



GHOST BLACK™

ADVANCED LIQUID POLYMER ACTIVATION SYSTEMS

**SMARTER POLYMER.
BETTER DEWATERING.**



POWERED BY THE PATENTED
GHOST REACTOR™

PolyGhost GHOST™ BLACK

LIQUID POLYMER ACTIVATION TECHNOLOGY

POWERED BY POLYGHOST.
ENGINEERED WITH ROTO PUMPS.

Advanced polymer activation technology
designed for **superior performance**,
reliability, and **efficiency**.



SUPERIOR
POLYMER
ACTIVATION



ENGINEERED
RELIABILITY



COMPACT
MODULAR
DESIGN



SMART
CONTROL
TECHNOLOGY



EASY
OPERATION &
MAINTENANCE



OPTIMIZED
PERFORMANCE
& EFFICIENCY

WHY POLYGHOST?

PolyGhost liquid polymer activation systems combine patented multi-stage activation technology with precision engineering to deliver consistent, fully activated polymer solutions for demanding industrial and municipal applications.



MAXIMIZED
POLYMER
PERFORMANCE



REDUCED
OPERATIONAL
COSTS



INCREASED
PROCESS
EFFICIENCY



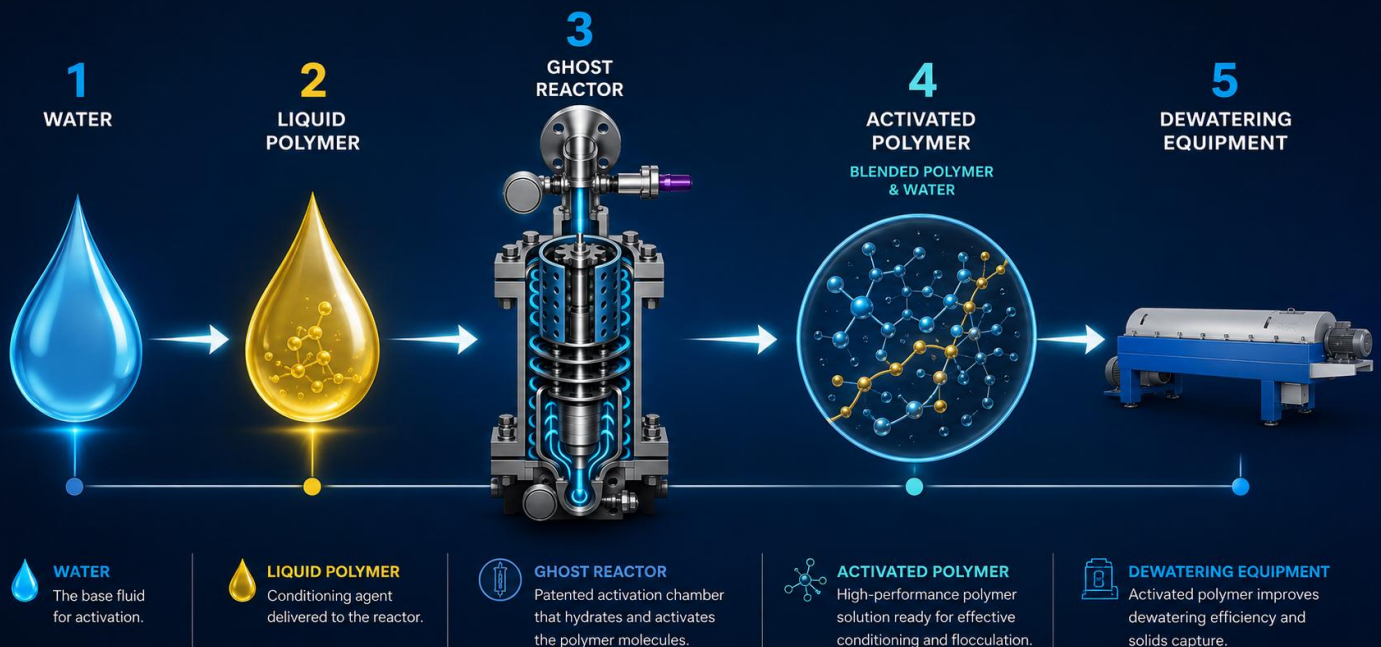
BETTER
ENVIRONMENTAL
RESULTS

The Heart of Every Ghost Black™ System

Everything begins with the Ghost Reactor™

At the heart of every Ghost Black™ Liquid Polymer Activation System is the patented Ghost Reactor™ ... the technology that transforms ordinary liquid polymer into a highly activated conditioning solution. While water and liquid polymer are simply the inputs, it is the Ghost Reactor™ that precisely hydrates, energizes, and activates the polymer molecules before they reach the dewatering equipment. The result is stronger floc formation, improved solids capture, reduced polymer consumption, and superior dewatering performance.

The Ghost Reactor™ is where polymer activation begins and where the Ghost Black™ advantage is created.



Ghost Reactor™ Overview



The PolyGhost® **Ghost Reactor™** is the core technology of the PolyGhost Liquid Polymer Activation System. It is a compact, continuous-flow reactor designed to combine polymer dispersion, controllable hydro-mechanical shear, staged hydraulic retention, progressive hydration, stabilization, and final homogenization within one integrated vertical or horizontal chamber.

Unlike conventional polymer activation systems that depend on single-stage static mixers or large external aging tanks, the **Ghost Reactor™** uses a proprietary multi-stage internal architecture to control how the polymer solution moves, mixes, hydrates, and matures throughout the reactor. This internal sequence increases residence time while progressively managing mixing energy to support uniform polymer activation without excessive mechanical degradation.

Dilution water and neat polymer enter through separate upper inlets and converge inside the primary activation zone. The developing solution then travels through the Dual-Wall Mixing Cup with Orifices, multiple perforated baffle stages, internal retention chambers, and the final conditioning zone before exiting through the solution outlet. The engineered flow path promotes even distribution, reduces bypass and short-circuiting, increases retention mixing time, and supports gradual, controlled hydration.

At the center of the reactor is an internally mounted submersible motor that directly drives the mixing mechanism. The activated solution remains in continuous contact with the motor housing, helping remove operating heat and maintain reliable cooling while eliminating the need for a conventional external motor, long drive shaft, and associated alignment arrangement.

The **Ghost Reactor™** is engineered to produce a stable, homogeneous polymer solution ready for immediate use in downstream processes, including sludge dewatering, thickening, flotation, clarification, and other municipal or industrial treatment applications.



GHOST REACTOR™

ADVANCED CHEMICAL ACTIVATION & BLENDING TECHNOLOGY

KEY BENEFITS

- ✓ Dual-wall design maximizes retention time
- ✓ Controlled flow prevents short-circuiting
- ✓ High-shear dispersion with polymer protection
- ✓ Uniform activation and hydration
- ✓ Scalable, robust, and maintenance friendly

KEY FEATURES



Dual Inlet System

Independent polymer and dilution water inlets for precise introduction



High-Efficiency Mixer

Rapid initial convergence and uniform distribution



Dual wall Mixing Cup with Orifices

Promotes even flow, prevent by pass and increase retention mixing time



Baffle Plates with Orifices

Directs flow, increases turbulence, and enhances shear activation



Submersible Motor

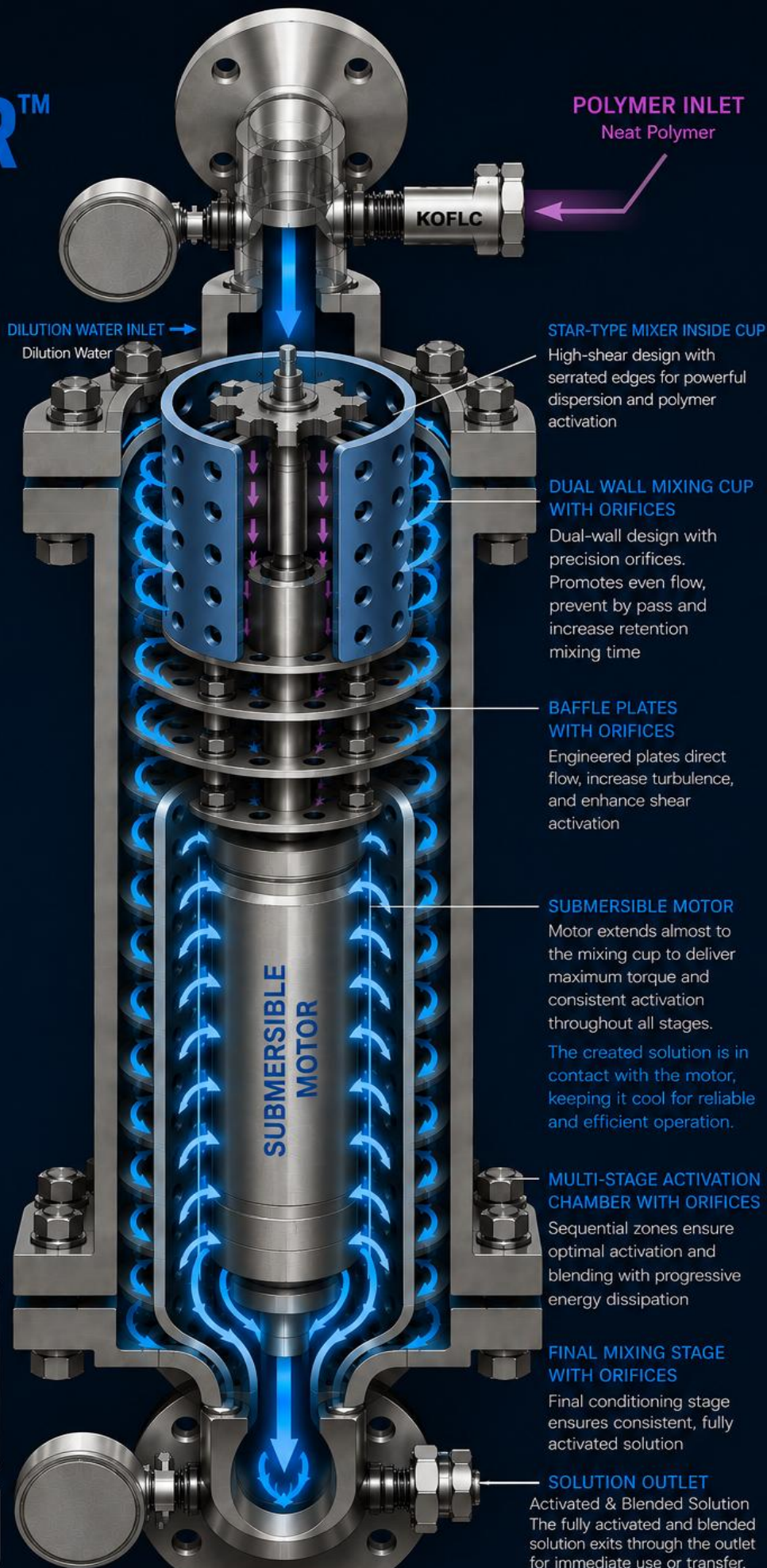
Motor extends almost to the mixing cup to deliver maximum torque and consistent activation throughout all stages. The created solution is in contact with the motor, keeping it cool for reliable and efficient operation.



The reactor design and internal mixing architecture are supported by USPTO patented technology, including:

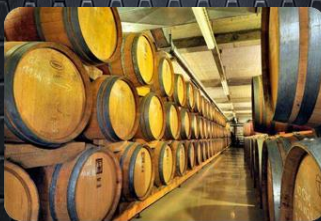
- US Patent 10,766,011
- US Patent 11,766,644
- US Patent 12,233,388

- Polymer Flow → Activated Solution Flow
→ Dilution Water Flow
(in contact with motor for cooling)





ONE TECHNOLOGY. ENDLESS APPLICATIONS.



From drinking water and wastewater treatment to breweries, distilleries, dairy processing, mining, oil refineries, marine, energy production, and industrial manufacturing, Ghost Black™ brings the power of the patented **Ghost Reactor™** to virtually any process requiring precision chemical or polymer activation.

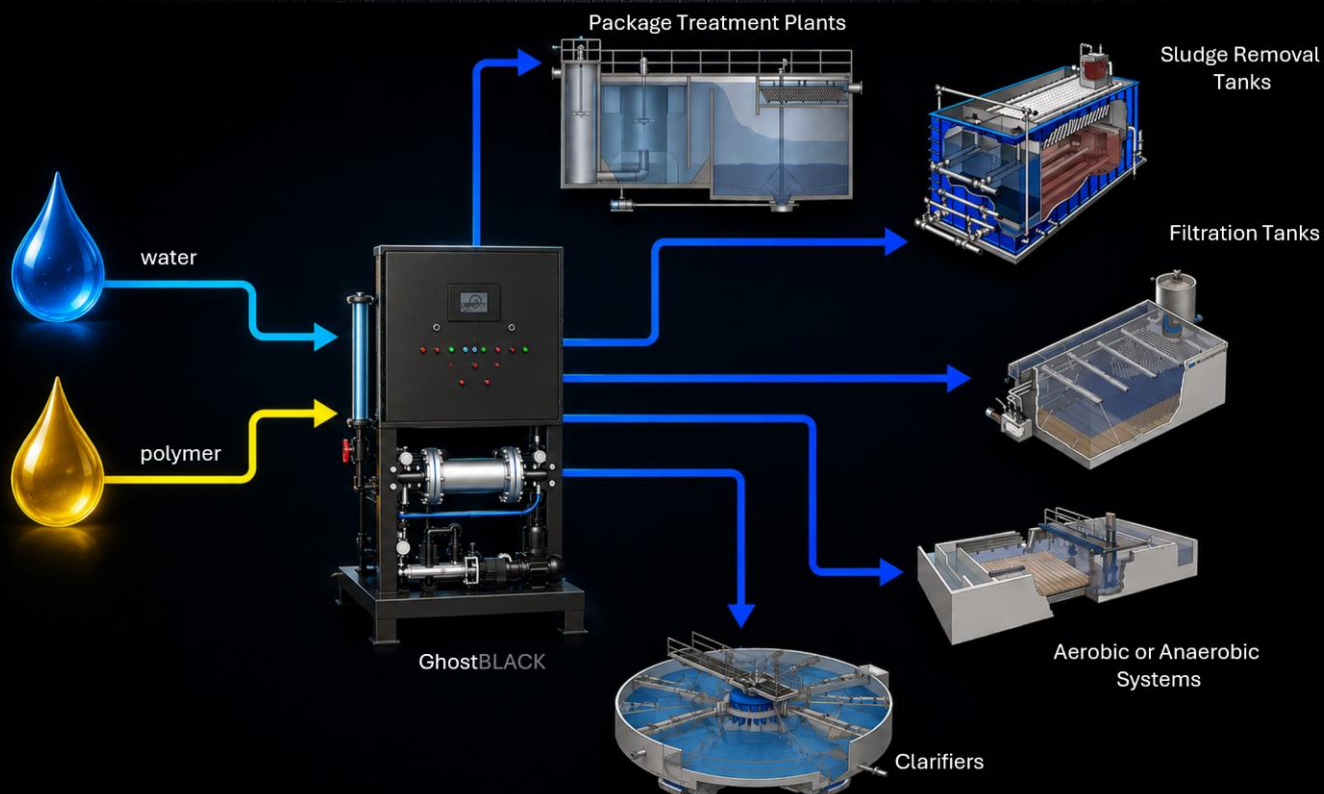
Engineered to efficiently blend, activate, and condition polymers, chemicals, nutrients, additives, and specialty formulations, **Ghost Black™** transforms ordinary mixing into high-performance process optimization. The result is improved activation efficiency, reduced chemical consumption, lower energy usage, enhanced separation performance, and significantly lower operating costs.

Whether feeding a belt filter press, decanter centrifuge, screw press, DAF system, clarifier, thickener, or any other process requiring precise chemical conditioning, Ghost Black™ delivers consistent, repeatable results that help customers achieve superior performance while reducing total operating costs.

One Reactor. Endless Applications. Smarter Activation. Better Results.



Optimizing Every Stage of Water and Wastewater Treatment



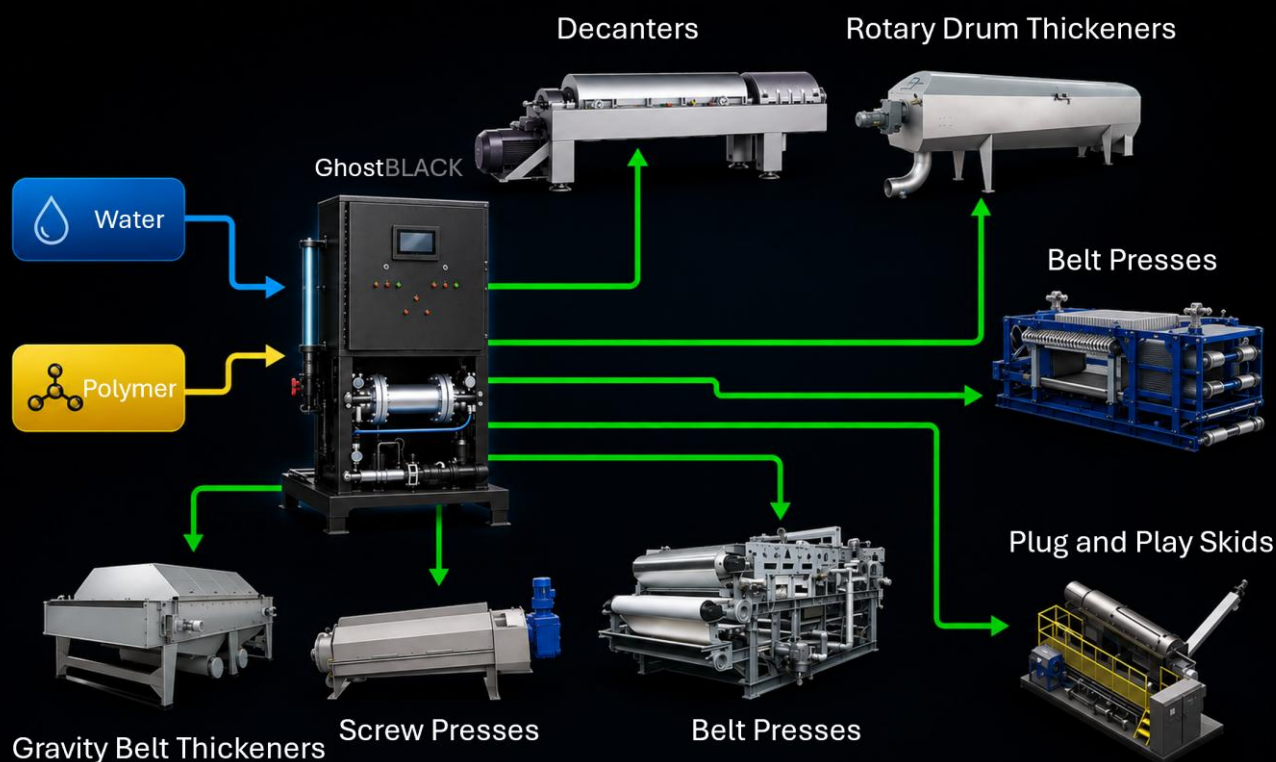
Ghost Black™ liquid polymer activation systems are designed for municipal and industrial treatment facilities where polymer performance matters.

Our patented **Ghost Reactor™** technology produces highly activated polymer solutions that enhance clarification, filtration, sludge thickening, and solids separation while reducing polymer usage and overall operating costs.



One Polymer Activation System.

Every Dewatering Technology.



Ghost Black™ is designed to integrate seamlessly with virtually every sludge thickening and dewatering process.

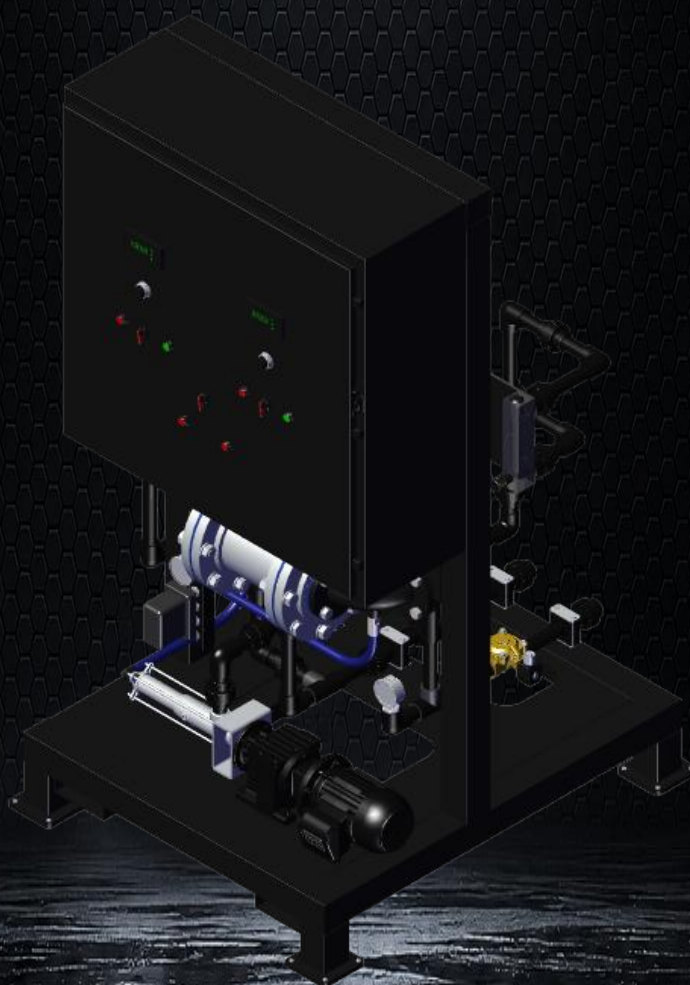
Powered by the patented **Ghost Reactor™**, it transforms conventional liquid polymer into a highly activated conditioning solution before it reaches your equipment.

The result is stronger floc formation, improved solids capture, reduced polymer consumption, lower operating costs, and enhanced performance across belt filter presses, decanter centrifuges, screw presses, gravity belt thickeners, rotary drum thickeners, and complete plug-and-play dewatering systems.



Take Complete Control of Your Polymer.

Activate More. Waste Less. Dewater Better.



Ghost Black™

Liquid Polymer Activation System.



GHOST BLACK™ Polymer Activation Skid

Key Technology Advantages:

- USPTO-patented Ghost Reactor™ activation technology.
- Continuous multi-stage hydro-mechanical polymer activation.
- Controllable low-to-high shear mixing for optimized polymer performance.
- Dual-Wall Mixing Cup with engineered flow orifices.
- Multi-stage hydraulic retention for progressive polymer hydration.
- Internal perforated activation chambers that eliminate dead zones.
- Submersible motor continuously cooled by the activated solution.
- Compact reactor eliminates the need for large aging tanks.
- Improved polymer activation consistency and reduced polymer consumption.
- Fully enclosed, scalable, and skid-mount ready design.
- Suitable for municipal, industrial, mining, food processing, pulp and paper, and environmental treatment applications.

Roto®
pumps
since 1968



Roto Pumps + PolyGhost

GHOST™ BLACK

Powered by PolyGhost.
Engineered with Roto Pumps.

A new generation of polymer
activation systems.



Superior
Polymer
Activation



Engineered
Reliability



Compact
Modular
Design



Smart
Control
Technology



Easy
Operation &
Maintenance

INNOVATION THAT WORKS.

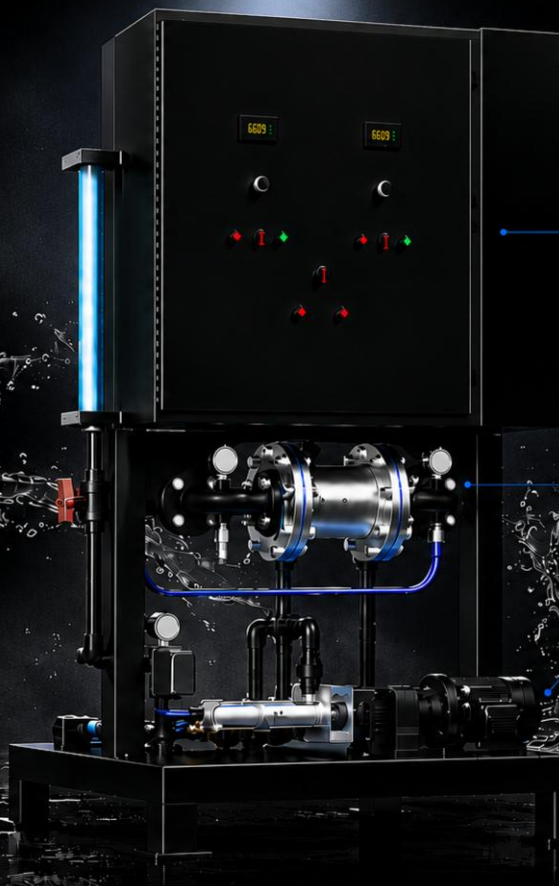
PERFORMANCE THAT LASTS.



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BUILD FOR MUNICIPAL AND INDUSTRIAL APPLICATIONS.



Smart PolySavings
PLUS+ Control
Advanced precision
monitoring and
dilution control

GHOST™ REACTOR
High + Controllable
USPTO Patented
Polymer Activation
Chamber

Roto Pumps
RJ Series Pumps -
Precise Metering
Progressive Cavity
Technology



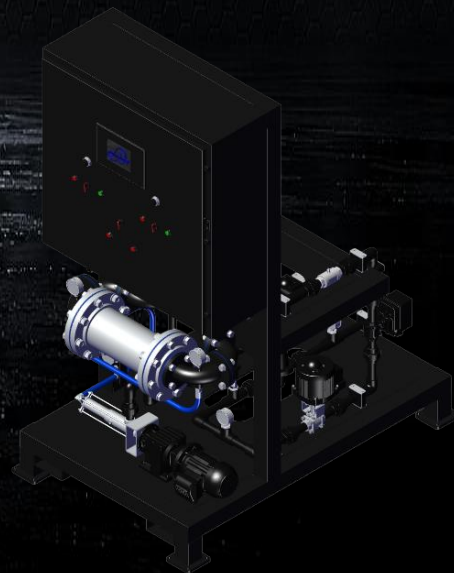
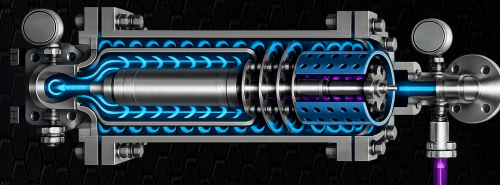
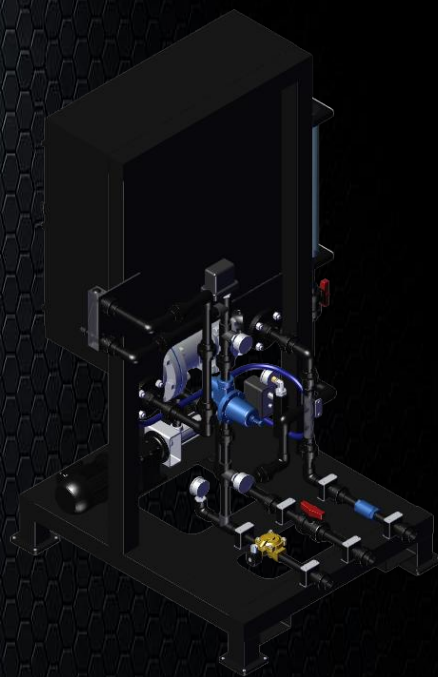
Ghost BLACK™ Overview

The PolyGhost® **Ghost BLACK™** is a manually controlled polymer activation and dosing system designed for facilities that require the performance of the patented Ghost Reactor™ with simple, reliable operation.

Ghost BLACK™ is equipped with a NEMA 4X analog control panel containing dedicated motor controls, analog instrumentation, and operator pushbuttons. All operating parameters are adjusted manually by the operator, allowing complete control over polymer preparation while maintaining a straightforward and maintenance-friendly design.

Polymer dilution is adjusted using a manual dilution water control valve, while polymer feed rate is independently controlled through a 0–100% potentiometer that varies the speed of the progressive cavity metering pump via an integrated Variable Frequency Drive (VFD). A second VFD independently controls the rotational speed of the **Ghost Reactor™** mixing system, allowing operators to optimize the reactor's controllable low-to-high shear activation for different polymer chemistries and process conditions.

To protect both the equipment and the polymer activation process, **Ghost BLACK™** incorporates multiple safety devices and mechanical safeguards. A low dilution water flow switch automatically shuts down the system if insufficient activation water is available, preventing improper polymer hydration. A high-pressure safety switch monitors polymer discharge pressure and automatically stops the metering pump if excessive pressure develops, such as when a polymer injection check valve becomes plugged or restricted.





Ghost BLACK™

The system also includes pressure gauges, isolation valves, check valves, flow control devices, and other industrial mechanical components that provide continuous monitoring, reliable operation, and long service life in demanding municipal and industrial environments.

Powered by the USPTO-patented **Ghost Reactor™** and engineered with Roto Pumps progressive cavity metering technology, **Ghost BLACK™** delivers consistent polymer activation while offering operators complete manual control over dilution, dosing, and mixing performance.

Standard Features

USPTO-patented **Ghost Reactor™** polymer activation chamber
NEMA 4X analog control panel (no PLC or HMI required)

Manual Start/Stop pushbutton controls

Manual dilution water ON/OFF valve

Manual dilution water flow adjustment

Independent VFD for polymer metering pump

Independent VFD for Ghost Reactor™ mixer

Polymer dosing adjustment via 0–100% speed potentiometer

Ghost Reactor™ mixing speed adjustment via 0–100% speed potentiometer

Low dilution water flow shutdown protection

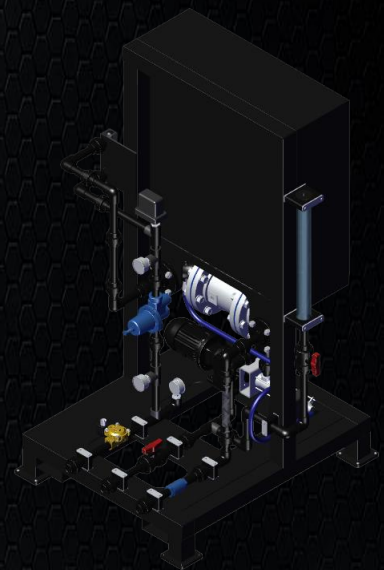
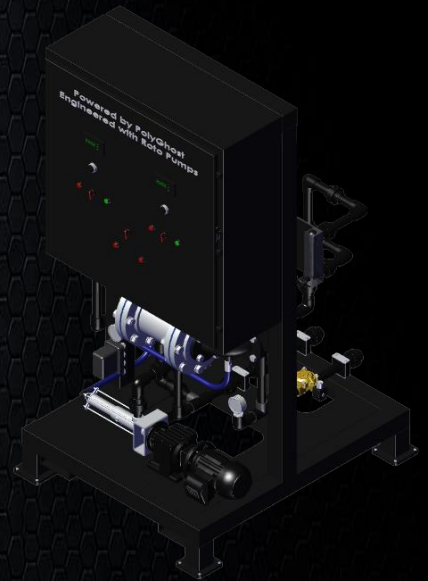
High polymer pressure shutdown protection

Pressure gauges for process monitoring

Industrial check valves, isolation valves, and mechanical protection components

Compact skid-mounted design for simple installation and maintenance

Ghost BLACK™ provides the proven performance of the patented Ghost Reactor™ in a rugged, manually operated platform that gives operators direct control over every stage of the polymer activation process while incorporating essential safety and equipment protection features.





Ghost BLACK™

Model Selection Guide

Ghost BLACK Model	Maximum Dilution Water Capacity	Dewatering Polymer Dosing Range (0.25–0.50%)	Clarification Polymer Dosing Range (0.15–0.30%)
Ghost BLACK-600	10 GPM	0.5 – 3.0 GPH	0.5 – 1.8 GPH
Ghost BLACK-1200	20 GPM	3.0 – 6.0 GPH	1.8 – 3.6 GPH
Ghost BLACK-2400	40 GPM	6.0 – 12.0 GPH	3.6 – 7.2 GPH
Ghost BLACK-3000	50 GPM	7.5 – 15.0 GPH	4.5 – 9.0 GPH
Ghost BLACK-3600	60 GPM	9.0 – 18.0 GPH	5.4 – 10.8 GPH
Ghost BLACK-6000	100 GPM	15.0 – 30.0 GPH	9.0 – 18.0 GPH
Ghost BLACK-12000	200 GPM	30.0 – 60.0 GPH	18.0 – 36.0 GPH
Ghost BLACK-18000	300 GPM	45.0 – 90.0 GPH	27.0 – 54.0 GPH
Ghost BLACK-24000	400 GPM	60.0 – 120.0 GPH	36.0 – 72.0 GPH
Ghost BLACK-30000	500 GPM	75.0 – 150.0 GPH	45.0 – 90.0 GPH
Ghost BLACK-36000	600 GPM	90.0 – 180.0 GPH	54.0 – 108.0 GPH

Order Guide Example:

GB – 3000 + (9 – 18) + S + 120v + 3 PH + 60 Hz + (B)

Ghost BLACK
P-3000

50 GPM
Maximum
Dilution Water

Dosing Pump
Operation
Dosing Range
9 GPH – 18 GPH

S – Single Pump
D – Dual Pump

120 V
230V
460 V

1- Phase
3 - Phase

50 Hz
60 Hz

L – Local Operation
R – Remote Operation
B – Local and Remote



Take Complete Control of Your Polymer.

Activate More. Waste Less. Dewater Better.



Ghost Black™ PLUS+

The Intelligent Polymer Activation System.



GHOST BLACK™ PLUS+ Polymer Activation Skid

Standard Features:

- Fully automated PLC and Touchscreen HMI
- USPTO-patented **Ghost Reactor™** polymer activation technology
- Automatic dilution and concentration control
- Automatic polymer aging and activation management
- Flow-based polymer dosing
- Integrated pressure and flow monitoring
- Automatic flushing and cleaning sequences
- Remote monitoring (SCADA / Ethernet) ready
- Precision metering using Roto Pumps progressive cavity pumps
- Compact skid-mounted, plug-and-play design

Ghost BLACK PLUS+™ combines intelligent automation with patented polymer activation technology to deliver consistent, high-performance polymer preparation with minimal operator intervention.



Roto pumps
since 1968 >>>



Roto Pumps + PolyGhost

**GHOST™
BLACK
PLUS+**

Powered by PolyGhost.
Engineered with Roto Pumps.

A new generation of polymer
activation systems.



Superior
Polymer
Activation



Engineered
Reliability



Compact
Modular
Design



Smart
Control
Technology



Easy
Operation &
Maintenance

PLUS+ FULLY AUTOMATED

- ✓ PLC + Touchscreen HMI
- ✓ Automatic Dilution Control
- ✓ Automatic Concentration Control
- ✓ Automatic Aging Time Control
- ✓ Flow-Based Polymer Dosing
- ✓ Automatic Flush Sequences
- ✓ Pressure & Flow Monitoring
- ✓ Remote Monitoring Ready (SCADA / Ethernet)

GHOST™ REACTOR
High + Controllable
USPTO Patented
Polymer Activation
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INNOVATION THAT WORKS.
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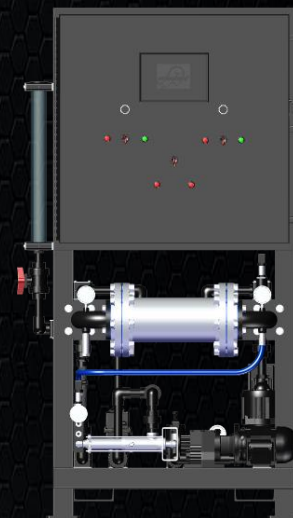
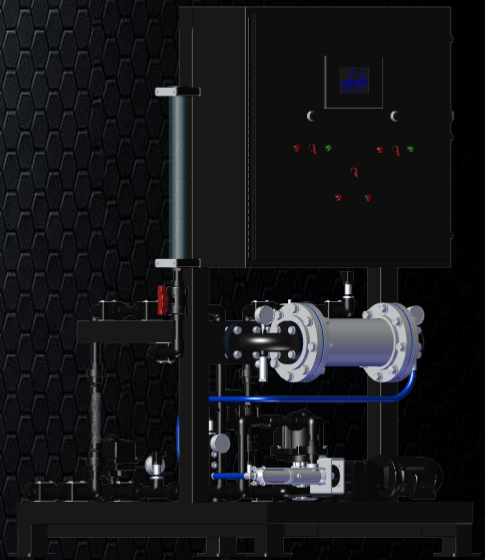
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BUILD FOR MUNICIPAL AND INDUSTRIAL APPLICATIONS.

Ghost BLACK PLUS+™ Overview

The PolyGhost® **Ghost BLACK PLUS+™** is a fully automated polymer activation and dosing system designed to produce consistently activated polymer solutions for municipal and industrial water and wastewater treatment applications. Built around the USPTO-patented **Ghost Reactor™**, the system combines precision polymer metering, advanced hydro-mechanical activation, automatic dilution control, and intelligent PLC automation into a compact skid-mounted package.

Ghost BLACK™ PLUS+



Ghost BLACK PLUS+™ continuously monitors and controls the complete polymer activation process, including dilution water, polymer concentration, aging time, flow rate, pressure, and dosing performance. The integrated touchscreen HMI allows operators to manage all system functions from a single interface while providing automatic sequencing, alarms, diagnostics, and remote SCADA connectivity.

Powered by the patented **Ghost Reactor™** and engineered with Roto Pumps progressive cavity technology, **Ghost BLACK PLUS+™** delivers highly efficient polymer activation, reliable operation, reduced polymer consumption, and exceptional process consistency. Its modular design simplifies installation, minimizes maintenance, and provides a complete plug-and-play solution for sludge dewatering, thickening, clarification, dissolved air flotation (DAF), and other polymer-dependent treatment processes.



Ghost BLACK™ PLUS+



Ghost BLACK PLUS+™ Automation & Control System

The PolyGhost® **Ghost BLACK PLUS+™** integrates advanced PLC-based automation and a touchscreen HMI operator interface to provide complete monitoring and control of the polymer activation process.

The intelligent control system continuously manages the critical operating parameters required to produce a consistent activated polymer solution, including dilution water flow, polymer dosing rate, solution concentration, differential pressure, operating status, and system alarms.

Unlike manual polymer activation systems, **Ghost BLACK PLUS+™** minimizes operator intervention by automatically controlling the activation sequence, monitoring process conditions, and protecting the equipment through integrated safety logic.

PolyGhost® HMI Operator Interface

The integrated touchscreen HMI provides the operator with real-time visualization and control of the complete polymer activation system.

The main operating screen displays:

- **Process**
- **Monitoring**
- **Water Flow (GPH)** Real-time dilution water flow through the system.
- **Polymer Pump Flow (GPH)** Real-time neat polymer dosing flow.
- **Solution Concentration (%)** Instantaneous calculated polymer solution concentration based on water flow and polymer dosing rate.
- **Differential Pressure (DP)** System pressure monitoring across the activation chamber.
- **Pump Flow Setpoints**
- **Adjustable polymer dosing targets.**
- **Automatic Operating Sequence**

The **Ghost BLACK PLUS+™** startup sequence automatically manages the complete activation process:

1. System Ready

The operator selects the desired operating mode through the HMI interface.

2. Dilution Water Activation

The system opens the dilution water control sequence and verifies that proper flow is available. A flow confirmation signal is required before proceeding.

3. Ghost Reactor™ Activation

Once adequate dilution water flow is confirmed, the **Ghost Reactor™** mixing system is activated. The system verifies stable hydraulic conditions before polymer injection begins.

4. Polymer Dosing Control

The selected polymer dosing pump starts according to the programmed flow setpoint.

The HMI displays:

- Polymer flow rate
 - Solution concentration
 - Differential pressure
 - Operating status
- ### 5. Continuous Automatic Operation
- During operation, the system continuously monitors:
 - Water flow
 - Polymer dosing rate
 - Solution concentration
 - Pressure conditions
 - Alarm status

The operator can adjust operating parameters through authorized HMI screens.

Advanced Control Features:
Automatic Concentration Control

The **Ghost BLACK PLUS+™** calculates the final polymer solution concentration by balancing:

Solution Concentration = Water Flow Rate + Polymer Dosing Rate + **Ghost Reactor™** Activation Technology

This allows the operator to achieve consistent polymer activation performance for different applications.

Ghost BLACK™ PLUS+



Alarm & Protection System:
The integrated PLC provides automatic protection against abnormal operating conditions.

- Monitoring includes:
- Low dilution water flow
- High differential pressure
- Polymer dosing faults
- System operating alarms
- Equipment protection sequences
- When an alarm condition occurs, the system can automatically stop operation and notify the operator.
- Manual Override Capability

- For maintenance and troubleshooting, **Ghost BLACK PLUS+™** provides controlled manual operation capability.
- Authorized operators can access:
- Manual mode
- Pump selection
- Flow adjustment
- System diagnostics
- Alarm review
- Input/output monitoring
- Remote Monitoring Ready

The **Ghost BLACK PLUS+™** automation platform is designed for integration with modern plant control systems.

Available communication features include:

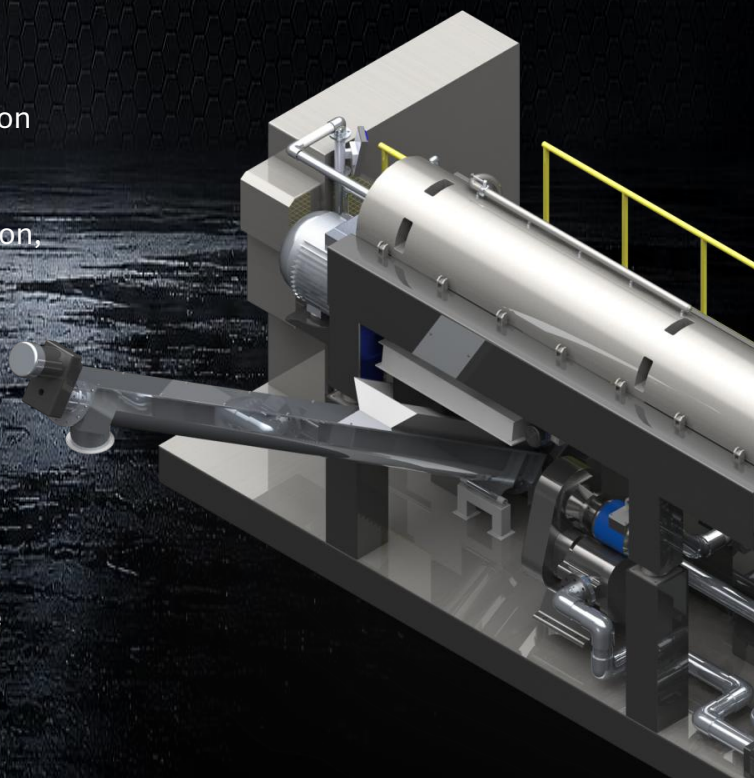
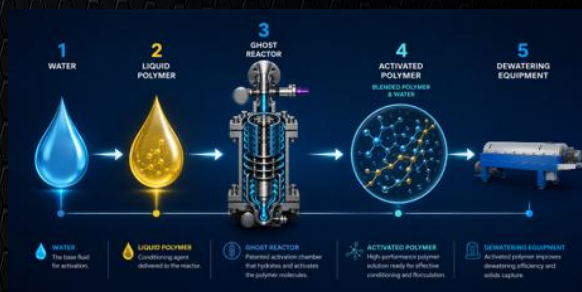
- SCADA integration
- Ethernet communication
- Remote monitoring capability
- Process data visibility
- **Ghost BLACK PLUS+™** Intelligent Polymer Activation

By combining the USPTO-patented Ghost Reactor™, precision polymer metering, and intelligent automation, **Ghost BLACK PLUS+™** provides a complete polymer activation solution designed for:

- ✓ Consistent polymer preparation
- ✓ Reduced operator intervention
- ✓ Improved process reliability
- ✓ Optimized polymer performance
- ✓ Municipal and industrial wastewater applications

Ghost BLACK PLUS+™ Advanced Automation for the Next Generation of Polymer Activation Technology.

Ghost BLACK™ PLUS+



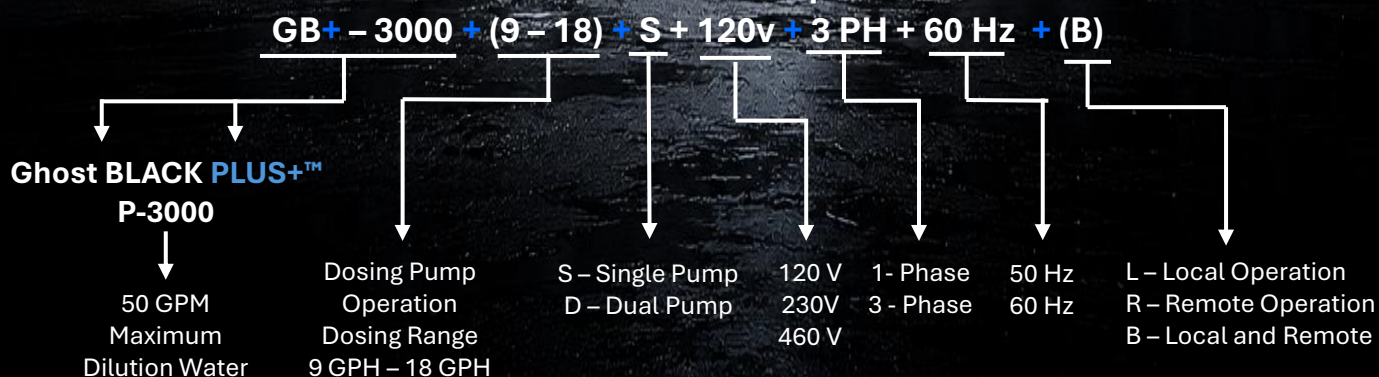


Ghost BLACK PLUS+™

Ghost BLACK PLUS+™ Model Selection Guide

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Ghost BLACK PLUS+™ P-2400	40 GPM	6.0 – 12.0 GPH	3.6 – 7.2 GPH
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Order Guide Example:





Ghost BLACK PLUS+ Model

Selection by Sludge Feed Capacity

Ghost BLACK PLUS+ model	Max. dilution water (GPM)	Approx. maximum sludge feed at 2% solids (GPM)	Approx. maximum dry-solids loading (LBS/HR)	Required neat polymer dosing range at 10–35 lb/DT (GPH)
P-600	10 GPM	Up to 86 GPM	Up to 860 lb/hr	0.52–1.81 GPH
P-1200	20 GPM	Up to 172 GPM	Up to 1,721 lb/hr	1.03–3.61 GPH
P-2400	40 GPM	Up to 344 GPM	Up to 3,442 lb/hr	2.06–7.22 GPH
P-3000	50 GPM	Up to 430 GPM	Up to 4,302 lb/hr	2.58–9.03 GPH
P-3600	60 GPM	Up to 516 GPM	Up to 5,163 lb/hr	3.10–10.83 GPH
P-6000	100 GPM	Up to 860 GPM	Up to 8,604 lb/hr	5.16–18.05 GPH
P-12000	200 GPM	Up to 1,719 GPM	Up to 17,208 lb/hr	10.32–36.11 GPH
P-18000	300 GPM	Up to 2,579 GPM	Up to 25,812 lb/hr	15.47–54.16 GPH
P-24000	400 GPM	Up to 3,439 GPM	Up to 34,416 lb/hr	20.63–72.22 GPH
P-30000	500 GPM	Up to 4,299 GPM	Up to 43,020 lb/hr	25.79–90.27 GPH
P-36000	600 GPM	Up to 5,158 GPM	Up to 51,624 lb/hr	30.95–108.32 GPH

Selection basis:

Capacities are based on sludge feed containing 2% total solids, neat liquid polymer dosages ranging from 10 to 35 lb per dry ton, and preparation of an approximately 0.30% polymer solution. Actual requirements vary according to sludge characteristics, polymer chemistry, desired cake solids, equipment loading, and operating conditions.

For conservative model selection, use the 35 lb/DT dosing condition and select the next larger model when the calculated requirement approaches the maximum capacity.



Technology Comparison

Feature	Conventional High-Speed Mechanical Mixing	Hydraulic Blending Technology	Ghost Reactor™ Technology
Mixing Method	High-speed impeller	Water-pressure blending	Patented submerged activation technology
Typical Drive Power	3 – 10 HP	No motor	0.5 – 1 HP submersible motor
Energy Consumption	High	Low	Ultra-low
Dependence on Water Pressure	No	Yes	No
Consistent Polymer Activation	Moderate	Pressure dependent	Excellent
Polymer Hydration Control	Limited	Limited	Precision controlled
Moving Parts	High	None	Minimal
Mechanical Wear	High	Low	Very Low
Maintenance Requirements	Frequent	Low	Minimal
Installation Flexibility	Moderate	Limited	High
Polymer Savings Potential	Standard	Moderate	Up to 50% demonstrated

Why Lower Horsepower Matters?

Traditional mechanical activation systems rely on large electric motors to generate mixing energy. **Ghost Reactor™** achieves superior activation using a compact 0.5 HP submersible motor, reducing installed horsepower by approximately 90–99% compared with many conventional mechanical activation systems while still delivering exceptional polymer activation performance.

Less horsepower means:

- Lower electrical costs
- Smaller control panels
- Less heat generation
- Reduced maintenance
- Longer equipment life
- Smaller carbon footprint

Why Ghost Reactor™ Is Different

For more than five decades, liquid polymer activation systems have relied on one of two approaches: **high-speed mechanical mixers** or **hydraulic blending chambers that depend on water pressure**.

Ghost Reactor™ introduces a fundamentally different approach.

Instead of relying on large external motors or the kinetic energy of pressurized water, Ghost Reactor™ uses a **patented submerged activation chamber** with an integrated submersible drive to precisely hydrate and activate liquid polymer. The result is a highly activated polymer solution while using a fraction of the energy required by traditional mechanical systems.

Ghost Reactor™ is not simply another polymer activation skid—it is a new generation of activation technology designed to maximize polymer performance while minimizing energy consumption, maintenance, and operating costs.

What Makes Ghost Reactor™ Different?

Patented Submerged Activation Technology

The activation process occurs inside a sealed submerged chamber where polymer hydration is precisely controlled for consistent activation.

Ultra-Low Energy Consumption

Traditional mechanical activation systems commonly use **3–5 HP** motors. **Ghost Reactor™** has demonstrated equivalent activation using as little as **0.5 HP**, reducing energy demand by approximately **90–99%**, depending on the application.

Independent of Water Pressure

Unlike hydraulic blending systems, **Ghost Reactor™** does not rely on high inlet water pressure for proper activation, helping deliver consistent performance even when plant water pressure fluctuates.

Consistent Polymer Activation

Controlled activation produces a more uniform polymer solution, improving floc formation and overall process stability.

Lower Polymer Consumption

Field experience has shown significant reductions in polymer usage when replacing conventional activation technologies. Actual savings depend on sludge characteristics and operating conditions.

Proven Submersible Motor Technology

Ghost Reactor™ uses industrial submersible motor technology that has been proven for decades in demanding applications such as water wells, groundwater pumping, wastewater systems, and fuel transfer.

Fewer Moving Parts

The submerged design reduces exposed rotating components, simplifying maintenance while improving long-term reliability.

The Result

- Lower energy consumption
- Improved polymer activation
- Better floc formation
- Reduced polymer usage
- More consistent dewatering performance
- Lower operating costs
- Higher process reliability

Ghost Reactor™ doesn't simply mix water and polymer, it activates polymer molecules more efficiently, helping every downstream process perform better.

From clarifiers and DAF systems to belt presses, decanter centrifuges, screw presses, and thickening systems, better polymer activation begins with the Ghost Reactor™.

Ghost Reactor™ isn't designed to mix polymer harder.

It's designed to activate polymer smarter.

