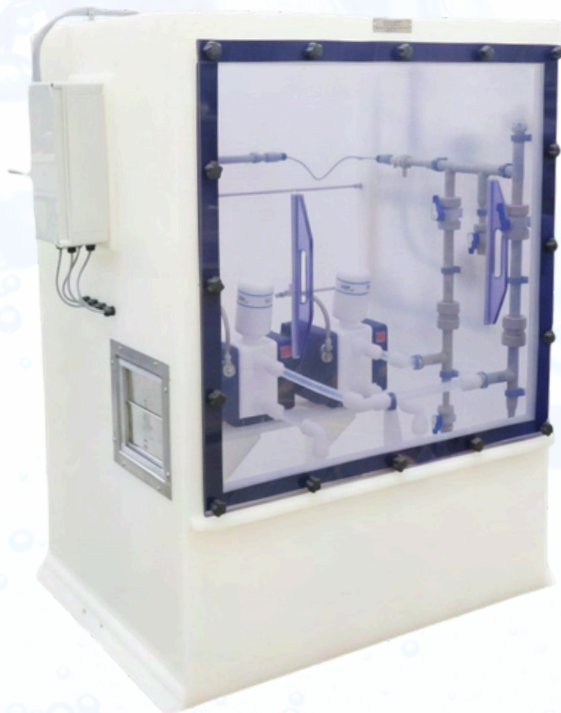
Standard designs reduce project risk.

Customizable

Materials, layouts, & controls tailored to your need.

Space-Focused

Compact configurations fortight process areas



System Options & Applications:

Standard:

- Known solvent types
- Defined flow conditions
- Straightforward compliance needs

Specialty & Sanitary:

- Aggressive solvents
- Higher purity expectations
- Facility-specific standards

Ideal Applications:

- Solvent Collection
- Process Waste
- Chemical Processing
- Sanitary Applications

RODI High Purity Water

Burt Process Equipment's PurePlus family of ultrapure water systems is a complete line of generation and distribution equipment. The advanced skid-mounted modules offer a prepackaged high-purity solution. Water Generation grades include USP, Electronic, ASTM/ NCCLS/CAP Lab, and others.

Features & Options

- Fusion welded and sanitary polypropylene and PVDF piping
- High-pressure stainless-steel reverse osmosis pressure vessels with performance membranes
- Pharmaceutical and electronics grade filter elements
- Precision controlled nitrogen tank blanketing for 18.3 MOhm applications
- Ultraviolet bacteria and TOC reduction
- Low resistivity alarm/diverter valve



Continuous storage tank level measurement



Markets Served with RODI Systems

- Pharmaceutical Manufacturers
- Life Science Research Facilities
- Biomedical and Clinical Laboratories
- Semiconductor Fabrication Plants
- Printed Circuit Board Manufacturers
- Food and Beverage Processing
- Metal Finishing Industry
- Hospitals and Institutions
- Education Facilities
- Power Generation Plants
- Data Centers



PLC controls with optional web interface

RainEx Rainwater Reclaim

Burt Process Equipment's RainEx product line is a key component in achieving Green building status through LEED certification. The result of over forty-three years of fluid handling and engineered systems experience the RainEx line of reclamation systems provides prepackaged solutions for rainwater recycling. The RainEx series gives customers a complete treatment package for use in recycled applications for irrigation, flushing fixtures, and cooling tower make-up.



Features & Specs

- Prepackaged and Factory Tested Design for Reduced Installation Costs
- Stainless Steel or PVC Filtration Systems
- Sanitization via Ultraviolet or Chemical Injection for Flushing Fixture Use
- Touch Screen and PLC Automatic Controls for Ease of Use
- Pigmented Storage Tanks to Minimize Bacterial Growth
- Optional Dye Injection for Flushing Fixtures
- On Site Start-Up and Training by a Factory Trained Field Service Technician
- Schools and Universities
- Office Buildings
- Hotels
- Data Centers
- Government Facilities
- Industrial Plants



Engineered and supported by ARCSA accredited professionals.

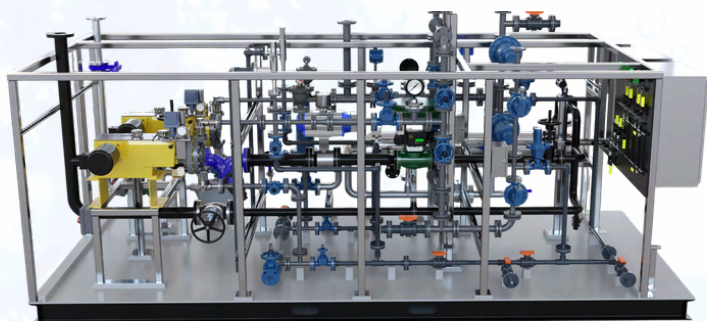
ChemFeed

Standard Systems

- Simplex, Duplex, and Triplex options
- Portable, prepackaged skids
- Corrosion-resistant & compact
- Trouble-free installation
- Wide range of pump technologies



Chemical Feed (Dosing) Systems are used in wastewater treatment to inject chemicals for pH control, solids removal, and final purification. The ChemPlus series consists of rugged, corrosion-resistant chemical feed skids designed for reliable, flexible operation. Systems are available in Duplex (two pumps) or Triplex (three pumps) configurations to accommodate higher capacities or multi-chemical dosing. They support multiple pump technologies and include chemical-resistant construction, factory fabrication and testing, HDPE skid and containment, multiple piping material options, and standard or custom control packages



Advanced Systems

- Custom options
- Designed for unique applications
- Hot Box design for use in any climate
- Prepackaged & factory tested
- Fast & easy installation

Burt Process Equipment designs and fabricates fully custom reagent metering skid systems for precise dosing of acidic, caustic, and other process chemicals. These prepackaged, fully assembled systems are engineered for specific application requirements such as pH adjustment, sanitization, and specialized reagent dosing. Custom systems can incorporate simplex, duplex, or triplex pump arrangements, advanced flow monitoring, PLC-based control panels, and optional leak detection and containment to meet environmental, health, and safety requirements for demanding or high-risk chemistries.

Process Chilled Water

Process Chilled Water (PCW) systems are designed and fabricated as fully integrated, skid-mounted systems to provide efficient and reliable cooling and precise monitoring of critical process variables, while ensuring seamless integration with existing facility plumbing and controls infrastructure.

Overview

- **Primary Functions:** Provides chilled water circulation, heat removal, and particulate management
- **Hazardous Environment Compliance:** Options available for explosion-proof instrumentation, pumps, and motors
- **Pump Configurations:** Simplex, duplex, or triplex configurations to meet redundancy requirements
- **Automatic Operation:** PLC-based control panels enable seamless integration with existing systems and minimize downtime
- **Closed Loop Operation:** Supports conductivity monitoring, filtration, and sanitary materials to maintain clean PCW in closed-loop systems



Process Chilled Water systems provide closed-loop circulation and thermal regulation for critical industrial processes. Each system is engineered to meet specific flow, temperature, redundancy, and cleanliness requirements while maintaining long-term operational reliability.

Wet Benches & Lab Sinks

Engineered chemical-processing workstations for lab, rinse, and clean-process environments



Designed for chemical compatibility, containment, and workflow control.

Burt Process wet benches and laboratory sinks are configured to fit the way your team works - including your chemicals, footprint, rinsing needs, drainage approach, and operator access requirements. Each system is built to support safer handling, durable operation, and long-term process reliability.

Technical Design Features

- Chemical-resistant construction for corrosive and aggressive solutions
- Engineered containment and splash control
- Integrated drainage and plumbing designed for laboratory use
- Configurable work surfaces, sink depths, and layouts
- Ergonomic access for safe and efficient operation



Tanks

Burt Process Equipment designs and fabricates corrosion-resistant tanks in a variety of materials and sizes to meet your needs. Every tank we build is custom-designed to meet the end user's requirements and is fabricated with the most advanced manufacturing equipment.



Options

- Open top, bolted cover, or sealed cover configurations
- Flat bottom, cone bottom, or sloped bottom for complete draining
- Internal mounts for heaters, pumps, or other process equipment
- External plastic encapsulated steel support girds for plastic tanks
- Plastic, painted steel, or stainless steel stands
- Double Wall construction
- Tank insulation
- Cover supports allow the cover to be walkable
- Handrails and ladders for tank top access

Features

- Designed for chemical compatibility with rugged construction for aggressive solutions
- Open atmospheric tanks
- Plastic tanks with seamless corners
- Flat bottom with external chemical-resistant support girds
- Plastic tanks rated for up to 180°F

Control Panels

In 2002, Burt Process Equipment, Inc. received our UL508A, UL698A, & NNNY certifications from Underwriters Laboratories. The UL 508A Standard is used to evaluate Enclosed Industrial Control Panels and certifies that the components and construction comply with the applicable NEC, ANSI/NFPA 70 guidelines. The certification ensures that a panel marked with the UL label is built with UL listed or UL recognized components and that the construction is compliant with the type requirement for the enclosure.

System Features

- NEMA Enclosures
- High Quality Components
- Audible/Visual Alarms
- Main Panel Power Switch and Indicating Light
- IEC or NEMA Motor Starters
- Ethernet and Modem Options for Remote Access
- PLC Based Control with Optional Web Interface
- Equipment Running Lights and Operator Interface



Integrated Quality & Engineering Support

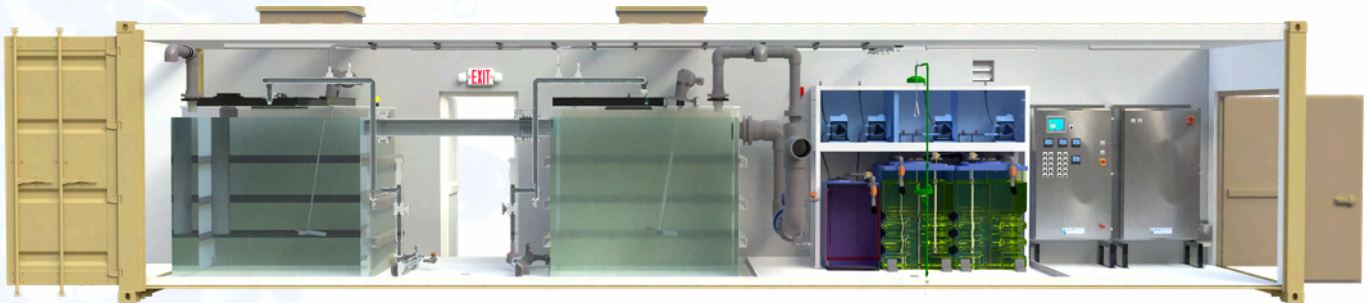
To support our systems, we utilize high-quality components from trusted manufacturers such as Rockwell Automation, Siemens, ABB, and Phoenix Contact. These partnerships allow us to deliver dependable automation solutions that enhance system performance and longevity.

From initial design evaluation through engineering, manufacturing, testing, and inspection, our process ensures each control panel is fully aligned with the requirements of the system it supports.

Containerized

Overview

Burt Process can containerize any system that we design. Larger systems can be installed across multiple containers, with modularization. Standard containers are 40' long and 9'6" tall, but customer sizes can be provided. Systems can even be installed in trailers that can be moved from one job site to another.



Features

- Shower/Eyewash station
- Containment pan
- Trench or Floor Drains
- Chemical spill protection
- Custom exterior paint colors
- Hazardous Gas detection system
- Exterior mounted system status stack light
- Custom container size
- Trailer mounted systems
- PLC/HMI based control systems
- Fire rated structures
- Advanced ventilation for hazardous conditions

Upgrade Your Systems

- pH Neutralization Systems
- Wastewater Treatment
- Filtration Equipment
- High Purity Water Generation System
- Rainwater Reclamation Systems
- Custom Plastic and Stainless-Steel Fabrications
- UL Listed Custom Control Panels
- Chemical Feed Systems
- Wet Process Benches
- Pump Lift Stations
- Tanks and Mixers
- Process Instrumentation and Controls

Containerization minimizes downtime, avoids structural modifications to existing buildings, preserves interior space, enables segregated hazardous storage, and allows for rapid implementation without major construction.

Industries Served



Aerospace

Data Centers

Construction

Food & Beverage

Government

Higher Education

Semiconductor

Maritime

Medical Device MFG

Metal Finishing

Microelectronics

Municipal

Oil & Gas

Pharmaceuticals

Solar

Transportation

Pharmaceutical Solutions

Integrated Pharma Handling Solutions

Potent Waste Containment & Transfer

- Closed-loop storage and sealed pumping systems designed to minimize exposure and environmental risk.

Specialty Solvent Collection & Handling

- Sanitary or corrosion-resistant transfer systems with vapor control and classified-area compliance for IPA, methanol, acetone, and specialty solvents.

Biowaste & Hazardous Waste Systems

- Secure lift stations contained storage tankage, and automated monitoring integrated with sterilization or neutralization processes.

Lift Stations & pH Adjustment Systems

- Corrosion-resistant pumping and automated neutralization skids for aggressive chemical waste streams.



Why Pharmaceutical Facilities Choose Burt Systems

- **Application-Specific Engineering:** Systems designed around your chemistry and process, not adapted from standard equipment.
- **Materials Expertise:** Proven capability with high-alloy metals, fluoropolymers, and advanced corrosion-resistant materials.
- **Regulatory-Aware Design:** Engineered to support GMP environments and stringent EHS standards.
- **Integrated Controls & Testing:** Preassembled, factory-tested systems that streamline validation and startup.
- **Long-Term Reliability:** Built for continuous operation in aggressive chemical environments.

Semiconductor Solutions

Where high-purity chemical handling meets semiconductor manufacturing precision.

Core Solutions

Wet Benches & Wet Process Modules

- High-purity chemical processing with integrated containment.

Solvent Collection & Recovery Systems

- Safe capture, transfer, and waste management of solvents.

Chemical Delivery & Distribution Systems

- Precision chemical dosing, storage, and transfer.

Waste Collection & Neutralization Systems

- Segregated waste handling designed for fab environments.



Why Semiconductor Facilities Choose Burt Systems

- **High-Purity Design** – Engineered to minimize contamination risk.
- **Advanced Materials Expertise** – CPVC, polypropylene, PVDF, fluoropolymer, and specialty materials.
- **Chemical Containment Leadership** – Integrated safety, leak detection, and exhaust systems.
- **Modular Construction** – Scalable solutions for fab expansion and upgrades.
- **Factory Tested Systems** – Reduced startup, commissioning, and validation timelines.

Solar Solutions

Where corrosive chemical handling meets reliable solar manufacturing performance.

Core Solutions

HF Treatment Systems

- Neutralization and fluoride precipitation
- Automated pH control
- Solar process wastewater handling

Lined Chemical Handling Systems

- PFA-lined piping
- PVDF wetted components
- Corrosion-resistant assemblies

Chemical Storage & Distribution Systems

- Bulk acid storage
- Transfer pumping
- Double-containment piping

Solar Wastewater Treatment Systems

- Fluoride removal
- Metals reduction
- Facility discharge compliance



Why Semiconductor Facilities Choose Burt Systems

- **Corrosion-Resistant Expertise** – Extensive experience with HF, sulfuric acid, and aggressive solar chemistries.
- **Advanced Materials Selection** – HDPE, PP, PVDF, FRP, and fluoropolymer-lined systems for maximum service life.
- **Integrated Treatment Solutions** – Complete systems from collection and storage to treatment and discharge.
- **Factory-Built & Tested** – Preassembled systems that reduce installation and commissioning time.
- **Long-Term Reliability** – Engineered for continuous operation in demanding solar manufacturing environments

Food & Beverage Solutions

Engineered systems that keep food and beverage operations compliant, efficient, and production-ready.



Engineered Capabilities

High-Volume pH Neutralization Systems

- Automated wastewater treatment
- Permit compliance
- Continuous pH monitoring

Chemical Mixing & Utility Preparation Skids

- Ingredient preparation
- CIP chemical preparation
- Precise batching and dosing

Sanitary Process Systems

- FDA-compliant materials
- Hygienic transfer systems
- Corrosion-resistant construction

Wastewater Collection & Equalization Systems

- Flow balancing
- Storage and pumping
- Pretreatment integration

Why Semiconductor Facilities Choose Burt Systems

- **Sanitary System Expertise** – Engineered for food-safe processing environments.
- **Wastewater Compliance Solutions** – Systems designed to help facilities meet discharge requirements.
- **Integrated Process & Utility Systems** – Complete skid-mounted packages for production support and chemical handling.
- **Factory-Built & Tested** – Preassembled and validated before shipment to reduce startup time.
- **Long-Term Reliability** – Corrosion-resistant materials and robust controls for continuous operation.

Advanced Systems

Built-to-spec water systems engineered to outperform, only from Burt Process.



Field & Start-Up Service

Installation

Factory-trained technicians providing turnkey installation, field fabrication, and equipment integration services to keep projects on schedule and minimize downtime.

Training

On-site operator and maintenance training covering system operation, troubleshooting, and preventive maintenance. Training sessions can be recorded for future reference.



Start-up

Comprehensive startup support including mechanical verification, controls integration, commissioning assistance, and operator handoff.

Services

- Calibration & Instrumentation
- Controls & PLC Programming
- Startup & Commissioning
- Operator Training
- Troubleshooting & Diagnostics
- Upgrades & Modernization
- Preventive Maintenance
- Performance Evaluations

Why Burt Field Service?

- Factory-Trained Technologies
- Start-Up & Commissioning Support
- On-Site Training Programs
- Preventative Maintenance Services
- Long-Term System Support





For Inquiries, Contact Us!

**We're here to help! Contact us and speak
with a process equipment specialist.**



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