Solutions for Water and Wastewater Industries

Fluid Metering Solutions Made Simple®

Blue-White®

Blue-White®

COMPANY HISTORY

Company Founder, Ozzie King & Truck

Blue-White® Industries' founder, Ozzie King (October 17, 1909 – August 11, 1998) was a true Pool Industry pioneer. In the late forties he became a successful pool builder and inventor, operating as King Blue-White Pools. In 1957, he switched the focus of the company from building to manufacturing and incorporated Blue-White Industries. In the early years of the industry, products that we now take for granted were simply not available. Ozzie King had the foresight to see what types of products were needed, and the skill to manufacture these products. He was awarded a patent on the Weir Gate Skimmer, which greatly reduced pool construction costs, and effectively cleaned pool water surfaces. This was the most important invention in the pool industry. In addition to the Weir Gate Skimmer, Ozzie developed the underwater pool light (the first underwater light approved by the City of Los Angeles), DE and Sand Filters, Air Gaps, chlorinators, and flowmeters. His F-300 Series flowmeter became the Pool Industry standard. This ingenious meter, which installs in just minutes, enables users to accurately determine actual flow rate in their pool's plumbing system. Health Departments now mandate flowmeters on all public and semi-public pools. In addition, he developed two great Chlorinators, the CHEM-FEED® C-600P, and the FLEXFLO® A-100, for which he was awarded a patent on the pump tube design. Ozzie's contributions to the Industry, both in building design and innovation, and product development and invention, are unequaled. Today Blue-White® Industries is still run by the King family.

Company Founder, Ozzie King. circa 1923

Blue-White®

MUNICIPAL PROCESS MARKETS AND APPLICATIONS:

- **Municipal Water Treatment**
- **Municipal Wastewater Treatment**
- **Chemical Injection**
- **Chlorination**
- **Chloramination**
- **Fluoridation**
- **Pac Injection**
- **Acid Injection**
- **Caustic Injection**
- **Alum Injection**

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FLEXFLO® PERISTALTIC METERING PUMPS

Blue-White's FLEXFLO® Series of Peristaltic Metering Pump are designed to dose precise amount of chemical and FLEXFLO® pumps will not experience vapor lock or loss of prime. Each pump comes with built in Tube Failure Detection, which will prevent dangerous chemical spills and downtime.

M5 is all inclusive with motor, controls, and connections all housed in one protective enclosure.

- Capable of outputs 9 gallons per minute/ 534 gallons per hour at only 75 RPM motor speed.
- Up to 80% reduced pulsation due to exclusive offset roller design and dual-channel tube assembly.
- .0076-534 GPH (.0286-2021 LPH)
- 65 PSI (4.4 bar)

M4 has smooth, dependable, feed for applications that require high volume chemical dosing requirements.

- 5" touchscreen display, IP rated M12 connection parts, and advanced communication protocols.
- .0028-158.5 GPH (.0108-600 LPH)
- 125 PSI (8.6 bar)

M3 features a bright and responsive 5" display screen that can be used with or without gloves.

- 5" touchscreen display, IP rated M12 connection parts, and advanced communication protocols.
- .0002-33.3 GPH (.0007-126 LPH)
- 125 PSI (8.6 bar)

M2 is designed to handle the demands of a wide range of chemical injection volumes.

- Self-priming even against max line pressure and by-pass valves are not required.
- .0085–21.23 GPH (.032–80.4 LPH)
- 125 PSI (8.6 bar)

M1 is easy to work with and simple to maintain with smooth chemical feed that will not vapor lock.

- Standardize on one pump with the wide feed range.
- .0001–5.6 GPH (.0004-21.2 LPH)
- 100 PSI (6.9 bar)

Blue-White®

FLEXFLO® PERISTALTIC METERING PUMPS

Choose the FLEXFLO® Capabilities Your Application Requires:

	M1	M2	M3	M4	M5
Flow Output Range	.0001–5.60 GPH (.004–21.2 LPH)	.0085–21.23 GPH (.032–80.4 LPH)	.0002–33.3 GPH (.0007–126 LPH)	.0028–158.5 GPH (.0108–600 LPH)	.0076–534 GPH (.0286–2021 LPH)
Turndown	10,000:1	200:1	10,000:1		
PSI	100 PSI (6.89 bar)	125 PSI (8.6 bar)			65 PSI (4.4 bar)
Warranty	5 YEAR				
Variable Speed DC Motor	BRUSHLESS	BRUSH	BRUSHLESS		
TFD (Pat.#7,001,153 and 7,284,964)	✓	✓	✓	✓	✓
Motor Reverse	■	✓	✓	✓	✓
Tube Info Button	■	TIMER	REVOLUTION COUNTER & TIMER		
Input: Remote Start/Stop	✓	✓	✓	✓	✓
Input: 4-20mA	✓	✓	✓	✓	✓
Input: Frequency (Pulsed)	■	✓	✓	✓	✓
Output: Relay & CC	✓	✓	✓	✓	✓
Output: 4-20mA	✓	✓	✓	✓	✓
Output: Pulse	■	■	✓	✓	✓
Password Protect (PIN)	■	■	✓	✓	✓
Ethernet/IP™	■	■	✓	✓	✓
Profibus	■	■	✓	✓	✓
Modbus-TCP	■	■	✓	✓	✓
NSF 61 Listed	✓	✓	✓	✓	✓

FLEXFLO® PERISTALTIC PUMPS have smooth, quiet pumping action and deliver accurate amounts of chemical to your system. Four FLEXFLO® models are offered featuring a broad range of output rates, electronics options and features. If you don't see the FLEXFLO® pump that meets your system requirements, please contact the factory. Blue-White® specializes in meeting OEM requirements.

FLEXFLO® APPLICATIONS INCLUDE

Municipal Water Treatment
Municipal Wastewater Treatment
Chemical Injection
Chlorination
Chloramination
Fluoridation
Pac Injection
Acid Injection
Caustic Injection
Alum Injection

Blue-White®

CHEM-FEED®
MULTI-DIAPHRAGM METERING PUMPS

CHEM-FEED® MD3

CHEM-FEED® MD1

Exclusive Hyperlink Drive Technology allows for smooth chemical feed. The Dual-Diaphragm Pumps with full stroke technology will not lose prime and minimize vapor lock with off-gassing chemicals such as Peracetic Acid and Sodium Hypochlorite.

MD3

- .03-52.6 GPH (.10-199 LPH)
- 145 PSI (10 bar)

MD1

- .0007-7.0 GPH (.0026-26.46 LPH)
- 180 PSI (12bar)

CHEM-FEED®
DIAPHRAGM METERING PUMPS

CHEM-FEED® C3

CHEM-FEED® Single Diaphragm Metering Pumps ensure precision chemical feed while providing excellent chemical resistance and dependable service.

C3

- .3-40 GPH (.1-.154 LPH)
- 150 PSI (10.3 bar)

C2

- .02-16.5 GPH (.09-62.5 LPH)
- 175 PSI (12 bar)

CHEM-FEED® C2

Blue-White®

CHEM-FEED® DIAPHRAGM METERING PUMPS

Choose the CHEM-FEED® Capabilities Your Application Requires:

	C2	C3	MD1	MD3
Flow Output Range	.02–16.5 GPH (.09–62.5 LPH)	.3–40 GPH (.1–.154 LPH)	.0007–7.0 GPH (.0026–26.46 LPH)	.03–52.6 GPH (.10–199 LPH)
Turndown	100:1	100:1	10,000:1	1,000:1
PSI	175 PSI (12.0 bar)	150 PSI (10.3 bar)	180 PSI (12.4 bar)	145 PSI (10.0 bar)
Warranty	2 YEAR		5 YEAR	
Variable Speed DC Motor	BRUSH	BRUSH	BRUSHLESS	
Dia-Flex® PVDF Single-layer Diaphragm	✓	✓	✓	✓
DFD (Diaphragm Failure Detection)	✓	✓	✓	✓
Protective LCD Snap-on Cover	✓	✓	✓	■
Input: Remote Start/Stop	✓	✓	✓	✓
Input: 4-20mA	✓	✓	✓	✓
Input: Frequency (Pulsed)	✓	✓	■	✓
Output: 4-20mA	✓	✓	✓	✓
Advanced Communications	■	■	■	✓
Password Protect (PIN)	■	■	LOCKOUT BUTTON	✓
NEMA 4X Enclosure	✓	✓	✓	✓
NSF/ANSI 61	✓	✓	✓	✓

CHEM-FEED® DIAPHRAGM METERING PUMPS provide superior chemical resistance, precision chemical metering capabilities, and are designed to provide excellent service in a wide range of applications.

CHEM-FEED® APPLICATIONS INCLUDE

Chemical Metering
Chlorination
Chloramination
Fluoridation
Polymer Injection
Oil Based Fluids
Gaseous Fluids
Shear Sensitive Fluids
Caustics
Chemical Slurries
Coagulation
De-Chlorination
Corrosion Inhibitors

Blue-White®'s CO_2 FEED SYSTEM

The CO_2 Feed System is a safe and effective way to adjust pH and minimize risk associated with dangerous mineral acids. The 0-100% scaled flowmeter has an integral adjustment needle valve for increased accuracy.

Additional benefits of the CO_2 Feed System include NEMA 4X enclosure, illuminated on/off switch, a flow setpoint indicator, stainless steel solenoid valve, and simple push-tight tubing connectors.

The CO_2 Feeder is an affordable and reliable system that is simple to use and adjust.

Blue-White®

CHEM-FEED® ENGINEERED SKID SYSTEMS

CHEM-FEED® Simplex, Duplex, and Triplex Plastic Skid System

The lightweight Plastic Skid Systems are equipped with all necessary components for hassle-free ordering and drop-in-place installation. The durable plastic skids feature rugged, chemical resistant Polyethylene construction with single, duplex, and triplex configurations offered.

CHEM-FEED® Simplex and Duplex Wall Skids

Piping options such as, PVC, CPVC, PVDF, and Chem Proline® (PE), for the Wall Mount Skid System make it strong and lightweight. The skid systems are chemical resistant, solvent or fusion welded for strength, and designed for small spaces.

CHEM-FEED® Simplex and Duplex Compact Plastic Skid Systems

The CHEM-FEED® engineered skid system is ideal for small spaces with a condensed design and compact footprint. The skid is constructed of strong and lightweight chemical and UV-resistant polyethylene. It is shipped fully assembled, with leak-free threadless connections and a built-in fluid containment tray.

Blue-White®

CHEM-FEED® SKID SYSTEMS

Choose the SKID SYSTEM Capabilities Your Application Requires:

	CFPS CHEM-FEED® Plastic Skid System	CFCS CHEM-FEED® Compact Skid System	CFWS CHEM-FEED® Wall Mount Skid System
System Type	SINGLE, DOUBLE, AND TRIPLE PUMP SYSTEMS	SINGLE AND DOUBLE PUMP SYSTEMS	
Frame Material	POLYETHYLENE		
Pipe Material Options	PVC, CPVC, PVDF, CHEM PROLINE (PE), 316SS	PVC, CPVC, 316SS	PVC, CPVC, PVDF, CHEM PROLINE (PE), 316SS
Mounting Position	FLOOR OR WALL	FLOOR OR WALL	WALL
PSI	150	150	150
Bar	10.3	10.3	10.3
Flow Indicator	✓	✓	✓
Calibration Cylinder	✓	✓	✓
Inlet Y Strainer	✓	✓	✓
Pulsation Dampener	OPTIONAL	OPTIONAL	OPTIONAL
Pressure Gauge with Guard	OPTIONAL	OPTIONAL	OPTIONAL
MS6 Chemical Flow Meter	OPTIONAL	■	OPTIONAL
Terminal Box	OPTIONAL	OPTIONAL	OPTIONAL
Drip Containment	✓	✓	■

SONIC-PRO® MS6 ULTRASONIC FLOW METERS

The MS6 Ultrasonic Flow Meter accurately measures chemical feed from your chemical metering pump using the latest Ultrasonic technology. The expertly engineered design offers a wide flow range from 10 to 10,000 ml/min and has a low pressure drop of less than 1 PSI.

Blue-White®

EXCLUSIVE PATENTED PARTS & ACCESSORIES

Flex-A-Prene®
Heavy-Duty Peristaltic Pump Tubing

Flex-A-Prene® is our single and multi-channel pump tube assembly designed by Blue-White® exclusively for FLEXFLO® Peristaltic Dosing Pumps. Flex-A-Prene® is engineered for optimum performance, including up to four times longer service than other pump tube assemblies.

Exclusive Diaphragms

Blue-White's PVDF diaphragms, used in our CHEM-FEED® Diaphragm type Chemical Metering Pumps, are manufactured in our factory to ensure a quality product. DiaFlex® features an innovative single layer design that exhibits zero breakdown or delamination. DiaFlex® is designed to last the life of the pump which greatly reduces downtime and maintenance.

The PVDF composition of both the pump head itself and the diaphragm ensures excellent chemical compatibility. DiaFlex® is available in three sizes to accommodate varying flow rates.

Quick Disconnect Fittings for Chemical Feed Pumps

Blue-White's Quick Disconnect Fittings can stop chemicals from pouring or spraying from your pump during maintenance. These Quick disconnect fittings are a toolless and quick way to disconnect a metering pump that will save time and money.

Star Tanks

The Star System Complete Metering System is available in 7, 15, and 30 gallons. The Star Systems have an easy fill lid with three lid positions: open, closed and vented. The compact and efficient tanks are constructed of natural polyethylene with U.V. inhibitors, and 0.30" thick walls for stability, strength and superior chemical resistance.

Foot Valves/ Injector Fittings

Foot Valves are used with all Blue-White® diaphragm pumps. The Foot Valve with Filter Strainer prevents loss of prime, and also restricts larger particles from entering into the metering pump, helping to avoid clogs. Injection fittings allow injection directly into piping and also act as a check valve.

Blue-White®

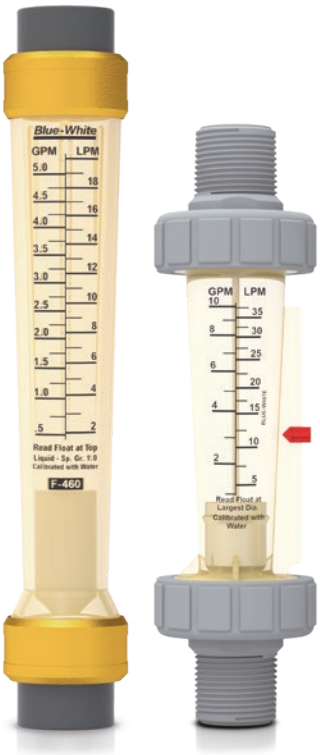
VARIABLE AREA FLOW METERS

Acrylic Variable Area Flow Meters

Acrylic Variable Area Flow Meters are durable, highly polished, one piece meter bodies annealed for strength and chemical resistance and are suitable for direct sunlight. Great for dependable flow monitoring.

Polysulfone Variable Area Flow Meters

Polysulfone Variable Area Molded Flow Meters resists high temperatures and pressures. Models available with no metal in the fluid path for use in UltraPure applications or ideal for corrosive environments such as Deionized Water applications.



Blue-White®

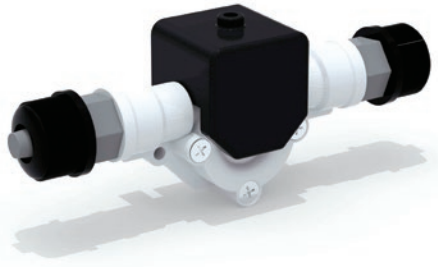
BW DIGI-METER® PADDLEWHEEL FLOW METERS

BW DIGI-METER® F-1000 and F-2000 Paddlewheel Flow Meters

The F-1000 and F-2000 Flow Meters are accurate, easy to install, and easy to operate. The F-1000 Flow Meter is sensor mounted on a pipe fitting and battery operated. The F-2000 has sensor, pipe, panel, or wall mount options available and are AC/DC transformer or battery operated (RT models only).

BW DIGI-METER® MICRO-FLO Paddlewheel Flow Sensor

The Micro-Flo Flow Sensor is accurate for monitoring low-flow monitoring applications. Be certain your pump is pumping and quickly detect an empty chemical tank, a clogged injection fitting, lost prime, and other problems that can prevent a metering pump from injecting chemical even know the pump is in good working condition.

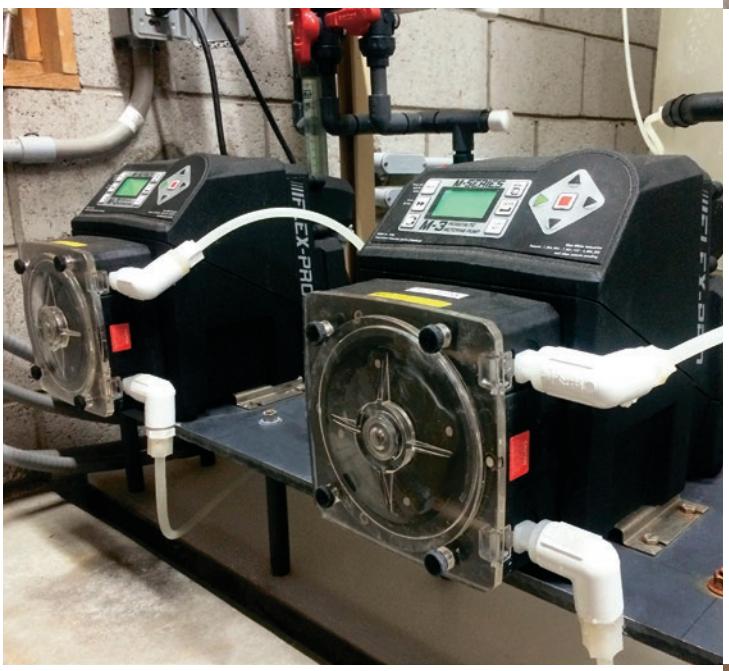


Blue-White®

CASE STUDIES

Dual Diaphragm Pump Used for ALUM Dosing

Suez Water Treatment Plant was successfully using peristaltic FLEXFLO® M3 peristaltic metering pumps to inject various chemicals into their water system. However, the amount of pressure needed to inject ALUM was too high to inject with peristaltic pumps and caused decreased tube life and increased maintenance. CHEM-FEED® MD3 dual diaphragm chemical metering pumps proved to be a good solution in this high pressure application. Suez Water was able to achieve the same smooth flow with and no need for replacement tubes.

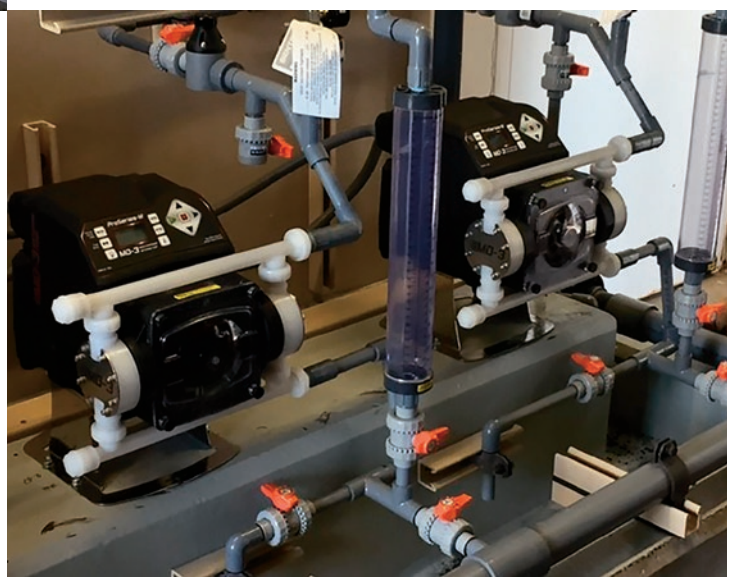


Challenging Groundwater Chemical Treatment Resolved

Mammoth Community Water District obtains the towns' drinking water from nine wells and fresh water from Lake Mary. The Arsenic present in the well water needed to be removed using sodium hypochlorite and ferric chloride. The solenoid pump originally used would require constant maintenance due to excess gas accumulation causing vapor lock. By switching to FLEXLO® M3 peristatic metering pumps, the Water District achieved smooth, accurate, and constant flow with no potential for vapor lock and did not lose prime.

Money Saving Solution for Marine Corps Base Application

A Marine Corps Base located in Southern California maintains a self-sustaining water supply and sewage treatment plant to serve a population of 70,000. The Camp had been using four single diaphragm metering pumps to inject sodium hypochlorite into their finished potable water to pre and post-chlorinate the drinking water for the base. The hypochlorite was causing vapor lock and the pump would lose prime. The solution was to switch to the CHEM-FEED® MD3 dual diaphragm pumps. When the first diaphragm is in the suction phase, the second diaphragm is in the discharge phase, so the chemical feed is in a near continuous flow preventing gas build up and loss of prime.



Fluid Metering Solutions Made Simple®

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Made in USA

Blue-White® is **ISO 9001:2015 CERTIFIED**