



Expert
Solutions
for Critical
Applications

BRAND
Portfolio



Where Innovation Flows.

www.neptune1.com

HYDRAULIC METERING PUMPS
MECHANICAL METERING PUMPS
ELECTRONIC METERING PUMPS
PORTABLE MIXERS
POLYMER BLENDING SYSTEMS



Dover's **Pump Solutions Group (PSG®)**, a global leader in positive displacement pump and supporting technologies, delivers value-added pumps and systems that serve customers requiring the safe and efficient transfer of critical and valuable materials. PSG features world-class pump brands and has multiple facilities on three continents (North America, Europe and Asia) that are ISO certified. We are passionately committed to innovative technologies that will positively impact the world. Our priority is providing the market expertise you need by delivering tomorrow's innovative fluid and material transfer solutions today.

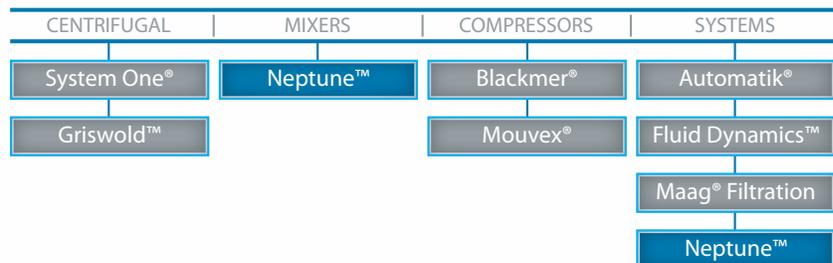
Where Innovation Flows.

POSITIVE DISPLACEMENT PUMPS



PSG® Technologies:

PUMPS & SYSTEMS TECHNOLOGIES





Who We Are

HYDRAULIC, MECHANICAL,
ELECTRONIC METERING
PUMPS

PORTABLE MIXERS

POLYMER BLENDING
SYSTEMS

Neptune®, part of Pump Solutions Group (PSG®), is a premier manufacturer of diaphragm metering pumps, chemical feed systems, mixers and chemical injection accessories. Since 1961, Neptune has been delivering accuracy, precision and quality for a variety of industries, including power generation, oil and gas exploration, petrochemical and irrigation.



North Wales, Pennsylvania (USA) – North Wales, Pennsylvania (USA) represents one of many PSG locations where innovation flows. This 100,000 square-foot, state-of-the-art facility is where Neptune Chemical Pump Company, Neptune Mixer Company and Fluid Dynamics™ call home. Neptune also has representation and distributors worldwide.

Where Innovation Flows

Innovation flows through everything we do at Neptune – ensuring our chemical injection, chemical feed, mixing and metering pump solutions meet the highest standard. Our hydraulic and mechanical diaphragm metering pumps are well-known worldwide for injecting chemicals into boilers and cooling towers, as well as in water and wastewater treatment applications. Our portable mixers and polymer blending systems deliver the highest level of precision, reliability, accuracy and quality that our customers demand.

Experts Assist in Metering Pump Selection

Neptune Chemical Pump Company has a metering pump solution to meet any challenge. There are many factors to consider when selecting the correct metering pump, such as materials of construction. You must also consider corrosion, erosion or solvent action, as well as required flow rate and discharge pressure. At Neptune, we have engineering and sales professionals dedicated to helping you select the correct metering pump to meet your unique needs. Trust your needs to the trusted leader in precision and quality.

MARKETS SERVED

AGRICULTURE

Neptune provides an important role in precise injection of fertilizers and pesticides to center pivot and drip tape irrigation systems for food and other crops as well as turf, ornamental and sports fields.

Typical Applications Handled:

- Fertigation – Fertilizer
- Chemigation – Fungicides, herbicides and pesticides

ENERGY

Neptune manufactures the most precise, environmentally friendly pumps and mixing equipment to help end-users meet their challenging energy efficiency demands.

Typical Applications Handled:

- Power Generation – Water cycle chemical treatments including pre-treatment, boiler, cooling tower and waste water
- Oil and Gas – Drilling, Pipeline and Refinery chemical addition

PROCESS

If you are looking for the most precise, accurate and reliable metering pump solutions covering the full process industry spectrum, look no further than Neptune.

Typical Applications Handled:

- Chemical Process – Catalysts and other process chemicals along with process water treatment
- Mining – Flotation reagents, leaching, depressants, PH adjustment and other chemicals
- Petrochemical – Demulsifiers, Catalysts, PH control and other process chemicals
- Pulp and Paper – Additives for pulp production, paper recycling and process water treatment.

WATER/WASTEWATER

Neptune plays a critical role in the handling and transferring of chemicals used in municipal and industrial water and wastewater treatment plants.

Typical Applications Handled:

- Industrial Water Treatment – Boiler, cooling tower and waste water treatment.
- Municipal Water and Waste Water Treatment – Disinfection, PH control, coagulation, odor and color control and others.



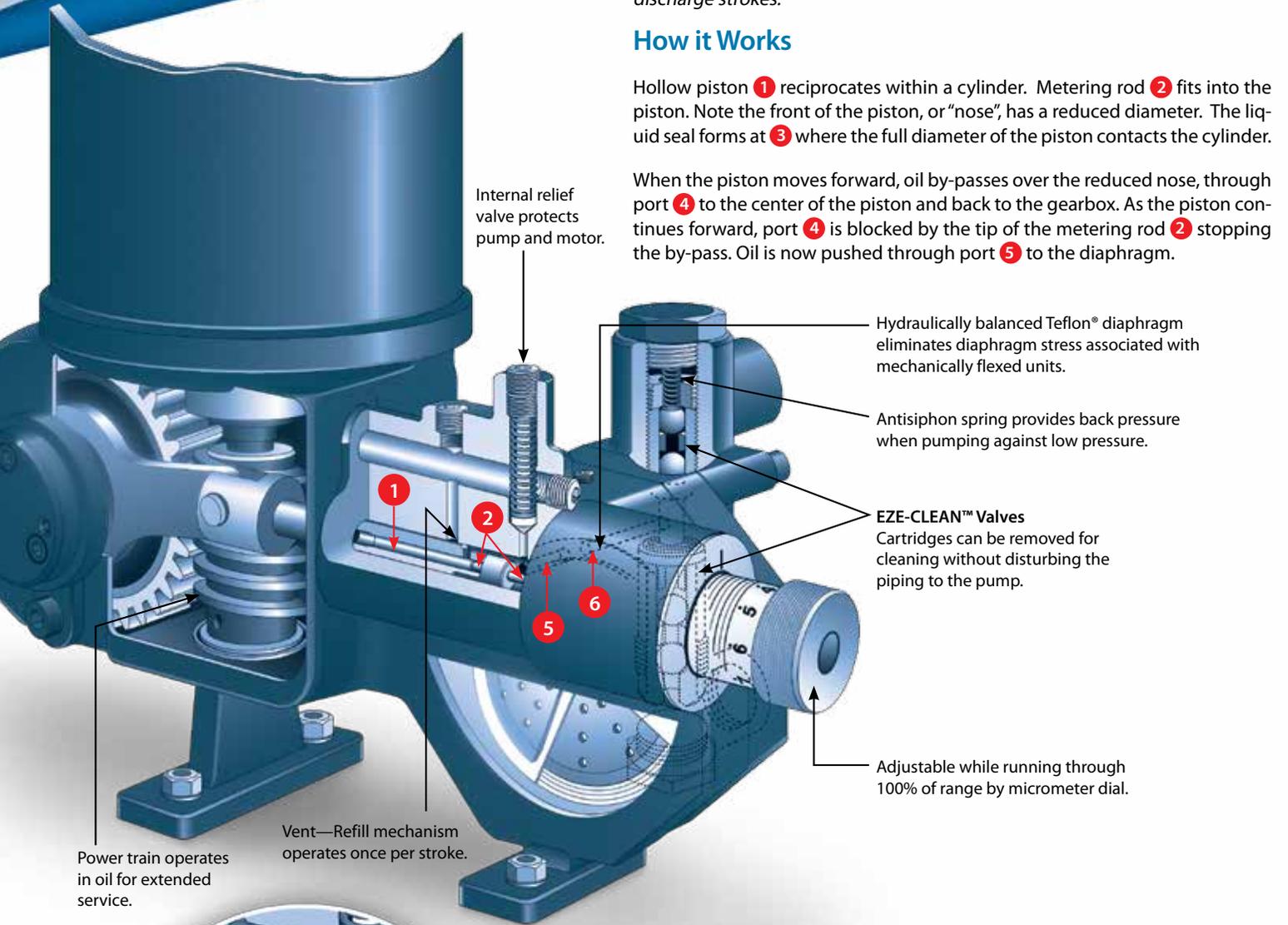


Variable Oil By-pass™ stroke adjustment allows better valve performance than variable linkage designs. *The valve checks have extra time to seat even in viscous liquids since they are idle during the by-pass portion of the suction and discharge strokes.*

How it Works

Hollow piston **1** reciprocates within a cylinder. Metering rod **2** fits into the piston. Note the front of the piston, or “nose”, has a reduced diameter. The liquid seal forms at **3** where the full diameter of the piston contacts the cylinder.

When the piston moves forward, oil by-passes over the reduced nose, through port **4** to the center of the piston and back to the gearbox. As the piston continues forward, port **4** is blocked by the tip of the metering rod **2** stopping the by-pass. Oil is now pushed through port **5** to the diaphragm.



Internal relief valve protects pump and motor.

Hydraulically balanced Teflon® diaphragm eliminates diaphragm stress associated with mechanically flexed units.

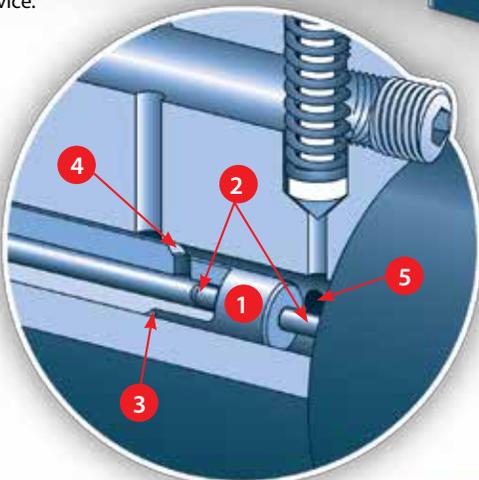
Antisiphon spring provides back pressure when pumping against low pressure.

EZE-CLEAN™ Valves
Cartridges can be removed for cleaning without disturbing the piping to the pump.

Adjustable while running through 100% of range by micrometer dial.

Power train operates in oil for extended service.

Vent—Refill mechanism operates once per stroke.



Turning the micrometer dial moves the metering rod and changes the pump capacity. When the metering rod is moved in, the tip of the metering rod closes port **4** sooner in the stroke allowing for less by-pass and more pumping action. Likewise, when the metering rod is moved out, the tip of the metering rod closes port **4** later in the stroke allowing more by-pass and less pumping.

The motion of the piston pushes and pulls the hydraulic fluid through port **5**, into and out of the diaphragm chamber. The action of the fluid pushes and pulls the diaphragm which, in turn, pushes and pulls chemical through port **6**. The action of the check valves controls the direction of the liquid.

TECHNOLOGY: DIAPHRAGM (METERING)

Hydraulic 500 Series

Diaphragm Metering Pumps

Series 500 Hydraulic Metering Pump features EZE-CLEAN™ valve design with double ball check which can be removed without disturbing the piping. The Series 500 provides leak-free metering of a wide variety of corrosive, flammable or hazardous liquids.

Industries Served

- Agriculture
- Chemical Processing
- Industrial Water Treatment
- Mining
- Municipal Water Treatment
- Oil & Gas
- Petrochemical
- Power Generation
- Pulp & Paper
- Turf & Ornamental

Features & Benefits

- Innovative designs for precision and long-term reliability
- Valve cartridges are double ball check design and can be removed without disturbing piping
- Variable Oil By-pass™ stroke adjustment for better valve performance
- Capacity adjustable by micrometer dial while pump is running or stopped
- Bright color contrasted ideal protected from corrosion by clear PVC covering
- Motor driven for precise injection
- Optional: Automatic stroke control adjustment and speed adjustment
- Optional: Double diaphragm leak detection available in most models
- Long-term reliability
- Stroke mechanism eliminates wear
- Accuracy (+/-1%)
- Clear PVC covering protects against corrosion
- Optional: Explosion-proof motors for use in hazardous atmospheres
- Hydraulically balanced diaphragm for extended life

Technical Data

- Liquid end materials: 316 SS, PVC, PVDF or Alloy 20
- Motor data: Integral motors standard, D-flange (IEC) and (NEMA) C-frame mountings are available
- Motor options: Explosion-proof, wash down duty, VFD

Performance Data

- Capacity/Flow @60Hz: 0.2 GPH (0.757 L/h) to 97 GPH (370 L/h)
 - Duplex head@60 Hz to: 194 GPH (730 L/h)
- Capacity/Flow @50Hz: 0.17 GPH (0.631 L/h) to 81 GPH (306 L/H)
 - Duplex head@50 Hz to: 162 GPH (610 L/h)
- Max. pressure: 207 Bar (3000 psi)

Certifications & Associations:



Hydraulic 500 Series
Diaphragm Metering Pump

TECHNOLOGY: DIAPHRAGM (METERING)

Hydraulic 600 Series Diaphragm Metering Pumps

Series 600/6000 Hydraulic Metering Pump sets the standard in motor-driven design, delivering precision and long-term reliability. Stainless steel, PVC, Kynar® or C-20 liquid-end materials of construction and hydraulically-balanced Teflon® diaphragms make the pumps compatible with a wide range of fluids.

Industries Served

- Chemical Processing
- Mining
- Municipal Water Treatment
- Oil & Gas
- Petrochemical
- Power Generation
- Pulp & Paper

Features & Benefits

- Innovative designs for precision and long-term reliability
- Valves can be removed without disturbing piping
- Variable Oil By-pass™ stroke adjustment for better valve performance
- Capacity adjustable by micrometer dial while pump is running or stopped
- Bright color contrasted dial protected from corrosion by clear PVC coating
- Motor driven for precise injection
- Optional: Automatic stroke control adjustment and speed adjustment
- Optional: Double diaphragm leak detection available in most models
- Optional: Explosion-proof motors for use in hazardous atmospheres
- Hydraulically balanced diaphragm for extended life
- Accuracy (+/-1%)
- Stroke mechanism eliminates wear
- Clear PVC covering protects against corrosion
- Handles viscous fluids

Technical Data

- Liquid end materials: 316 SS, PVC, PVDF or Alloy 20
- Motor data: D-flange (IEC) and (NEMA) C-frame mountings available
- Motor options: Explosion-proof, wash down duty, VFD

Performance Data

- Capacity/Flow @60Hz: 7 GPH (26.5 L/h) to 240 GPH (910 L/h)
- Capacity/Flow @50Hz: 5.83 GPH (22.08 L/h) to 200 GPH (757 L/h)
- Max. pressure: 276 Bar (4000 psi)

Certifications & Associations:



Hydraulic 600 Series
Diaphragm Metering Pump

TECHNOLOGY: DIAPHRAGM (METERING)

Mechanical 7000 Series Diaphragm Metering Pumps

Series 7000 metering pumps eliminate the need for contour plates on the liquid side of the diaphragm, resulting in a simple, straight-through valve and head design that optimizes flow rates. The precise, self-priming pumps deliver superior performance when pumping chemicals that can off-gas.

Industries Served

- Agriculture
- Car Wash
- Chemical Processing
- Mining
- Municipal Water Treatment
- Petrochemical
- Pulp & Paper
- Turf & Ornamental

Features & Benefits

- Self-priming
- Superior performance when pumping chemicals that off-gas
- Suction lift exceeding 20 ft (6m)
- Easily handles viscosities in excess of 5,000 cP
- Capacity adjustable by micrometer dial when pump is running or stopped
- Long-term reliability
- Variable speed drives allow greater turndown range or automatic capacity control
- Compatible with a wide range of fluids
- Optional: Explosion-proof motors for use in hazardous atmospheres

Technical Data

- Liquid end materials: 316 SS, PVC, PVDF or Alloy 20
- Motor data: Integrally mounted, D-flange (IEC) and (NEMA) C-frame mountings available
- Motor options: Explosion-proof, wash down duty, VFD

Performance Data

- Capacity/Flow @60Hz: 6 GPH (23 L/h) to 300 GPH (1140 L/h)
- Capacity/Flow @50Hz: 5 GPH (19 L/h) to 250 GPH (950 L/h)
- Max. pressure: 10 Bar (150 psi)

Certifications & Associations:



Mechanical 7000 Series
Diaphragm Metering Pump



PZ Series
Electronic Metering Pump

TECHNOLOGY: DIAPHRAGM (METERING)

PZ Series Electronic Metering Pumps

PZ Series Smart Electronic Metering Pumps are designed for accurate, reliable injection of a wide variety of liquids. The pumps can be easily integrated into existing chemical metering systems, and feature an air release valve that allows the pumps to be used in sodium hypochlorite service or with other chemicals that off-gas at room temperature.

Industries Served

- Car Wash
- Chemical Processing
- Industrial Water Treatment
- Municipal Water Treatment
- Pulp & Paper
- Turf & Ornamental

Features & Benefits

- Leading pulse metering pump design
- Operates on any single phase voltage from 94 VAC to 264 VAC
- Manual stroke length adjustment (*Models: PZi4, PZi8, PZiG*)
- Digital setting option can set stroke speed, discharge volume or by percentage (*Models: PZi8, PZiG*)
- Timer and batch functions built-in (*Models: PZi8, PZiG*)
- 1 to 300 spm (max) speed allows wide turndown range

Technical Data

- PVC, acrylic, stainless steel and PVDF models available
- Manual, 4-20mA or pulse input controlled
- Models for high viscosity available
- Automatic degassing valve for chemicals that off-gas
- External interlock available (remote start, level switch, reset)

Performance Data

- Capacity/Flow @60Hz: 0.44 GPH (2 L/h) to 20.6 GPH (80 L/h)
- Max. pressure: 15.1 Bar (220 psi)

Certifications & Associations:



TECHNOLOGY: PROPELLER MIXER

Gear Drive Mixer

Portable mixers have been designed, engineered and built to provide long life and trouble-free service in a wide variety of blending/mixing operations. Mixers can be clamp-or base-mounted on beams, tank walls and other supports.

Industries Served

- Car wash
- Chemical processing
- Food and beverage
- Industrial water treatment
- Mining
- Municipal water Treatment
- Oil and gas
- Petrochemical

Features & Benefits

- Designed for long life and trouble-free service
- Grease lubricated gears mean no oil leakage
- Flange, angle riser, cup, clamp and bung mounts available
- Vibration-absorbing pad standard
- Air motor options
- Laboratory grade mixers available
- Mixer available for pails, drums, totes and tanks up to 5,000 gallons (19,000 liters)
- Optional coatings such as rubber, PVC or PTFE
- Superior flow coefficients and power consumption characteristics. Available with TEFC, explosion-proof or air-motors
- Cost-efficient
- Grease-filled gearbox eliminates leaking and danger of oil contamination
- Maintenance-free
- Helical gear drive - no clutches to slip, wear, or replace, ensuring long life

Technical Data

- 316 SS propellers and shafts
- Adjustable entry utilizing indexed ball-and-socket design on some models
- Motor data: TEFC D-flange (IEC) and (NEMA) C-frame mountings available
- Motor options: Explosion-proof, wash down duty, VFD

Performance Data

- Horsepower: .05 hp (.04 kw) to 5 hp (3.74 kw)
- Mixing liquids with viscosities to 32,000 cP
- Gear drive @ 60Hz: 350 rpm (50Hz: 288 rpm)
- Direct drive @ 60Hz: 1,750 rpm (50Hz: 1,425 rpm)

Certifications & Associations:



Gear Drive Mixer

TECHNOLOGY: SYSTEMS

Polymaster Chemical Feed Systems

The Polymaster Series Polymer Blend & Feed Systems dilute, mix and thoroughly activate emulsion, dispersion and solution polymers including new high molecular weight products. Patented Gatlin distribution head ensures the optimum mixing required to achieve maximum polymer efficiency.

Industries Served

- Chemical Processing
- Industrial Water Treatment
- Mining
- Municipal Water Treatment
- Oil & Gas
- Petrochemical
- Power Generation
- Pulp & Paper

Features & Benefits

- State-of-the-art polymer activation and blending
- Incorporates patented motorized Gatlin mixer
- Prepares polymer solutions from 0.1 to 2.0 per cent concentration
- Easy to operate and maintain
- Easy installation
- Provides maximum activation: Not affected by fluctuating water pressure
- Eliminates need for costly booster pumps
- Will not shear fragile long chain polymers
- Compact, lightweight design allows portability
- Automatic shutdown and alarm on loss of dilution water

Technical Data

- All electrical controls and flow indicators on front panel
- Automatic units adjust polymer pump flow rate by pacing the speed of the polymer pump via an external 4-20mA signal

Performance Data

- Capacity/Flow @60Hz: 60 GPH (227 L/h) to 3000 GPH (11360 L/h)
- Min water Pres.Reqd.: 1.72 Bar (25 psi)
- Max. operating pressure: 6.9 Bar (100 psi)

Certifications & Associations:



Polymaster Chemical Feed System

Accessories



Injection Quills

Used to inject chemicals pumped by metering pumps into turbulent-flow zone of high-pressure water or steam lines.

- Operating pressures to 207 bar (3,000 psi)
- Spring-loaded check valve
- Available in 316 SS, PVC, Kynar® and C-20
- Available in 1/2 in. and 3/4 in. NPT



Corporation Stops

Corporation Stops are used for injecting chemicals pumped into tanks, mains, cooling towers and process systems providing more rapid, uniform dispersion of injected chemical. Corporation Stops allow injection quills to be inserted or removed without having to drain or shut down the system.

- Operating pressures to 10 bar (150 psi)
- Available in 316 SS, PVC, Kynar® and C-20
- Available in 1/2 in. through 1 in. NPT or AWWA
- Lever-operated stop and protection chain standard
- Available with choice of Bronze or 316 SS



EZE-Grab Platforms

For portable pump installations, molded polyethylene base provides elevated platform for use indoors or outdoors.

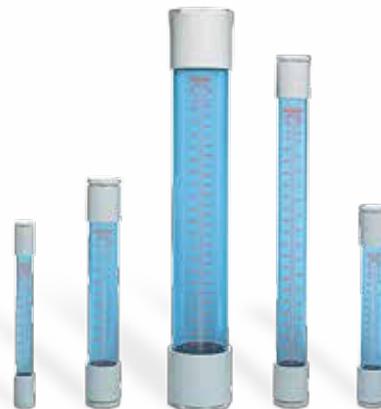
- Handles allow the pump to be moved easily



Back Pressure Valve & Pressure Relief Valves

Valves ensure the set pressure is maintained at the pump outlet port (discharge) to assure accurate metering and prevent siphoning. Back pressure valves are a required accessory when pumping to a low pressure injection point below the tank level or when pumping from a bulk tank with a high head pressure.

- Available in 316 SS, PVC, Kynar® and C-20
- PTFE diaphragm



Calibration Columns

Provide a fast, easy, economical way to check the flow rate of a chemical metering pump.

- PVC with slip-on caps for top filling and easy cleaning
- Shielded-glass available for acid and strong chemical applications
- Mylar lamination for protection against harsh chemicals
- 100-4,000 ml capacity (dual scales)



Sample Coolers

Sample Coolers cool hot water or steam samples for easy handling and effective sample collection. The Cooler is suitable for use on hot water, saturated steam or superheated steam services.

- Available with 316 SS shell and coil or 316 SS shell and Inconel® coil. Pressure rating 3,500 psi (241 bar) for coil and 250 psi (17 bar) for shell. Max temperature 750°F (399°C)
- Carbon steel shell with 316 SS coil available. Pressure rating 1,500 psi (103 bar) coil and 200 psi (14 bar) shell. Max temperature 600°F (316°C)

Pulsation Dampener

Remove the pulsating flow caused by a pump's reciprocating action, ensuring a smooth, laminar flow.

- Equipped with pressure gauge and charging valve
- Pressure ratings to 69 bar (1,000 psi) with 4:1 safety margin



Nimble Skid Pump Packages

Complete metering systems ready to use with any bulk or intermediate bulk chemical container.

- Available in 18 in. x 30 in. and 24 in. x 46 in. footprints
- Can be used with electronic or motor-driven diaphragm pumps
- Containment available for all systems

30-Gallon Mini-Tank

For use with any hydraulic or electronic metering diaphragm pump.

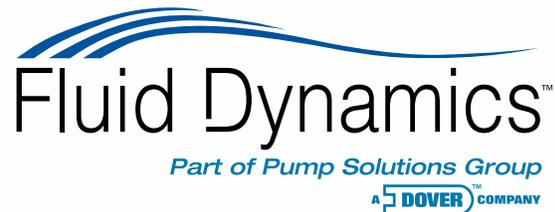
- Available with or without containment

By-Pass Feeders

Used to introduce chemicals into closed circulating-water systems.

- Dish bottom in or dish bottom out models available
- Standard high-pressure cap rated to 300 psi
- Filter bags available in 1, 5, 20 and 50 micron ratings





Fluid Dynamics[™]
Part of Pump Solutions Group
A **DOVER** COMPANY

Fluid Dynamics[™], part of Pump Solutions Group (PSG[®]), is one of the premier manufacturers of polymer blending technology in the world. Fluid Dynamics is a division of Neptune Chemical Pump Company. Fluid Dynamics shares its state-of-the-art facility with Neptune Chemical Pump Company and Neptune Mixer in North Wales, Pennsylvania (USA).

Where Innovation Flows

At Fluid Dynamics, innovation flows through every aspect of the manufacturing process. The innovation began in 1974 when Fluid Dynamics opened its doors. Back then, Fluid Dynamics was in the design and construction of wastewater treatment plants. One of the owners was also a representative of a mechanical polymer blending system but recognized the maintenance and performance flaws with this system, so he set out to improve on an already popular design. It was this entrepreneurial spirit and vision that changed the direction of Fluid Dynamics forever.

Respected Polymer Blending Leader

Evolving into the most respected polymer leader wasn't easy, but a few creative people and numerous ingenious ideas later, the dynaBLEND[™] was born. This high energy, non-mechanical dry and liquid polymer activation and blending technology is designed for clarification, filter aid, thickening and dewatering.

Nothing Compares to dynaBLEND[™]

The revolutionary non-mechanical polymer blending system is the backbone behind Fluid Dynamics' position as one of the premier polymer equipment companies in the world. Numerous attempts have been made to duplicate dynaBLEND but, over 25 years and thousands of installations later, end-users and engineers all agree: *Nothing compares to the dynaBLEND.*



Industries Served:

Since inception, our company's entire focus has been on the development and application of polymer blending technology. Fluid Dynamics developed the high energy, non-mechanical dry and liquid polymer activation and blending technology for clarification, filter aid, thickening and dewatering. Today, with the most experienced technical staff in the industry and the highest performing technology available, Fluid Dynamics has established itself as the premier polymer equipment company in the world.



WASTE AND WATER TREATMENT

- Sludge thickening and dewatering
- Phosphorous removal
- Enhanced settling
- Coagulation and flocculation
- Filter aids



AGRICULTURE

- Beef, Pork, Poultry: Thickening & dewatering in on-site treatment plants
- Vegetable: Dewatering of mud from vegetable washing / water recovery/re-use



OIL & GAS

- Polymer flooding for enhanced oil recovery
- Refinery oil water separation (DAF)
- Dewatering of drilling muds



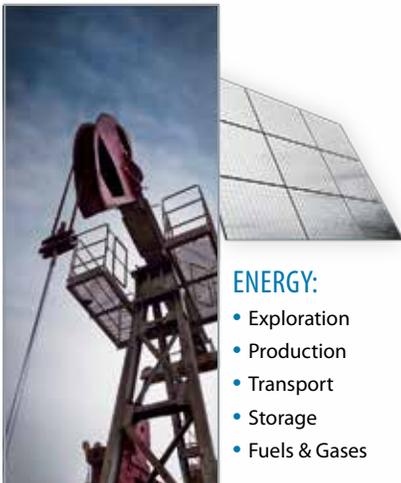
MINING

- Tailings settling
- Ore concentration



Markets Served:

Fluid Dynamics focuses on providing benefits to our customers across a wide array of markets and industries. Our core competencies span three core markets that expand to cover nearly every aspect of daily life around the globe.



ENERGY:

- Exploration
- Production
- Transport
- Storage
- Fuels & Gases



PROCESS:

- Chemical
- Petrochemical
- Bulk Transfer
- Metering
- Injection



WATER/ WASTEWATER:

- Metering / Dosing
- Treatment
- Post Treatment Disposal / Recycling
- Collection / Transmission



miniBLEND: L4S Series
Liquid Polymer Blending System

miniBLEND™ Liquid Polymer Blending System

The miniBLEND™ is a perfect choice for chemical OEMs, mobile sludge dewatering and budget conscious customers. Complicated and costly controls have been eliminated while maintaining the features that make the dynaBLEND™ liquid feeder the most reliable feeder in the industry – the hydrodynamic mixing chamber and easy to access polymer check valve.

Applications

- Water/wastewater treatment
- Agriculture
- Oil and gas
- Thickening and dewatering in on-site treatment plants
- Dewatering of mud from vegetable washing/water recovery/re-use
- Polymer flooding for enhanced oil recovery
- Refinery oil water separation
- Ore concentration
- Mining
- Sludge thickening and dewatering
- Phosphorous removal
- Enhanced setting
- Coagulation and flocculation
- Filter aids

Features & Benefits

- Lightweight and portable
- Manual or automatic pump speed control
- Choice of diaphragm, peristaltic or remote mounted neat polymer metering pump
- 304 stainless steel frame and mixing chamber
- Reliable, non-mechanical mixing chamber
- Lowest operating cost, most reliable polymer feeders in the industry
- Proven performance
- Proven reliability
- Proven quality
- Low life cycle cost
- Handles extreme conditions, harsh environments
- Lifetime mixing chamber warranty
- Explosion proof models available

Technical Data

- Dimensions: 18 in. D (457mm) x 24 in. W (610mm) x 40 in. H (1,016mm)
- Weight: 100 lbs. (45 kg.)
- Power requirement: 120 VAC, 5-Amp (0.6 kW)

Performance Data

- Operating pressure: 6.9 bar maximum (100 psi)
- Dilution water 12 to 1,200 gph (45 to 454 lph)
- Polymer 0.01 to 10 gph (.04 to 38 lph)

Certifications & Associations:





dynaBLEND™

Liquid Polymer Blending System

The dynaBLEND™ liquid feeder is the most reliable feeder in the industry. The patented hydrodynamic mixing chamber and easy to access polymer check valve are just a sample of the industry leading features. Knowing the facts behind polymer blending is the first step in understanding the numerous benefits of the dynaBLEND™ technology. Over the years, the spectrum of polymers available has widened and today there are more difficult-to-blend polymers than ever before. This is especially important because some polymer blending system work well on simple-to-blend polymers, but fail at effectively activating the difficult polymers.

Applications

- Water/wastewater treatment
- Agriculture
- Oil and gas
- Mining
- Sludge thickening and dewatering
- Phosphorous removal
- Enhanced setting
- Coagulation and flocculation
- Filter aids
- Thickening and dewatering in on-site treatment plants
- Dewatering of mud from vegetable washing/water recovery/re-use
- Polymer flooding for enhanced oil recovery
- Refinery oil water separation
- Ore concentration
- Lifetime mixing chamber warranty
- Explosion proof models available

Features & Benefits

- Rugged components for harsh/extreme environments
- Diaphragm, progressive cavity or peristaltic metering pump options
- Lightweight portable packages available
- Proven performance
- Proven reliability
- Proven quality
- Low life cycle cost
- Flexibility to choose control features that best meet the needs of a specific user
- Handles extreme conditions, harsh environments

Technical Data

- 304 SS mixing chamber (316 SS option)
- PVC piping standard (SS optional)

Performance Data

- Dilution water 12 to 21,000 gph (45 to 79,494 L/h)
- Polymer 0.01 to 300 gph (.04 to 1,136 lph)

Certifications & Associations:



dynaBLEND: L4-P / L6-P Series
Liquid Polymer Blending System

dynaBLEND™ Dry Polymer Preparation System

Compact, high performance dry polymer preparation system utilizes a negative pressure conveyance system to transport and disperse the dry polymer prior to wetting.

Applications

- Water/wastewater treatment
- Agriculture
- Oil and gas
- Mining
- Sludge thickening and dewatering
- Phosphorous removal
- Enhanced setting
- Coagulation and flocculation
- Filter aids
- Thickening and dewatering in on-site treatment plants
- Dewatering of mud from vegetable washing/water recovery/re-use
- Polymer flooding for enhanced oil recovery
- Refinery oil water separation
- Ore concentration

Features & Benefits

- Vacuum induced, non-mechanical polymer conveyance
- Wetting technology reduces plugging
- Proven performance
- Assures thorough wetting of polymer for optimum performance
- Proven quality
- Prevents polymer build-up at volumetric feeder
- Proven reliability
- Safer and cleaner operation
- Low life cycle cost
- Flexibility to choose control features that best meet the needs of a specific user
- Handles extreme conditions, harsh environments

Technical Data

- Polymer transfer distance up to 20 ft (from the volumetric feeder to the mix tank)
- 180-gallon stacked tank system

Performance Data

- Up to 12 lb./hr. dry polymer

Certifications & Associations:



dynaBlend: Dry Polymer Preparation System

dynaJET™

Dry Polymer Preparation System

The dynaJET™ technology is a high performance dry polymer preparation system that utilizes a blower-assisted conveyance system to transport and disperse the dry polymer prior to wetting.

Applications

- Water/wastewater treatment
- Agriculture
- Oil and gas
- Mining
- Sludge thickening and dewatering
- Phosphorous removal
- Enhanced setting
- Coagulation and flocculation
- Filter aids
- Thickening and dewatering in on-site treatment plants
- Dewatering of mud from vegetable washing/
water recovery/re-use
- Polymer flooding for enhanced oil recovery
- Refinery oil water separation
- Ore concentration

Features & Benefits

- Blower induced pneumatic conveyance
- Non-mechanical wetting
- Provides reliable plug-free wetting of dry water and wastewater treatment chemicals
- Proven performance
- Assures thorough wetting of polymer for optimum performance
- Proven quality
- Prevents polymer build-up at volumetric feeder
- Proven reliability
- Safer and cleaner operation
- Low life cycle cost
- Flexibility to choose control features that best meet the needs of a specific user
- Handles extreme conditions, harsh environments

Technical Data

- Stacked tanks to 750 gallons
- Side + side tanks to 30,000 gallons
- Polymer transfer distance beyond 20 ft (from the volumetric feeder to the mix tanks)

Performance Data

- Systems rated from 12 to 1,000 lb./hr. of dry polymer

Certifications & Associations:



dynaJet: Dry Powder Preparation System

ABAQUE™
PERISTALTIC PUMPS
mouvex.com

ALMATEC®
AIR-OPERATED
DOUBLE-DIAPHRAGM PUMPS
almatec.de

BLACKMER®
VANE PUMPS & COMPRESSORS
blackmer.com

ENVIROGEAR®
INTERNAL GEAR PUMPS
envirogearpump.com

FLUID DYNAMICS™
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