A GRIESBACH COMP

DIAMOND

Water Conditioning

Pre-engineered Industrial Water Softener Systems

Pictured above is a Model DIS-900-3 twin system with optional skid mounting

DIS Series

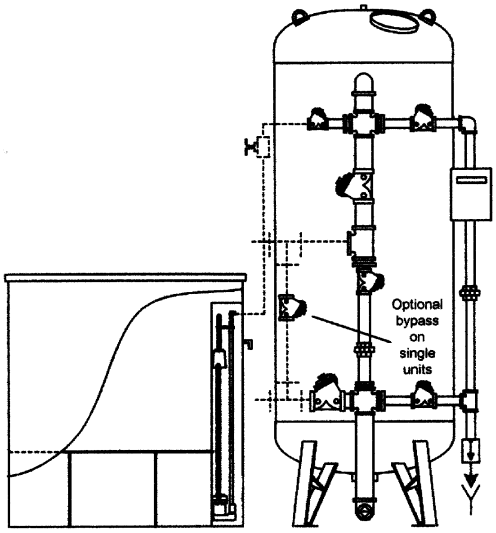
Manufacturers Of Energy - Saving Water Conditioning Equipment
Since 1932

DIAMOND
Water Conditioning

A GRIESBACH COMPANY

STANDARD FEATURES

Design Criteria- Diamond Water systems are an integrated system design using the most reliable and serviceable components on the market today. All softeners are provided with high capacity 8% crosslink industrial cation resin that offers low pressure loss and excellent stability over a wide range of operating conditions. The standard PVC lower distributor system provides corrosion resistant, trouble free service, total resin bed utilization, even service flows and proper backwashing. A filter gravel support bed covers the lower distributor system to prevent intrusion of resin and wasted capacity.



Controller- Diamond Water standard controllers combine a pilot stager with a time clock, mounted and pre-wired in a NEMA rated enclosure to initiate a regeneration. Cycle times are programmable to accommodate a wide range of applications. Push button and manual initiation is provided as standard. Pilot stagers are pre-tubed to the diaphragm valves at the factory. A ball valve and y-strainer are standard on the inlet supply to the pilot stager. Twin alternating systems use a 16-port PVC pilot stager that provides a stand-by unit rinse down feature, prior to going "on-line", as standard.

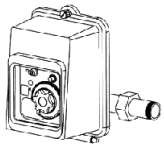
Brine System- Diamond Water dry salt brine systems are designed to provide maximum salt storage. The non corrosive polyethylene brine tank houses a salt grid, brine well and 3/4" PVC commercial brine valve that allows for field adjustments for varying salt dosage. The eductor is designe for maximum efficier cy and reliability (both brine draw a refill. Brine tanks and larger are con of steel with epoxy li primer exterior. A wet salt system is employed using a brine saturator, filtering gravel and an Aquamatic 3010B brine valve.

Control Valves- Diamond Water systems utilize 'Y' pattern diaphragm valves, arranged in a valve nest, for control of the water flow through the system. The individual valves are operated by a pilot stager in the controller using either hydraulic or pneumatic pressure for a control medium. Valves are constructed of cast iron with rubber, stainless steel and brass internals. A pressure compensating drain line flow control is installed on each system to regulate the backwash and fast rinse flows over a wide range of operating pressures.

Resin Tanks- Diamond Water pressure vessels are constructed of welded carbon steel with a cold epoxy lining and primed exterior as standard. The vessels are rated for 100 psi working pressure and supported by steel strap legs welded to the bottom head. Vessels 48" and larger are provided with angle iron legs. A 4" x 6" hand hole in both the upper head and lower sideshell are provided on 20", 24" and 30" diameter vessels while an 11" x 15" manway in the upper head is provided on 36" and larger diameter vessels.

CONTROLLER OPTIONS

- **480QC System** - This electronic controller initiates the regeneration of either single, twin or triple parallel or alternating systems. 1" and 2" turbine meters are available. Regeneration can be delayed on single systems and is immediate on multi-tank systems. Capacity set, capacity remaining, flow rate and unit status are digitally displayed. Controller's are pre-wired with plug-in quick connect cables, housed in a NEMA 4X enclosure and is available in 24 VAC, 120 VAC and 220 VAC.



- **Econominder Remote Meter** - This mechanical meter controller is available in 1", 1 1/2", 2" and 3". Meters are constructed of brass. A mechanical time clock can provide either immediate or delayed regeneration and indicates gallons remaining on a dial that automatically resets after regeneration is complete. Meters are pre-assembled and available in 24 VAC, 120 VAC and 220 VAC.

- **3200 ET** - This electronic timer can be added to the Econominder Remote Meters to provide additional display and control features. All timers are provided in a NEMA 3R enclosure suitable for outdoor use. The timer can control single, twin and triple systems with interlock; immediate or delayed mode; time clock or meter initiation and provides an auxiliary relay to control additional equipment. Digital display provides numerous system functions including time, capacity, flow rate, and a totalizer. Timer is available in 24 VAC, 120 VAC and 220 VAC.

- **Systemax 2000** - This electronic controller contains 9 different system configurations for the ultimate in water treatment system control. An optional tenth system can provide "demand recall" that adds and deletes units from a system based on flow demand. There are independently adjustable relay outputs for each unit in the system. The controller can be used on a single, twin or triple system and offers 10 different regeneration types utilizing time clock, meter or sensor initiation. A Hall Effect type sensor must be used to provide water flow information to the controller. The controller is provided in a NEMA 4X enclosure and available in 24 VAC, 120 VAC and 220 VAC.

- **962S Controller** - This electronic controller is specifically designed for use on diaphragm valve nest systems. The controller operates a single unit but can be coupled with other controllers for twin or triple operation with interlock. The controller initiates immediate, delayed or remote regeneration using time clock, meter or calendar override. The controller is programmed and operating histories are retrievable through push buttons on the front panel. A Hall Effect sensor must be used to provide water flow information to the controller. The controller is provided in a NEMA 1 enclosure and available in 120 VAC and 220 VAC.

Model Number	Dimensions					Shipping Weight (lbs.)		
	Height*	Width	Length**					
			Single	Twin	Triple	Single	Twin	Triple
DIS-150-1	6' 0"	2' 5"	4' 2"	7' 4"	10' 6"	710	1345	2055
DIS-150-11/2		2' 6"				720	1370	2090
DIS-150-2		2' 10"				755	1430	2185
DIS-210-11/2	6' 1"	2' 8"	4' 6"	8' 0"	11' 6"	920	1765	2680
DIS-210-2		3' 0"				950	1815	2760
DIS-210-21/2		3' 1"				1000	1900	2900
DIS-300-11/2	6' 4"	3' 2"	5' 0"	9' 0"	13' 0"	1425	2735	4160
DIS-300-2		3' 6"				1430	2740	4170
DIS-300-21/2		3' 7"				1460	2785	4245
DIS-300-3		3' 8"				1535	2935	4470
DIS-450-11/2	6' 10"	3' 2"	5' 6"	9' 6"	13' 6"	1755	3335	5085
DIS-450-2		3' 6"				1760	3355	5105
DIS-450-21/2		3' 7"				1775	3410	5185
DIS-450-3		3' 8"				1825	3505	5330
DIS-600-11/2	7' 5"	3' 8"	6' 9"	11' 3"	15' 9"	2430	4665	7090
DIS-600-2		4' 0"				2460	4725	7185
DIS-600-21/2		4' 1"				2475	4780	7240
DIS-600-3		4' 2"				2535	4865	7400
DIS-750-2	8' 5"	4' 0"	6' 9"	11' 3"	15' 9"	2835	5440	8275
DIS-750-21/2		4' 1"				2865	5470	8365
DIS-750-3		4' 2"				2970	5580	8550
DIS-900-2	7' 10"	4' 6"	7' 6"	12' 6"	18' 2"	3340	6430	9770
DIS-900-21/2		4' 7"				3380	6490	9810
DIS-900-3		4' 8"				3415	6600	10015
DIS-1050-2	8' 10"	4' 6"	8' 2"	13' 2"	18' 2"	3650	7050	10700
DIS-1050-21/2		4' 7"				3690	7110	10740
DIS-1050-3		4' 8"				3725	7220	10945
DIS-1200-21/2	8' 6"	5' 6"	9' 0"	15' 6"	21' 6"	6300	11290	15810
DIS-1200-3						6500	11600	16275
DIS-1500-21/2	8' 6"	5' 10"	10' 0"	16' 6"	23' 0"	7600	13800	19275
DIS-1500-3						7760	14110	19740
DIS-1800-3	9' 0"	6' 10"	10' 6"	17' 6"	24' 6"	9710	17870	25230
DIS-1800-4						10250	18950	26850
DIS-2400-3	9' 3"	7' 6"	11' 6"	19' 0"	26' 6"	12040	21920	31320
DIS-2400-4						12630	23110	33090
DIS-3000-3	9' 6"	7' 10"	12' 6"	20' 6"	28' 6"	14620	26540	37710
DIS-3000-4						15100	27250	39150

SYSTEM DIMENSIONS

*Allow a minimum of 24 inches above the water softener resin tank to accommodate loading of the sub-fill gravel and resin. A.S.M.E. Code tanks will add approximately 10 inches to the tank height.

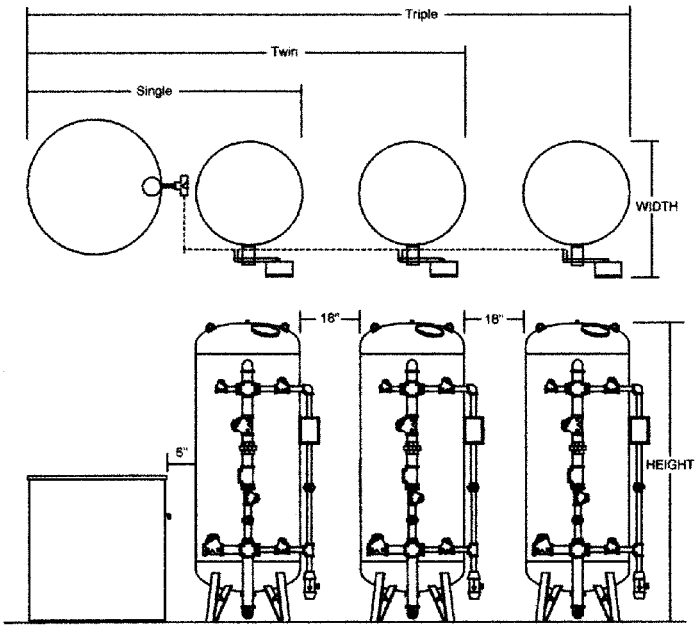
**If less than 4 hours can be provided between regenerations of a twin or triple system, two or three brine tanks respectively, are recommended.

NOTES:

1. Add 4 inches to the height for systems that are provided on an optional steel skid.
2. The brine tank on an optional skid mounted system is not mounted on the skid unless specified.
3. Brine line piping is not provided and must be supplied by the installing contractor. PVC pipe is recommended.

System Specifications

The operating pressure range of all standard Diamond Water systems is 30 to 100 psig and designed for water temperatures from 35˚ to 120˚F. Custom systems are available for higher pressures and temperatures. Standard electrical requirements are 115 volt - 60 hertz, single phase power. Alternate power requirements are optional. Standard electrical enclosures are NEMA 1 rated. NEMA 4X fiberglass enclosures are optional.



These conditioners will not purify or make your water safe to drink.
Product improvements and design changes subject to change without notice.

WARRANTY: CONSULT FACTORY

Your Authorized Dealer: