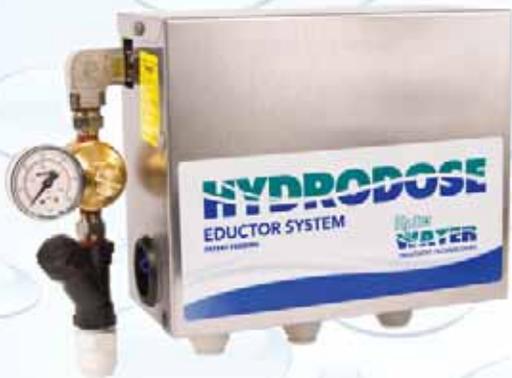


# Hydro<sup>®</sup> WATER TREATMENT TECHNOLOGIES

A **DOVER**™ COMPANY

## Water Treatment Catalog



Changing the World of Water Treatment Technology

The Water Treatment Equipment *Experts*

## **Our Mission:**

To become the world's most successful and sought-after dispensing systems company within the specialty chemical markets we serve. Most successful in terms of value creation compared to our competitors; most sought-after as defined by the suppliers, customers, business partners, and prospective employers who want to associate with our company.

It is our mission - Hydro aims to please! We invite you to peruse our catalog, and see for yourself the solutions Hydro Water Treatment Technologies has for even your most complex challenges. If there's anything further we can do, or any questions we can answer, our top-notch customer service team is available to lend a hand.

We look forward to hearing from you.

Thank you for choosing Hydro.



# Hydrodose Eductor System (Patent Pending)

The HydroDose Eductor System provides an innovative delivery method for both solid and liquid chemicals.

## Features

- ▲ Delivery rates up to 600 GPD
- ▲ Runs off line water pressure (40-90 psi)
- ▲ Includes adjustable pressure gauge and filter
- ▲ Uses low power consumption, 24 VAC solenoids
- ▲ Eductor Technology means less maintenance

## System Advantages

### FASTER CHEMICAL INJECTION

At rates up to 600 GPD, the HydroDose quickly delivers any chemical. Perfect for slug feeding biocides. Much more cost effective than diaphragm pumps that only deliver at a fraction of that rate.

### DESIGNED FOR CHEMICAL RESISTANCE

All parts that come in contact with the chemical are made from polypropylene and polyethylene to provide maximum chemical resistance.

### SIMPLE SET-UP

HydroDose eductors can discharge into an open sump or any line with 20 psi or less back pressure. Most applications simply use the existing injection point.

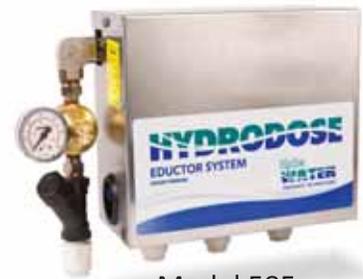


Model 585

## Model Information

<u>Model</u>	<u>Description</u>
585	Single product eductor system
586	Single product eductor mounted on a board with a calibration column
587	Three product eductor system
588	Three product eductor system mounted on a board with a calibration column

<u>Model</u>	<u>Dimensions</u>	<u>Weight</u>
585	5"W x 7"H x 5"D	5 lb.
586	12"W x 18"H x 6"D	8 lb.
587	10" W x 7"H x 5"D	6 lb.
588	16"W x 18"H x 6"D	10 lb.



Model 585



# Solid Dissolvers

## Single Product

The 595 single solid dissolver provides diluted solution of one solid product held in an integrated reservoir, ready for on demand pumping when indicated by the system controller.

### Features

- ▲ No electricity required
- ▲ Runs off line water pressure (30-90 psi)
- ▲ Uses low cost, reliable float technology
- ▲ Includes adjustable pressure gauge and filter
- ▲ Atmospheric siphon breaker included for backflow protection
- ▲ Translucent body allows viewing of water level in reservoir
- ▲ Takes advantage of the reduced transportation and storage costs, and worker safety benefits of solid chemistry



### System Advantages

#### USES RELIABLE, TIME-PROVEN FLOAT TECHNOLOGY

No electric solenoids to burn out, no transformers to fail when current spikes. The dissolver's float technology has been proven in the car wash industry for over 40 years. And there are no reed switches to gum up and stick. The result: consistent, reliable performance, reduced down time, and reduced service calls.

#### EASY TO INSTALL

Attach the unit using 4 bolts, hook the float to the valve, attach the water inlet and the solution discharge tubing—that's it. The unit is ready to go to work.

#### DESIGNED FOR CHEMICAL RESISTANCE

Molded parts are made of polypropylene and polyethylene; metal parts are made of Hastelloy for maximum chemical resistance.

#### SPECIALIZED NOZZLE TECHNOLOGY

Spray nozzles are molded polypropylene to avoid chemical attack. Four spray patterns are available to ensure optimum dissolve rates.

### Model Information

<u>Model</u>	<u>Description</u>
595	Single product solid dissolver, float-activated, with integrated reservoir
Dimensions:	15"W x 28"H x 10"D
Weight:	25 pounds (with water)



# Solid Dissolvers

## Single Product With Back-Up

The model 590 solid dissolver provides diluted solution of one product held in an integrated reservoir, ready for on demand pumping when indicated by the system controller. The system provides a backup sump/float system to prevent spills in case of an overflow condition.

### Features

- ▲ No electricity required
- ▲ Runs off line water pressure (30-90 psi)
- ▲ Uses low cost, reliable float technology
- ▲ Includes back-up reservoir and float assembly for overflow protection
- ▲ Includes adjustable pressure gauge and filter
- ▲ Atmospheric siphon breaker included for backflow protection
- ▲ Translucent body allows viewing of water level in reservoir
- ▲ Takes advantage of the reduced transportation and storage costs, and worker safety benefits of solid chemistry



### System Advantages

#### USES RELIABLE, TIME-PROVEN FLOAT TECHNOLOGY

No electric solenoids to burn out, no transformers to fail when current spikes. The dissolver's float technology has been proven in the car wash industry for over 40 years. And there are no reed switches to gum up and stick. The result: consistent, reliable performance, reduced down time, and reduced service calls.

#### EASY TO INSTALL

Attach the unit using 4 bolts, hook the floats to the valves, attach the water inlet and the solution discharge tubing—that's it. The unit is ready to go to work.

#### DESIGNED FOR CHEMICAL RESISTANCE

Molded parts are made of polypropylene and polyethylene; metal parts are made of Hasteloy for maximum chemical resistance.

#### INTEGRATED BACK-UP PROTECTION

The unit contains a second reservoir and float assembly which is activated should the primary reservoir overflow. This back-up feature shuts off the water flow to prevent system overflow.

#### SPECIALIZED NOZZLE TECHNOLOGY

Spray nozzles are made from molded polypropylene to avoid chemical attack. Four spray patterns are available to ensure optimum dissolve rates.

### Model Information

<u>Model</u>	<u>Description</u>
590	Single product solid dissolver, float-activated, with primary reservoir and back-up float system/reservoir
Dimensions:	26"W x 28"H x 10"D
Weight:	30 pounds (with water)



# Solid Dissolvers

## Continuous Feed Systems (Patent Pending)

The continuous feed single product solid dissolver provides diluted solution of one solid product held in an integrated reservoir, ready for on-demand delivery when indicated by the system controller. The unit holds two containers of the treatment product, and continually switches back and forth between containers as it senses an empty container.

### Features



Model 591

- ▲ "Toggle-logic" continuously switches to full container
- ▲ Runs off line water pressure (30-90 psi)
- ▲ Includes adjustable pressure gauge and filter
- ▲ Translucent body allows viewing of water level in reservoir
- ▲ Includes back-up reservoir and float assembly for overflow protection
- ▲ Takes advantage of reduced transportation and storage costs, and worker safety benefits of solid chemistry
- ▲ Optional remote alarm connections
- ▲ Also available in non-electric (Model 592) version that sprays both containers at once

### System Advantages

#### EXTENDS PRODUCT REPLACEMENT CYCLES

The dissolver's unique "Toggle-Logic" technology allows it to sense when the first chemical container is empty, and automatically switches to the second container. Once the second container is empty, the unit switches back to the first container position, which has been replaced with a full product container. This constant seeking and switching allows for a continuous feed of product to the tower or boiler. And the extended time between switching containers is perfect for high volume accounts, or accounts where on-site maintenance is less frequent.

#### AUTOMATICALLY ADJUSTS TO LOCAL WATER SOURCES

The conductivity sensors evaluate the incoming water source in order to assist in determining when the lack of chemical in the dissolved solution indicates an empty chemical container. If the water source changes seasonally or changes in conductivity for some reason, the unit automatically adjusts to the new source. No input or guessing from the user is required.

#### SPECIALIZED NOZZLE TECHNOLOGY

Spray nozzles are molded polypropylene to avoid chemical attack. Four spray patterns are available to ensure optimum dissolve rates.

#### INTEGRATED BACK-UP PROTECTION

The unit contains a second reservoir and float assembly which is activated should the primary reservoir overflow. This back-up feature shuts off the water flow to prevent system overflow. Dry contacts are available to connect to a remote alarm. In addition, the controller provides connections for the Hydro Systems low level advisory alarm. The alarm can be set to notify the user when a chemical has been depleted or when both chemical containers are empty.

#### NON-ELECTRIC MODEL AVAILABLE

This system is also available as a non-electric version (Model 592) that sprays both containers at the same time.

### Model Information

<u>Model</u>	<u>Description</u>
591	Continuous feed, one product solid dissolver with "toggle-logic"
592	Non-electric continuous feed system

Dimensions: 35" W x 31" H x 10" D  
Weight: 45 pounds (including water)



# Solid Dissolvers Gravity Feed Systems

The solenoid-activated Gravity Feed system (593) provides diluted solution of one solid product as demanded by the system controller.

The timer activated Gravity Feed system (594) provides diluted solution of one solid product using a programmable, battery-operated timer. The diluted solution is gravity-fed directly into the tower or boiler.

## Features

- ▲ Designed for "open" (non-pressurized) boiler feed tanks or towers
- ▲ Bowl and solenoid (or timer) mounted on panel for integrated functioning
- ▲ Runs off line water pressure (30-90 psi)
- ▲ 593 includes adjustable pressure gauge and filter
- ▲ Atmospheric siphon breaker included for backflow protection (593)
- ▲ Lowest cost method of taking advantage of the reduced transportation and storage costs, and worker safety benefits of solid chemistry
- ▲ Low Voltage - 24VAC solenoid



Model 593

## System Advantages

### EASY TO INSTALL

Mount the back panel using four screws, attach the solenoid transformer to the system controller, and the unit is ready to go to work.

### ECONOMICAL PERFORMANCE

By integrating components and using direct gravity-feed, the unit provides the lowest cost method of taking advantage of all of the benefits of solid chemistry.

### SPECIALIZED SPRAY NOZZLE TECHNOLOGY

Spray nozzles are molded polypropylene to avoid chemical attack. Four spray patterns are available to ensure optimum dissolve rates.

### TIME-BASED FEEDING (594)

Select the times to feed chemical by programming the easy-to-use timer, which opens the water valve and sprays the solid chemical. No electricity required.

## Model Information

<u>Model</u>	<u>Description</u>
593	Gravity-feed, one product solid dissolver, with solenoid
594	Gravity-feed, one product solid dissolver, with timer

Dimensions: 12"W x 17"H x 10"D

Weight: 10 pounds



Model 594



# Solid Dissolvers Modular Systems

The Modular Solid Dissolving System provides diluted solution of one or three products, managed by the system controller, and delivered directly to the tower or boiler.

## Features

- ▲ Designed for “open” (non-pressurized) towers or boiler feed tanks
- ▲ Bowls and solenoids mounted separately
- ▲ Runs off line water pressure (30-90 psi)
- ▲ Includes adjustable pressure gauge and filter
- ▲ Takes advantage of the reduced transportation and storage costs, and worker safety benefits of solid chemistry
- ▲ Available in single- or triple-product configurations



## System Advantages

### MODULAR DESIGN

Modular design allows solenoids to be located separately from the dissolving bowls for maximum system design flexibility. Keep the solenoids inside to avoid weather damage, and attach the bowls at point of delivery.

### EASY TO INSTALL

Mount each back panel using four screws, attach the solenoid transformer to the system controller, connect the water inlet and solution discharge tubing, and the unit is ready to go to work.

### SPECIALIZED SPRAY NOZZLE TECHNOLOGY

Spray nozzles are molded polypropylene to avoid chemical attack. Four spray patterns are available to ensure optimum dissolve rates.

## Model Information

<u>Model</u>	<u>Description</u>
596	Modular, single product solid dissolver, with solenoid and dissolving bowl
597	Modular, three product solid dissolver, with solenoids and dissolving bowls

### Dimensions:

1 product solenoid panel	5"W x 12"H x 4"D
1 product bowl panel	7"W x 17"H x 10"D
3 product solenoid panel	16"W x 12"H x 4"D
3 product bowl panel	21"W x 17" H x 10"D

### Weights:

1 product solenoid panel	5 pounds
1 product bowl panel	5 pounds
3 product solenoid panel	15 pounds
3 product bowl panel	10 pounds



# Venturi Feed Systems

Venturi Feed systems plumb directly into the make-up water line and treat all incoming water with the desired amount of chemical. Designed for “open” boilers or cooling towers, the Venturi Systems operate on water line pressure(30-90 psi).

## Features

- ▲ Two water inlet flow rates available (3.5 and 6.0 GPM)
- ▲ Durable stainless steel cabinetry
- ▲ Includes sampling port for concentration testing
- ▲ Operates on ordinary line water pressure (30-90 psi)
- ▲ No electricity or pumps required

## System Advantages

### CONSISTENT FEEDING

The Venturi Feed system is installed directly into the make-up line and treats every drop of water added to the system. This automatic process avoids the need for workers to remember to manually add treatment chemicals.

### ACCURATE, LEAN CONCENTRATIONS

Chemical injection is controlled by the patented Ultra-Lean Metering Device. “Torturous Path” technology allows very small amounts of chemical to be accurately injected into the incoming water stream.

### SYSTEM STABILITY

Continuous feeding eliminates the spikes that normally occur with “slug-feeding”. Dangerous periods where chemical protection is too low are avoided as well.

### EASY TO INSTALL

The unit installs right into the feed line. No electricity required, no pumps, no motors—it’s 100% water driven.

### LOWEST COST TREATMENT OPTION

Reduce the need to continuously monitor the system to manually add treatment product—all of the water entering the system is being treated all the time. And you’ll also avoid the costs of pumps and ongoing pump maintenance and repair.

### SEASONALLY ADJUSTABLE

Adjust the level of chemical injection, due to water source or seasonal water usage, quickly and easily by switching the Ultra-Lean Metering Device.



Model 598-599

## Model Information

<u>Model</u>	<u>Description</u>
598	Venturi injection unit, for open-feed systems. 3.5 GPM flow rate
599	Venturi injection unit, for open-feed systems. 6.0 GPM flow rate

Dimensions:	10"W x 8"H x 5"D
Weight:	5 pounds
Dilution rates to:	200 PPM or less



# Autodose™ Series

Using flexible programming capability, the 1100 Series AutoDose™ Pumps dose drains, cooling towers, boilers, pools, lubrication systems or other areas at the appropriate times. Easily programmed, the controller turns the pump on and off to ensure regular, consistent dosing of chemicals.

## Superior Design for Optimum Performance and Ease of Use

It's widely accepted that it is easier to maintain drains than to unstop clogged ones. But maintenance of drains and other systems requires consistent application of maintenance chemicals. This is the job the AutoDose line of dispensers were designed for. Look at what the AutoDose dispensers have to offer:

- ▲ Molded cabinet is durable and corrosion resistant, even in demanding applications.
- ▲ The timer is visible when the cabinet is locked. It is secured from unauthorized reprogramming and insulated from moisture and vapors, yet the program can be monitored.
- ▲ During normal operation, the timer runs on the same power source as the pump, simplifying system maintenance (only one set of batteries to replace).
- ▲ Internal backup battery in timer maintains program even when main power source is disconnected or inoperative.



## Maximum Flexibility for Customized Dosing

Hydro's AutoDose pump systems offer great flexibility. Here's what they offer in terms of customization of dispensing:

- ▲ choice of days, time (AM or PM) and dose durations (in one minute increments)
- ▲ up to 24 dosing periods per 24 hours
- ▲ capability to dose every day, weekdays, weekends, or just on specific days

But maybe the most important benefit gained by using the AutoDose pumps is that they don't forget to add a dose! This can greatly enhance the performance of the treatment product.

## AutoDose™ Series Specifications

### The following specifications apply to all models:

- ▲ Cabinetry: Molded engineering resin (ABS)
- ▲ Flow Rate: 100cc (3.5oz.)/minute at 23 RPM
- ▲ Program Duration: 7 days, daily variations possible
- ▲ Events: 24 Events per day
- ▲ Minimum "on": 1-30 oz. dispenser
- ▲ Timer Display: LCD

### Model

1170  
1180  
1190

### Description

Pail mounted  
Wall mounted  
Wall mounted with AC adapter

\* Batteries required to run the units are not included. Models run on two 6-volt lantern-style batteries or eight D-size batteries (alkaline batteries suggested).

## Battery or AC Powered Operation to Suit Specific Needs

The AutoDose pumps run on two 6-volt lantern batteries, eight D-size batteries (alkaline batteries suggested) or on AC power. Environmental conditions of the application can be taken into consideration when choosing the power supply.

In some areas, particularly near drains where local safety codes may forbid electrical outlets, battery power can be the only answer. No outlet is required at the treatment site, which adds safety in these wet areas. Battery power also makes installation easier, since location of the system doesn't depend on outlet availability. Battery power ensures dosing at the proper time, even during or after power outages, enhancing the effectiveness of treatment chemicals which require regular dosing at specified intervals.

Batteries in AutoDose systems will power Hydro's patented pump for up to 40 running hours when alkaline batteries are used. This provides months of service for many treatment needs. The Hydro pump is designed specifically to extend battery life, reducing the frequency of battery replacement. These design advancements also increase tube and motor life.

Where battery replacement may be difficult, the AC powered versions offer the same flexible programmability and reliable dosing without requiring batteries.



# Chemilizer Injectors



Chemilizer is a precision line of volumetric chemical injectors utilizing years of proven diaphragm technology. Powered by the existing water supply, the internal motor drives the chemical pump, injecting very precise amounts of chemical - either directly back into the flow or to a remote location. The speed of the motor and pump are proportional to the water flow, ensuring Chemilizer will inject consistent amounts of chemical regardless of fluctuation in water pressure and flow. Chemilizer injectors are ideal for applications requiring a consistent level of chemical product to be injected into a water line, without the cost and hassle of an electronic pump.

## Reliability and Consistency



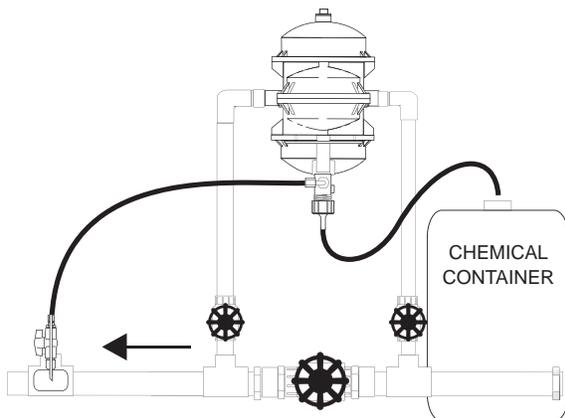
HN55



CP33

- ◆ **Water powered, no electricity needed!** Chemilizer injectors are immune to electrical surge and power failure. The water powered motor works even when your lights are not!
- ◆ **Backed by a Two-Year Motor Warranty**
- ◆ **Handles a wide range of water flow rates:** .5-13 GPM
- ◆ **Corrosion Resistant Construction** - Silicone and Viton components available to withstand your most aggressive chemicals.
- ◆ **Resistant to wear and tear:** The chemical is injected after the motor preventing chemical contact with critical motor parts.
- ◆ **Tailor it to your specific dilution needs**
- ◆ **Functions as an in-line injector, or a chemical dosing system:** Chemical diversion line disconnects, allowing direct access to the chemical concentrate which can then be used for bottle or bucket filling.

## Easy to Install



Chemilizer injectors are easy to install into an existing water system.



# FoamMaster Series

FoamMaster power cleaning systems automatically dilute concentrated products with water, and use compressed air to generate a thick, rich, clinging foam.

## The Ideal Way to Enhance Cleaning Product Performance



Model 890

When it comes to cleaning coils or cooling towers, there's no more effective and efficient method than foam cleaning. Foam cleaning not only allows the cleaning solution to remain in contact with the surface areas for an extended time period, it also allows you to clean hard-to-reach areas not always accessible by traditional cleaning methods. It also helps to avoid the damage done to equipment such as coils, tower fill, and tower basins by high pressure equipment, as well as reducing expensive labor time.

Hydro Systems offers two unique systems for foam cleaning. Both work on as little as 3 gallons (12 liters) per minute water flow, and compressed air pressure of 40 psi (3bar or 3kg).

### Model 890

- ▲ Chemical-contact components are made of chemical resistant materials, allowing use with acids and aggressive cleaners.
- ▲ Air and water flow can be controlled to deliver the foam thickness you need.
- ▲ Built-in check valve prevents compressed air from forcing its way into the water line, allowing you to increase air flow for improved cleaning.
- ▲ Rinse feature allows you to rinse the area after cleaning without an additional hose.
- ▲ Comes complete with 25ft. (8 meter) heavy duty discharge hose and brass foam/rinse nozzle with on/off valve.

### Model 865

- ▲ Provides excellent foam quality at an economical price.
- ▲ Separate hose required for rinsing process.
- ▲ Includes PVC discharge hose and handle.



Model 865



Model 890 (Cart mounted)

## Model Selection Criteria

### 890 Wall or cart mounted includes:

- ▲ stainless steel cabinet
- ▲ air pressure gauge
- ▲ rinse bypass for rinsing without an additional hose.
- ▲ Hose-end shut off w/ brass foam/rinse nozzle.
- ▲ 25ft. (8m) heavy duty discharge hose

Approx. Dilution Range: min: 5.5:1 max: 240:1

### 865 Drum mounted includes:

- ▲ air pressure gauge
- ▲ PVC discharge tubing and Vinyl hose guard.
- ▲ can be installed on small or large bung of drum

Approx. Dilution Range: min: 5:1 max: 128:1



# HydroFoamer/Sprayer Series

Hose end foamers and sprayers offer automatic dilution with convenient control of where and how solution is applied.

## Ease of use enhances product performance

Application of diluted solution with the HydroFoamer or HydroSprayer hose-end proportioners is easy. On and off functions are finger-tip controlled using a trigger on the spray nozzle. To rinse, the concentrate container is disconnected using an easy-to-operate quick coupler, which is designed to allow either a full width spray or powerful jet stream when rinsing. This range of control helps personnel put the solution only where it's wanted. Handles on larger containers increase the operator's control over application.



HydroFoamers and HydroSprayers eliminate the time and hassle of manually mixing concentrates, which not only increases labor productivity, but also increases concentrate performance because the solutions are consistently mixed as directed by the manufacturer. Since concentrates are mixed only as they're applied, they are fresh and will perform at peak power, and waste is minimized. When the HydroFoamer and HydroSprayer are used in combination, a total system is provided that allows cleaning, rinsing and sanitizing.

The HydroFoamer's unique injection concept mixes the proper amount of concentrate with both air and water to produce a thick, rich foam for longer soak time. HydroSprayers produce a fine mist spray suitable for application of no-rinse sanitizers or products used to cover relatively large areas.

## Other Benefits

- ▲ Built with Hydros proven, reliable components - durability proven by years of use in the field.
- ▲ Non-electric, no installation required - just fill the concentrate container and connect the dispenser to a water source
- ▲ Compact easy to store
- ▲ Increased productivity of employees
- ▲ Enhanced safety (reduced exposure to concentrates)
- ▲ Maximum cleaning product performance

## Useful in a wide variety of applications

- ▲ animal care/research facilities
- ▲ tower fill and coils
- ▲ food processing plants
- ▲ health care and educational facilities

## Model Information

Approx. Dilution Range:				Approx. Dilution Range:			
Model	Capacity	Max*:	Min:	Model	Capacity	Max*:	Min:
HydroSprayer 381	96 ounces (2.8 litres)	128:1	16:1	HydroFoamer 481	96 ounces (2.8 litres)	128:1	12:1
HydroSprayer 383	48 ounces (1.4 litres)	128:1	16:1	HydroFoamer 483	48 ounces (1.4 litres)	128:1	12:1

\* leaner dilutions available, contact Customer Service for more information.



# Mercury Wt Cm-700

## Water Treatment Systems

Mercury WT Water Treatment Systems effectively inhibit corrosion, scale and chemical build-up within hot water boilers, cooling towers, or other on-site dilution applications. By combining incoming water with up to five chemicals, Mercury WT Water Treatment Systems keep equipment operating efficiently.

### Features

- ▲ Reduces Energy Costs
- ▲ Prolongs Equipment Life
- ▲ Saves Time on Maintenance and Repairs

When used with the optional Day Tank Installation Kit, the Mercury WT System dispenses chemicals into an automatically refilled day tank. A float switch maintains the volume level in the tank. As the treated water is used and the level drops, the float sinks and switches on a water solenoid valve. The solenoid valve adds water and triggers reprogrammed chemical amounts to dispense. When the tank is full, the water automatically shuts off.



### System Features

- ▲ **Automated Operation:** ensures a constant flow of treated water to inhibit corrosion or scale build-up.
- ▲ **Flexible Programming:** provides customized dispense times, chemical types and dose amounts to match your specific usage requirements.
- ▲ **Easy and Economical to Maintain:** reduces service calls with an easy-to-understand digital readout, three-button operation and a highly water-resistant controller.
- ▲ **Adjustable and Expandable:** works in various applications to meet current needs while allowing future expansion with add-on 4th and 5th pumps.

### System Components

#### Mercury WT 3-Pump Dispensing Unit

- ▲ Sprite WT 2-Pump Dispensing Unit (forth & fifth pump option)
- ▲ External Solenoid (activated by Controller)
- ▲ Water Tank Float Assembly for use with various sized tanks (includes "stir-stick" for chemical mixing)
- ▲ Power Cord with plug, 115 VAC, 60Hz
- ▲ Accessories supplied for plumbing and electrical installations

### Specifications

Dimensions:	8" W x 9" H x 6" D
Weight:	6 lbs.
Electrical:	100-240 VAC, 50-60 Hz, 1 A
IP Rating:	34
Pump Flow Rate:	6 oz. /min



## Solid Dissolvers

### Single Product With Back-Up

The model 590 solid dissolver provides diluted solution of one product held in an integrated reservoir, ready for on demand pumping when indicated by the system controller. The system provides a backup sump/float system to prevent spills in case of an overflow condition.

#### Features

- ▲ No electricity required
- ▲ Runs off water line pressure (30-90 psi)
- ▲ Uses low cost, reliable float technology
- ▲ Includes back-up reservoir and float assembly for overflow protection
- ▲ Includes adjustable pressure gauge and removable filter
- ▲ Atmospheric siphon breaker included for backflow protection
- ▲ Translucent body allows viewing of water level in reservoir
- ▲ Takes advantage of the reduced transportation and storage costs, and worker safety benefits of solid chemistry



#### System Advantages

##### USES RELIABLE, TIME-PROVEN FLOAT TECHNOLOGY

No electric solenoids to burn out, no transformers to fail when current spikes. The dissolver's float technology has been proven in the car wash industry for over 40 years. And there are no reed switches to gum up and stick. The result: consistent, reliable performance, reduced down time, and reduced service calls.

##### EASY TO INSTALL

Attach the unit using 4 bolts, hook the floats to the valves, attach the water inlet and the solution discharge tubing—that's it. The unit is ready to go to work.

##### DESIGNED FOR CHEMICAL RESISTANCE

Molded parts are made of polypropylene and polyethylene; metal parts are made of Hasteloy for maximum chemical resistance.

##### INTEGRATED BACK-UP PROTECTION

The unit contains a second reservoir and float assembly which is activated should the primary reservoir overflow. This back-up feature shuts off the water flow to prevent system overflow.

##### SPECIALIZED NOZZLE TECHNOLOGY

Spray nozzles are made from molded polypropylene to avoid chemical attack. Four spray patterns are available to ensure optimum dissolve rates.

#### Model Information

<u>Model</u>	<u>Description</u>
590	Single product solid dissolver, float-activated, with primary reservoir and back-up float system/reservoir
Dimensions:	26"W x 28"H x 10"D
Weight:	30 pounds (with water)



# Total Eclipse Chemical Management System (Patent Pending)

The Total Eclipse Chemical Management System (CMS) is a reliable automatic management system for operations requiring sophisticated control and data management.

## Features

- ▲ Controls up to 8 products
- ▲ Program up to 20 different wash formulas
- ▲ Connect to Machine Interface and Pumpstand via low voltage cables
- ▲ PC based programming with Formula Editor software
- ▲ "A", "B", "C" program quantities available for all pumps
- ▲ Manager provides confidential report printing with no need to access programming menus
- ▲ Easy transfer of program files and reports via USB flash drive
- ▲ Data reports in HTML format can be read directly into Excel spreadsheets (See Sample Reports below)
- ▲ 5 Modes of operation, Standard, Relay, Event, Occurrence, Grouping
- ▲ Easy to read LCD Display



Total Eclipse CMS is a versatile controller that is backwards compatible with existing NOVA pumpstands and provides reports of production, cost, and chemical consumption.

## System Advantages

- ▲ Simple PC based programming
- ▲ Intuitive menu structure
- ▲ Six line, plain text menu and button prompts display on controller
- ▲ Multiple languages available
- ▲ Name formulas and pumps with customer and industry-specific names
- ▲ Vertical or horizontal mounting
- ▲ Controller setup files can be moved from controller to controller via USB
- ▲ Time or volume calibration
- ▲ Part of a pre-wired modular system
- ▲ Dual level password protection
- ▲ SAE or metric units of measurement

Settings Report		Formula Report	
Report Name	Date Today: 03-04-08 Date Last Stored: 03-04-08	Report Name	Date Today: 03-04-08 Date Last Stored: 03-04-08
Product	1	Product	1
Formula	1	Formula	1
Volume	1	Volume	1
Time	1	Time	1
Relay	1	Relay	1
Event	1	Event	1
Occurrence	1	Occurrence	1
Grouping	1	Grouping	1

Diagnostic Report	
Report Name	Date Today: 03-04-08 Date Last Stored: 03-04-08
Product	1
Formula	1
Volume	1
Time	1
Relay	1
Event	1
Occurrence	1
Grouping	1

Production Summary Report	
Report Name	Date Today: 03-04-08 Date Last Stored: 03-04-08
Product	1
Formula	1
Volume	1
Time	1
Relay	1
Event	1
Occurrence	1
Grouping	1

Sample Reports

## Ordering Information

When ordering specify controller after pump module.

Example: LM-240-XXX  
LM-100 TE  
LM-200 TE  
LL-6000 TE  
LL-8000 TE





## Looking Out For You

Throughout its history, Hydro Systems Company has made a commitment to being the best in cutting-edge technology for the chemical proportioning and dosing industry. With its more than 45 years of proven excellence and market experience, Hydro Systems has become a leader in providing proportioning equipment that provides the highest levels in environmental friendliness, safer work environments, increased productivity, and cleaner work areas.

Part of this commitment has been a dedication to the highest level of customer service in the industry. This, coupled with Hydro's core competencies of superior manufacturing response and flexibility, customer specific product customization, unparalleled speed to launch, and a business model that's fueled by leading design and innovation has resulted in our many long term business relationships with the most significant customers in our industry.

For a comprehensive look at Hydro Systems' complete product lines and the ways they can improve your chemical proportioning and dispensing applications, please visit [www.hydrosystemsco.com](http://www.hydrosystemsco.com)



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