

**Hellenbrand**

What's In Your Water?™

**ProMate® 6.0 - DMT**  
DUAL MEDIA TECHNOLOGY SYSTEM



**One System with Dual Media  
Solving Multiple Problems**

# Hellenbrand Means Quality and Reliability

The only Waunakee in the world, a village of nearly 11,500 people in south central Wisconsin, is the home of Hellenbrand Water Conditioners. Waunakee, an Indian name that means “peaceful valley,” is the ideal setting for a company with neighborly, small town concern for its customers and dealers. Since it opened its doors in 1967 Hellenbrand has offered something you rarely find anywhere today — well designed, quality products backed up with fast, reliable service. Family owned, made in the USA.

The company leaders, with a total of more than 150 years experience in the water conditioning equipment business, are proud of their reputation so that you can be proud of your Hellenbrand Water Conditioner.

With our growing national network of dealers, Hellenbrand has earned a reputation from their peers within the water treatment industry as an organization that supports its dealer network with not only well designed quality products, but with leading edge technology, extensive dealer training and simply treating our customers with good old fashioned family service.

We continuously work with our dealers to find the best approach to treat various water problems. Until recently, many of these solutions required multiple pieces of equipment to properly treat the various water problems, such as a filter to remove chlorine and chloramines and a water softener to soften the water, Now with the DMT Series systems, we are able to effectively treat various multiple water problems with one unit.



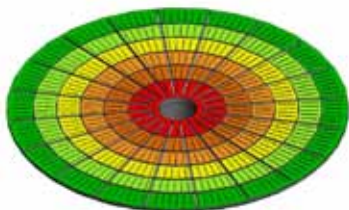
## Elegant Simplicity Combined With Raw Power

### Superior Flow Technology

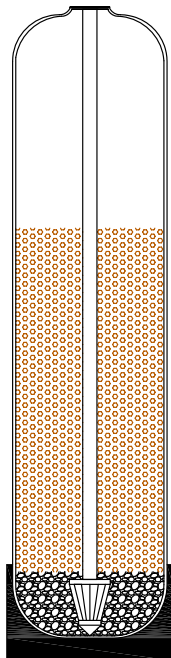
Hellenbrand’s DMT distribution plate has 56% more surface area on 10” diameter systems than standard systems with a cone type distributor, and runs the full width of the tank diameter for significantly improved performance.

- Improved bed expansion in backwash provides better cleaning of the bed.
- Less water is required to regenerate

Array (starting at center)	% Increase of open area with respect to Array No. 1
Array No. 1	-
Array No. 2	100%
Array No. 3	200%
Array No. 4	300%
Array No. 5	400%
Array No. 6	500%



Vortech™ 10” Mid Plate



Standard Tank

### Smart Control Technology

- The ProMate6 Controller accurately measures and records your water usage for the past 63 days. This smart control feature automatically adjusts your reserve capacity to your changing water usage patterns, making sure that you always have soft water.
- Super scrub features keeps your resin bed in like-new condition.

### Fewer Parts = Fewer Problems

- Modular Design
- Non-Corrosive Valve Body & Internals
- One Piece Stack Assembly
- No Nuts, Bolts, Screws or Micro-Switches
- Disassemble and Reassemble in Minutes



# How Does a ProMate6 DMT Water Softener Work?

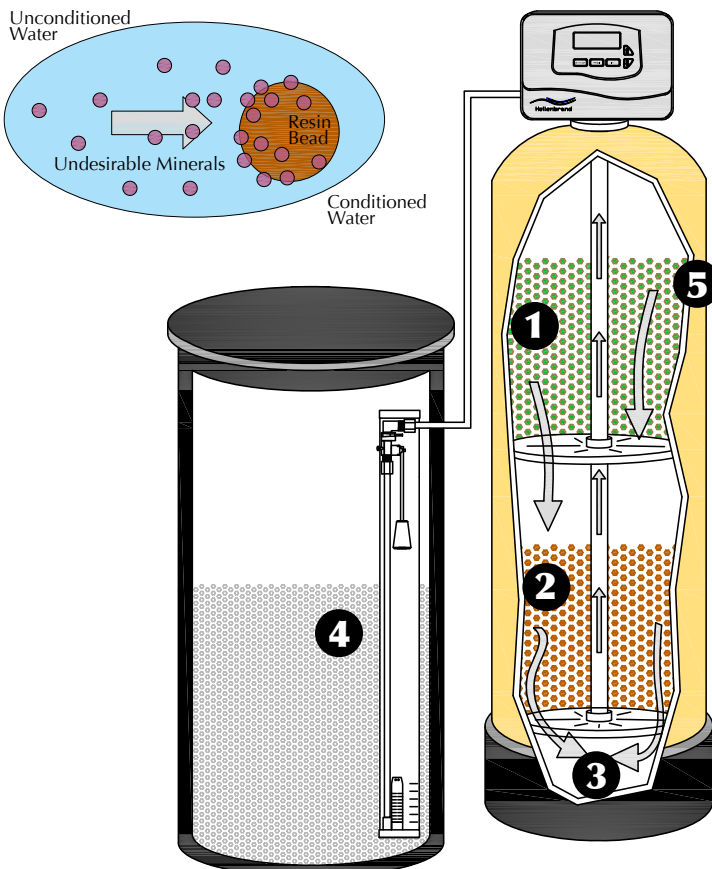
Life is hard - especially if you have hard water in your home. Hard water creates scale, which can shorten the life of your pipes, water heater, dishwasher and washing machine. Hard water deposits stain sinks and bathtubs, spot glasses and dishes, and leave your laundry dull and dingy. Put an end to your problem water with a ProMate6.0 DMT. Why not make the switch today?

## ProMate6.0 DMT with Tannin Reduction

- 1 Raw water enters the upper chamber in the DMT conditioner containing softening resin, which is charged with sodium ions. The hard water ions (calcium & magnesium) are attracted to the softening resin and an equal amount of sodium is bumped off into the water supply.
- 2 Once the softened water leaves the upper chamber, it passes down through the lower chamber where the tannin removal resin removes the tannins in your water supply. (Tannins originate from decaying plant and vegetative matter creating stained water and create a yellow to brown color in water.)
- 3 When the water reaches the bottom of the tank, it exits up through the center of the tank, soft and free of tannins, ready for use in your home or business.
- 4 Eventually the ion exchange resin in both the upper and lower chamber must be recharged. The same strong salt solution from your brine tank recharges both chambers of resin at once, starting the process all over again. The brine solution from your brine tank is the fuel to recharge the resin beads with sodium.

## ProMate6.0 DMT with Carbon

- 1 Raw water enters the upper chamber in the DMT conditioner and passes down through the activated carbon filtration media where chlorine and adverse taste and odors are removed.
- 2 The water then enters the lower chamber of the DMT conditioner containing softening resin, charged with sodium ions. The hard water minerals (calcium and magnesium) are attracted to the softening resin and equal amount of sodium ions are displaced off the resin into the water supply.
- 3 As water reaches the bottom of the tank, it exits up through the center of the tank, soft and free of chlorine, ready for use in your home or business.
- 4 When softening resin is saturated with hard water minerals, it must be recharged. A strong salt solution flushes the calcium and magnesium off the resin and the resin is recharged with sodium. The brine solution from your brine tank is the fuel to recharge the resin beads with sodium.
- 5 The activated carbon in the upper chamber eventually will be consumed with the removal of chlorine and taste and odors and can be easily replaced by your Hellenbrand Dealer.



## Why the DMT is Better

- One unit instead of two.
- Uses less salt.
- Uses less water.
- Fewer parts = fewer problems.
- Smart control automatically adjusts to your families changing water usage patterns.
- Super scrub feature keeps your system operating at peak efficiency.

The Vortech™ Mid Plate allows us to have a separate chamber(s) within a tank to use multiple water treatment medias to effectively treat multiple water problems with one system.

The Vortech™ Bottom Plate provides substantially more slotted surface area than a cone type distributor. This additional area enhances the cleaning ability during regeneration, reduces pressure drop and improves efficiency.



# Complete Protection For Your Home & Family

## You'll notice a big difference in every part of your home with a ProMate6.0-DMT



### Help Dry Skin and Hair

Use less shampoo and conditioner. Enjoy healthier and softer skin and hair with softened, chlorine free water. Chlorine is a strong compound that chemically bonds with protein in our hair and skin, often resulting in dry, brittle, dull looking hair and flaky, itchy skin.



### Stop Discoloration and Staining

Softened water eliminates plugged showerheads, aerators and stains from hard water and significantly reduces rust colored stains from iron. The ProMate-6 DMT with Tannin reduction goes one step further by reducing the staining from tannins.

Photo courtesy of WQA; <http://www.wqa.org/site/ologic.cfmID=1091>



### Reduce Energy Costs

Softened water maintains the Energy Star ratings on your water heater by preventing rock like scale build-up, thus saving you significant dollars in energy costs and a much longer life for your water heater.



### Protect Plumbing, Appliances & Fixtures

Softened, chlorine free water extends the life and significantly reduces the repair costs as a result of hard and/or chlorinated water. Chlorine oxidation turns rubber seals in faucets and water closets into mush. Your faucets and showerheads will last much longer and your dishes and clothes will be cleaner.

## Soft Water Benefits Study

### Dishwasher Study Findings

- Detergent savings of up to 70% with soft water as compared to hard water.
- Depending on the soil, hardness reduction was found to be up to 12 times more effective at soil removal than increasing detergent dose.
- Hardness reduction was 6 times more effective at reducing spotting and twice as effective at reducing filming as increasing detergent use.

### Laundry Study Findings

- Stain removal performance increases dramatically when hardness is removed even when dose and temperature are also lowered.
- Softening the water will allow use of less detergent and will also save energy by lowering water temperatures, while still maintaining or improving performance.

### Softened Water Benefits

- **Gas Storage Tank Water Heaters**
  - Gas storage tank household water heaters operated on softened water maintained the original factor efficiency rating over a 15 year lifetime.
  - Each 5 grains of water hardness causes an 8% loss in efficiency and an 8% increase in cost for using 100 gallons of hot water per day on 30gpg hard water. That's 48% less efficient than softened water.

- **Tankless Water Heaters**

- Tank-less water heaters operating on 26.2 grains per gallon of hardness failed to operate after 19 days of testing.
- Softened water saves 40% of operating costs compared to operating on 20 gpg of hard water and saves 57% when operating on 30 gpg of hard water.

- **Electric Water Heaters**

- Each 5 gpg of water hardness causes 0.4 pounds of scale accumulation each year in electric storage tank household water heaters.
- Up to 30 pounds of calcium carbonate rock-like scale deposits can accumulate in electric water heaters.

- **Carbon Footprint**

- The carbon footprint increases 18% for gas storage tank water heaters when operated on 26 gpg hard water for 15 years as compared to the same operation on 0 gpg hard water

- **Showerheads and Fixtures**

- Showerheads with soft water maintained a brilliant luster and full flow, and performed nearly as well throughout the study as the day they were installed.
- Showerheads on hard water lost 75% of the flow rate in less than 18 months.

The detergent savings studies were conducted by the independent testing firm Scientific Services S/D, Inc. of New York and the softened water benefit studies were conducted by the Battelle Memorial Institute, a non-profit international science and technologies enterprise. Both studies were funded by the Water Quality Research Foundation (WQRF).



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Your Hellenbrand Dealer:



Hellenbrand's continuing effort to help save our environment, this brochure was printed on recycled paper.

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