



Since  
1987

## ***Projects Portfolio***

Methodology Driven

### **Proven Track Record**

Engineering based, methodology driven Projects Management leading to boosting Infrastructure, Industrial and Innovative Projects Nationwide.

**HelioPower**<sup>®</sup>



Experience  
Matters



## Our Journey

HelioPower Technology began its journey in 1987 with a clear and consistent vision: to elevate the standard of integrated engineering solutions across the region. Over the years,

HelioPower has steadily expanded its client base by investing in skilled resources and advanced technology, while upholding a reputation for reliability and excellence. And maintaining reputation that meets and exceeds our clients expectations.

## HelioPower

Leading Engineering  
Innovation since 1987

HelioPower Technology (HPT) stands as a leading provider of integrated engineering solutions, renowned for driving progress across diverse industrial sectors nationwide. With a strong legacy of expertise, HPT has delivered innovative, reliable technologies in water treatment, process equipment, and customized automation for major public and private clients.

The company's portfolio exemplifies robust engagement in high-impact projects, ranging from municipal infrastructure to complex industrial installations, reflecting HPT's commitment to Engineering excellence, sustainability, and client-focused delivery in regional ever-expanding market.

## Our Partners

Best of Breed Engineering Solutions

**WILDEN**

**ROBUSCH**

**MILTON ROY**

**Elmo  
Rietschie**

**FINISH THOMPSON INC**

**Tuthill**  
PUMP YOUR HEART INTO IT

**Rotadel**  
An Ingersoll Rand Business

**DAVYL**

**BLACOH**  
FLUID CONTROL

# Professional

## Project Management

### Planning Drives Project Success

Every project begins with meticulous planning, detailed risk assessment, and resource alignment—ensuring objectives are clearly defined and achievable from the start.

### Expert Projects Control

HelioPower's certified project managers lead multidisciplinary teams and apply proven methodologies, guaranteeing seamless execution and control at every stage.

### On-Time, On-Budget Delivery

Rigorous oversight and commitment ensure the company consistently delivers engineered solutions that meet client expectations, timelines, and budget requirements.



#### No One Size Fits All

Projects are managed by certified professionals and specialized engineers, enabling seamless coordination, proactive risk mitigation, and effective stakeholder communication throughout complex engagements.



**Commitment,  
expertise, and  
quality in  
every project**



# Projects Consultation

Taking your Dreams to Reality

HelioPower Technology's Engineering Projects Consultancy services embody a comprehensive approach that ensures client project success from concept to completion. Our team excels at assessing client needs in-depth, translating requirements into tailored, innovative solutions designed to optimize both performance and value. Leveraging

advanced design methodologies and rigorous production standards, we deliver robust systems that meet the most demanding industrial challenges. Our expertise extends through every phase—from design and production to implementation and deployment—with a dedication to seamless project integration, timely delivery, and operational reliability.

Most importantly, HelioPower's consultancy assures each client receives professional guidance and support at every step, resulting in successful project outcomes that consistently exceed expectations.



## Peace of mind!

Leverage our services to achieve seamless, efficient, and expertly engineered project solutions tailored to their specific needs.

- Reliability Guaranteed
- Transparent Communication
- Quality Driven Delivery
- Tailored For Your Needs



# Projects

## Project Type

### **PRIMING SYSTEMS**

Removes air from pump casing by creating a vacuum, ensuring reliable start and preventing pump damage. Can be manual, automatic, or air-primed.

### **PNEUMATIC CONVEYING SYSTEMS**

Uses air or vacuum to move bulk powders or granules through a closed pipeline. Can be designed for dilute (continuous, low pressure/high velocity) or dense phase (batch, high pressure/low velocity) transfer

### **POLYMER PREPARATION SYSTEM**

Automated system for preparing and dosing polymer solutions; includes multi-chamber tanks for dilution, maturation, and storage, with automated feeding, mixing, and dosing controls

### **GAS HANDLING SYSTEMS**

Handles movement and evacuation of gas streams using mechanical pumps; suited for vacuum and pressure needs.

### **AEROBIC DIFFUSING SYSTEMS**

Provides needed air via blowers and diffusers to support aerobic biological processes in water/wastewater treatment plants.

### **COMPLETE DOSING SYSTEMS**

Complete dosing system automates precise chemical measurement and injection using pumps, tanks, mixers, and control units to ensure accurate, reliable dosing for optimal industrial process performance.

### **TAILORED ENGINEERING SYSTEMS**

Tailored Engineering Projects at HelioPower Technology begin with collaborative design, leveraging advanced simulation and specification to create custom solutions that integrate pneumatic,

mechanical, and liquid transfer technologies for complex industrial mixing and material handling. Production utilizes precision manufacturing and rigorous quality assurance to assemble solutions such as all-in-one pneumatic systems, mechanical conveyors, liquid and

powder mixing tanks, and intelligent control panels calibrated for each client's unique workflow. Integration is achieved through seamless connection with existing infrastructure and process automation, followed by comprehensive

implementation and deployment including site commissioning, testing, and training. Throughout, robust project management guarantees clear communication, timely delivery, and post-deployment support, ensuring every engineered solution delivers outstanding performance, reliability, and value for complex industrial needs.

# Priming Systems

Start Right First Time

## SYSTEM DESCRIPTION

HelioPower *Priming systems* have played a vital role in many nationwide mega projects by enabling pumps to start instantly and run reliably even when water sources are below the pump, eliminating costly manual procedures and improving project efficiency.

These automatic systems maintain prime on every connected pump, supporting uninterrupted operations and long-term cost savings for large-scale watering, firefighting, irrigation, and industrial fluid transfer applications.

## SYSTEM COMPONENTS

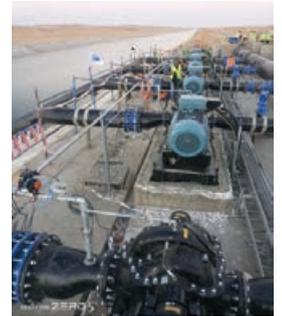
Vacuum Pump,  
Tanks/Priming  
Chamber,  
Control Panel,  
Priming Valve,  
Indicators,  
Sensors,  
Air Primer

## APPLICATIONS

Agriculture, Aquariums, Ballast Systems, Dams, Desalination Plants, Dredging, Emergency Fire Pumps, Fish Hatcheries, Fracking, General Industrial, Marine Industry, Irrigation, Mining, Power Plants, Water Treatment Plants

## ADVANTAGES

- Eliminates manual priming for pumps
- Enables instant, hassle-free pump start-up
- Reduces operational costs and downtime
- Increases overall system reliability
- Supports versatile applications nationwide



# Pneumatic Conveying System

## Moving with Air Power

### SYSTEM DESCRIPTION

HelioPower's *Pneumatic Conveying System* efficiently transports powders, granules, and dry bulk materials through enclosed pipelines using controlled pressure differentials and airflow. Ideal for fine, fluidizable powders, the system offers flexible, reliable, and contamination-free material handling across diverse industrial applications, ensuring seamless integration and optimized process performance.

Both pressure and vacuum systems can be configured in dilute or dense modes depending on material characteristics and process requirements.

### SYSTEM COMPONENTS

- Air mover (blower or vacuum pump)
- Material feed device (rotary airlock valve or feeder)
- Conveying line (pipes, elbows, diverters)
- Air-material separator (cyclone separator, filter receiver)
- Storage vessels (silos, bins, hoppers)
- Control and monitoring system (valves, sensors, PLC)
- Dust collector and venting components

### ADVANTAGES

- Enclosed system minimizes dust and spillage
- Reduced maintenance due to fewer moving parts
- Flexible routing for complex plant layouts
- Safe, contamination-free material handling
- Customizable design for diverse industrial needs

### APPLICATIONS

Many different powders can be moved using pneumatic conveying. These include flour, cement powder, carbon black, carbon steel, sugar, and plastic pellets. It also works for small food particles, tablets, fine sands, metal powders, excipients and APIs, and more.



# Complete Dosing System

Precise and Accurate

## SYSTEM DESCRIPTION

Our pre-engineered chemical dosing skids deliver reliable water and wastewater treatment with rapid delivery. Built with Milton Roy metering pumps, each system ensures accuracy and reliability with dual pump configurations (duty/standby), integrated piping, valves, calibration column, and optional control panel.

Designed for sodium hypochlorite and a wide range of treatment chemicals, DOSASKID™ combines robust construction with plug-and-play simplicity for consistent performance and reduced downtime.

## SYSTEM COMPONENTS

- Dosing pumps
- Skids
- Pulsation dampener
- Back pressure valve
- Pressure relief valve
- Calibration column
- Pressure gauges
- Chemical storage tank
- Injection valve/injection points
- Control panel/system
- Pipework and fittings
- Safety systems (alarms, sensors)
- Filters/strainers
- Other Gauges

## ADVANTAGES

- Fast and reliable dosing
- Easy installation and operation
- Precise chemical control
- Low maintenance needs
- Flexible for various chemicals

## APPLICATIONS

Water Pollution Control, purification, treatment and/or chlorination, PH balancing, Wastewater Management, Acid Water Neutralization  
Hydroponic Nutrient Treatment, Liquid Fertilizer Treatment Environment, Mining and minerals  
New energies , Mechanical engineering, Pulp and paper, Chemicals



# Polymer Preparation System

Mixing Innovation with Polymer Precision

## SYSTEM DESCRIPTION

HelioPower's POLYPACK is an automated, compact polymer preparation system designed for consistent flocculant concentration and efficient maturation in minimal space. It uses an ultrasonic level switch to feed the process as needed, ensuring continuous, uniform polymer preparation with optimized mixing and maturation cycles.

This system reduces manual intervention and prevents dosing errors, delivering reliable and high-quality polymer solutions for effective solid-liquid separation.

## SYSTEM COMPONENTS

- Main Tanks (Preparation,- Maturation, Dosing)
- Dry feeder
- Water supply system (shut-off valve, solenoid valve, pressure reducer)
- Mixers/agitators
- Level switch
- Overflow channels/valves
- Control panel/system
- Flow meters
- Pressure gauges
- Powder funnel
- Safety level switches
- Dosing pumps (external but integrated)
- Calibration system

## ADVANTAGES

- Consistent, high-quality polymer solutions
- Automated operation reduces manual labor
- Compact design saves plant space
- Optimized dosing improves separation efficiency
- Reliable performance for diverse applications

## APPLICATIONS

**Industrial and potable water treatment:** Efficient flocculation for improved clarification.

**Wastewater treatment:** Enhanced physico-chemical separation processes.

**Sludge management:** Optimizes dewatering performance in centrifuges and filter presses.

**Paper industry:** Serves as a retention agent for better paper quality and process efficiency.

**Other sectors:** Reliable polymer dosing for chemical, petrochemical, mining, and quarry operations.



Polypropylene (PPH)



Stainless steel (304L or 316L)



# Gas Handling System

Safe, Reliable, and Clean Gas Solutions

## SYSTEM DESCRIPTION

HelioPower's Gas Handling System delivers tailored, safe, and efficient gas management solutions. Our expert engineers design, install, and maintain custom systems that seamlessly integrate with your operations, optimizing gas flow, pressure, and safety. Partner with us for reliable, high-performance gas handling that drives your industrial success.

With comprehensive support from design to validation, we ensure your system's longevity and compliance. Experience peace of mind and operational excellence with HelioPower—your trusted gas handling partner.

## SYSTEM COMPONENTS

Vacuum System (Liquid Ring Pump, Rotary Lobe Pump, or Side Vane Pump)  
Gas filters/strainers  
Pressure regulators  
Valves (isolation, control, relief)  
Gas dryers/dehydrators  
Gas storage tanks or receivers  
Piping and tubing  
Gas analyzers and sensors  
Control panels  
Safety devices & valves

## ADVANTAGES

- Customized design tailored to specific operational needs
- Enhanced safety through integrated controls and monitoring
- Reliable and efficient gas flow and pressure management
- Comprehensive support from installation to validation
- Long-term performance with expert maintenance and service

## APPLICATIONS

Hospitals, Pharmaceutical Manufacturing  
Research Laboratories  
Electronics Manufacturing  
Food & Beverage Production  
Chemical Processing



# Aeration System

Efficient Air, Enhanced Water

## SYSTEM DESCRIPTION

HelioPower's Aeration systems provide a cost-effective way to improve water treatment by oxidizing iron, manganese, and removing gases like hydrogen sulfide, carbon dioxide, methane, and VOCs. By introducing air, they enhance process performance, water quality, and eliminate unpleasant odors and tastes.

Systems include blowers, diffusers, manifolds, and controls to ensure optimal oxygen transfer and mixing. Widely used in industrial, drinking water, and wastewater treatment, aeration boosts clarity, reduces contaminants, and improves overall efficiency.

## SYSTEM COMPONENTS

- Blowers or compressors
- Diffusers (fine bubble or coarse bubble)
- Aeration tanks or basins
- Piping and manifolds
- Control valves and dampers
- Oxygen sensors and controllers
- Mixing devices or mixers
- Instrumentation and control panels
- Air filters and silencers
- Safety devices (pressure relief valves, alarms)

## ADVANTAGES

- Energy-efficient operation
- Enhanced water treatment performance
- Reduces chemical use
- Improves water quality and clarity
- Reliable and easy maintenance

## APPLICATIONS

- Industrial water treatment
- Drinking water treatment
- Wastewater treatment
- Sludge treatment
- Aquaculture and reservoirs
- Surface water pretreatment
- Odor control in water processing



# Tailored Engineering Systems

Custom Designs, Optimal Results

## SYSTEM DESCRIPTION

HelioPower's Tailored Engineering Systems deliver expert-designed, high-quality solutions customized to meet your unique needs. Utilizing pneumatic all-in-one designs, mechanical transfer equipment, liquid transfer/weighing/mixing components, powder mix tanks, and integrated control panels, we ensure seamless system integration and optimal performance for diverse industrial applications.

Our engineering excellence ensures seamless integration and optimal performance across diverse industrial applications

## SYSTEM COMPONENTS

Pneumatic all-in-one designs

Mechanical transfer equipment

Liquid transfer, weighing, and mixing components

Gas Management & Handling equipment.

Powder mix tanks

Integrated control panels

## ADVANTAGES

- Comprehensive, one-stop engineering solutions
- Customized designs for specific operational needs
- Seamless integration of mechanical, pneumatic, and control components
- Expert support from design to installation and maintenance
- Enhanced system reliability and operational efficiency

## APPLICATIONS

Industrial process automation  
Chemical dosing and mixing  
Material handling and transfer  
Water and wastewater treatment  
Powder and liquid blending  
Custom pneumatic systems  
Integrated control system solutions





# HelioPower®

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