## H200-2" \& H300-3" SERIES WATER CONDITIONERS



# For Commercial \& Industrial Applications 

Apartment Buildings<br>Boiler Water Treatment<br>Car Washes<br>Commercial Buildings<br>Condominiums<br>Factories<br>Hospitals

Laundries
Mobile Home Parks
Motels and Hotels
Nursing and Rest Homes
Office Buildings
Restaurants
Schools

## The H200 \& H300 is powerful, easy to use and packed with benefits

- Solid state microprocessor can control from one to four units allowing system add on capabilities as your needs grow.
- Regeneration may be initiated with a time clock, meter delayed or meter immediate.
- Up to nine fully programmable cycle times, that can be moved around and repeated in various orders for your particular application needs.
- Soft water brine refill reduces build up in brine tank from hardness and iron present in the raw water supply.
- Easy to use user screen shows Time of Day, Current Flow Rate, Total Gallons Processed and Volume/Days until Regeneration.
- Solid state microprocessor has a removable POD display allowing you to remote mount the POD on top-mounted systems for easy access.
- Economical built-in electronic meter on H200 Series requires no extra piping.
- H200 \& H300 Standard System Design Options
- Single Tank Systems
- Twin, Triplex and Fourplex Alternating
- Twin, Triplex and Fourplex Demand Recall
- Lead free brass body with NSF Approved Food Grade Electro-Deposited Epoxy Coating to protect internally and externally against corrosion.
- Corrosion free Noryl® backplate.
- Nema 3 Enclosure
- Optional Calendar Day Override from 1-28 days.
- 24-Volt output AC adapter is safe, comes with a 15 -foot cord for easy installation.
- Reliable and proven DC drive from our family of H-Series Systems.
- Capacitor back-up with up to 24 -hour power carry over.
- Optional System Control Board enables the addition of a third and fourth unit to be implemented into the system design. In addition the system board can be utilized for demand recall or to operate external devices like chemical feed pumps, booster pumps, and to lock out an R.O. system. The available two sets of normally open \& normally closed auxiliary outputs can be activated after the start of a regeneration, after the start of a specified regeneration cycle, on a set number of gallons during service, on a set number of gallons during regeneration, on a set number of gallons during service \& regeneration mode, while in standyby \& regeneration mode with a multi-tank system, or if a unit would be in an Error Mode.
- Motorized Alternating Valve "MAV" Provides:
- Twin Alternating
- Provides for no Raw Water By-Pass during regeneration
- Provides choices of treated or non-treated water for regeneration.
- Separate source regeneration.



## H200 Physical Specifications

Mineral tank sizes shown are with polyglass tanks.

| MODEL | PIPE SIZE(INCHES) | MINERAL TANK (INCHES) | RECOMMENDED BRINE TANK |  | APPROXIMATESHIPPING WEIGHT-TOP MOUNT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (INCHES) | (LBS) | SINGLE | TWIN |
| H200-240 | 2 | $24 \times 72$ | $24 \times 50$ | 715 | 674 | 1325 |
| H200-300-24 | 2 | $24 \times 72$ | $24 \times 50$ | 715 | 776 | 1529 |
| H200-300-30 | 2 | $30 \times 72$ | $24 \times 50$ | 1,110 | 1059 | 2064 |
| H200-450-30 | 2 | $30 \times 72$ | $30 \times 50$ | 2,030 | 1333 | 2593 |
| H200-450-36 | 2 | $36 \times 72$ | $39 \times 48$ | 2,030 | 1393 | 2653 |
| H200-600 | 2 | $36 \times 72$ | $39 \times 48$ | 1,640 | 1751 | 3426 |
| H200-750 | 2 | $42 \times 72$ | $42 \times 60$ | 2,580 | 2535 | 4954 |
| H200-900 | 2 | $42 \times 72$ | $50 \times 60$ | 4,130 | 2922 | 5750 |
| H200-1200 | 2 | $48 \times 72$ | $50 \times 60$ | 4,130 | 3600 | 6900 |

## H200 Capacity Ratings

| MODEL | $\begin{aligned} & \text { RESIN } \\ & \text { CU.FT. } \end{aligned}$ | RATED CAPACITY |  |  | FLOW RATES (gpm) |  | $\begin{aligned} & \text { BKW } \\ & \text { GPM } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { LOW SALT } \\ & \text { GRAINS/LBS } \end{aligned}$ | $\begin{aligned} & \text { MEDIUM SALT } \\ & \text { GRAINS/LBS } \end{aligned}$ | HIGH SALT GRAINS/LBS | 15 PSI | 25 PSI |  |
| H200-240 | 8 | 152,000/48 | 224,000/80 | 256,000/120 | 77 | 100 | 12 |
| H200-300-24 | 10 | 190,000/60 | 280,000/100 | 320,000/150 | 75 | 97 | 12 |
| H200-300-30 | 10 | 190,000/60 | 280,000/100 | 320,000/150 | 92 | 120 | 20 |
| H200-450-30 | 15 | 285,000/90 | 420,000/150 | 480,000/225 | 88 | 113 | 20 |
| H200-450-36 | 15 | 285,000/90 | 420,000/150 | 480,000/225 | 100 | 130 | 30 |
| H200-600 | 20 | 380,000/120 | 560,000/200 | 640,000/300 | 97 | 126 | 30 |
| H200-750 | 25 | 475,000/150 | 700,000/250 | 800,000/375 | 106 | 137 | 40 |
| H200-900 | 30 | 570,000/180 | 840,000/300 | 960,000/450 | 104 | 130 | 40 |
| H200-1200 | 40 | 760,000/240 | 1,120,000/400 | 1,280,000/600 | 105 | 135 | 50 |

1. Steel tank design configurations are also available up through 60 " tank diameters. Consult factory for details.

OPERATING CONDITIONS

1. Water Pressure 30-100 psi.
2. Water temperature is not to exceed $110^{\circ} \mathrm{F}$ and the unit cannot be subject to freezing conditions. Consult factory for higher water temperature applications.
3. Limit of 2 ppm of Ferrous Iron. Add 3 grains per gallon of hardness for each ppm of iron present.
4. Flex connectors and vacuum breakers are required when using the PolyGlass Composite mineral tanks.
5. Backwash flow rates are calculated at 4 gpm per sq. ft. of bed area and rounded off based on $50^{\circ} \mathrm{F}$ water temperature.
6. Refer to Hellenbrand Bulletin 2050 "Flow Rates and Soft Water Quality (Hardness Leakage) if your application requires that levels of hardness leakage do not exceed "x".

## H200 Series Top Mount Dimensions-Fiberglass Tanks

| MODEL | SYSTEM <br> HEIGHT | OUTLET <br> HEIGHTS | INLET <br> HEIGHTS | DRAIN <br> HEIGHTS | MINERAL <br> TANK | BRINE <br> TANK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{H} 200-300$ | 89.4 | 86.7 | 83.1 | 85.4 | $24 \times 72$ | $24 \times 50$ |
| $\mathrm{H} 200-300-30$ | 86.2 | 83.5 | 79.9 | 82.2 | $30 \times 72$ | $24 \times 50$ |
| $\mathrm{H} 200-450$ | 86.2 | 83.5 | 79.9 | 82.2 | $30 \times 72$ | $30 \times 50$ |
| $\mathrm{H} 200-600$ | 87.2 | 84.5 | 80.9 | 83.2 | $36 \times 72$ | $39 \times 48$ |
| $\mathrm{H} 200-750$ | 104.5 | 101.8 | 98.2 | 100.5 | $42 \times 72$ | $42 \times 60$ |
| $\mathrm{H} 200-900$ | 104.5 | 101.8 | 98.2 | 100.5 | $42 \times 72$ | $50 \times 60$ |
| $\mathrm{H} 200-1200$ | 104.5 | 101.8 | 98.2 | 100.5 | $48 \times 72$ | $50 \times 60$ |

## H200 Series Side Mount Dimensions-Fiberglass Tanks

| MODEL | SYSTEM <br> HEIGHT | OUTLET <br> HEIGHTS | INLET <br> HEIGHTS | DRAIN <br> HEIGHTS | MINERAL <br> TANK | BRINE <br> TANK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| H200-300-SM | 95.6 | 54.6 | 51 | 53.3 | $24 \times 72$ | $24 \times 50$ |
| H200-300-30-SM | 94.6 | 54.6 | 51 | 53.3 | $30 \times 72$ | $24 \times 50$ |
| H200-450-SM | 94.6 | 54.6 | 51 | 53.3 | $30 \times 72$ | $30 \times 50$ |
| H200-600-SM | 95.3 | 54.6 | 51 | 53.3 | $36 \times 72$ | $39 \times 48$ |
| H200-750-SM | 100.9 | 54.6 | 51 | 53.3 | $42 \times 72$ | $42 \times 60$ |
| H200-900-SM | 100.9 | 54.6 | 51 | 53.3 | $42 \times 72$ | $50 \times 60$ |
| H200-1200-SM | 100.9 | 54.6 | 51 | 53.3 | $48 \times 72$ | $50 \times 60$ |

H300 Physical Specifications

| MODEL | PIPE SIZE(INCHES) | MINERAL TANK (INCHES) | BRINE TANK |  | APPROXIMATE SHIPPING WEIGHT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (INCHES) | SALT STORAGE <br> ( LBS) | SHIPPING SINGLE | $\begin{aligned} & \text { WEIGHT } \\ & \text { TWWN } \end{aligned}$ |
| H300-300 | 3 | 24x72 | 30x50 | 1110 | 800 | 1600 |
| H300-300-30 | 3 | 30x72 | 30x50 | 1110 | 1070 | 2070 |
| H300-450 | 3 | 30x72 | $39 \times 48$ | 2030 | 1340 | 2600 |
| H300-600 | 3 | $36 \times 72$ | 39x48 | 1640 | 1760 | 3440 |
| H300-750 | 3 | $42 \times 72$ | $42 \times 60$ | 2580 | 2540 | 4960 |
| H300-900 | 3 | $42 \times 72$ | $50 \times 60$ | 4130 | 2930 | 5760 |
| H300-1200 | 3 | $48 \times 72$ | 50x60 | 4130 | 3600 | 6900 |
| H300-1500 | 3 | 54x72* | 60x64 | 4000 | N/A | N/A |
| H300-1950 | 3 | 60x72* | $72 \times 45$ | 4800 | N/A | N/A |
| H300-2100 | 3 | $63 \times 86$ | $72 \times 54$ | 4800 | N/A | N/A |

Mineral tank sizes shown are with polyglass tanks. (*denotes steel tanks)

## H300 Capacity Ratings

| MODEL | $\begin{aligned} & \text { RESIN } \\ & \text { CU.FT. } \end{aligned}$ | RATED CAPACITY |  |  | FLOW RATES (gpm) |  | $\begin{aligned} & \text { BKW } \\ & \text { GPM } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | LOW SALT GRAINS/LBS | MEDIUM SALT GRAINS/LBS | HIGH SALT GRAINS/LBS | 15 PSI | 25 PSI |  |
| H300-300 | 10 | 190,000/60 | 280,000/100 | 320,000/150 | 98 | 126 | 12 |
| H300-300-30 | 10 | 190,000/60 | 280,000/100 | 320,000/150 | 158 | 205 | 20 |
| H300-450 | 15 | 285,000/90 | 420,000/150 | 480,000/225 | 144 | 186 | 20 |
| H300-600 | 20 | 380,000/120 | 560,000/200 | 640,000/300 | 172 | 222 | 30 |
| H300-750 | 25 | 475,000/150 | 700,000/250 | 800,000/375 | 190 | 244 | 40 |
| H300-900 | 30 | 570,000/180 | 840,000/300 | 960,000/450 | 180 | 238 | 40 |
| H300-1200 | 40 | 760,000/240 | 1,120,000/400 | 1,280,000/600 | 194 | 251 | 50 |
| H300-1500 | 50 | 950,000/300 | 1,400,000/500 | 1,600,000/750 | 200 | 260 | 90 |
| H300-1950 | 65 | 1,235,000/390 | 1,820,000/650 | 2,080,000/975 | 205 | 260 | 110 |
| H300-2100 | 70 | 1,330,000/420 | 1,960,000/700 | 2,240,000/1,050 | 210 | 270 | 110 |

All sizes are also available with steel tanks.
OPERATING CONDITIONS

1. Water Pressure 30-100 psi.
2. Water temperature is not to exceed $110^{\circ} \mathrm{F}$ \& the unit cannot be subject to freezing conditions. Consult factory for higher water temperature applications.
3. Limit of 2 ppm of Ferrous Iron. Add 3 grains per gallon of hardness for each ppm of iron present.
4. Flex connectors and vacuum breakers are required when using the PolyGlass Composite mineral tanks.
5. Backwash flow rates are calculated at 4 gpm per sq. ft . of bed area and rounded off based on $50^{\circ} \mathrm{F}$ water temperature.
6. Refer to Hellenbrand Bulletin 2050 "Flow Rates and Soft Water Quality (Hardness Leakage) if your application requires that levels of hardness leakage do not exceed "x".

## H300 Series Top Mount Dimensions-Fiberglass Tanks

| MODEL | SYSTEM <br> HEIGHT | OUTLET <br> HEIGHTS | INLET <br> HEIGHTS | DRAIN <br> HEIGHTS | MINERAL <br> TANK | BRINE <br> TANK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{H} 300-300$ | 99.3 | 86.6 | 86.6 | 90.3 | $24 \times 72$ | $24 \times 50$ |
| $\mathrm{H} 300-300-30$ | 96.1 | 83.4 | 83.4 | 87.1 | $30 \times 72$ | $30 \times 50$ |
| $\mathrm{H} 300-450$ | 96.1 | 83.4 | 83.4 | 87.1 | $30 \times 72$ | $39 \times 48$ |
| $\mathrm{H} 300-600$ | 97.1 | 84.4 | 84.4 | 99.8 | $36 \times 72$ | $39 \times 48$ |
| $\mathrm{H} 300-750$ | 114.4 | 101.7 | 101.7 | 105.4 | $42 \times 72$ | $42 \times 60$ |
| $\mathrm{H} 300-900$ | 114.4 | 101.7 | 101.7 | 105.4 | $48 \times 72$ | $50 \times 60$ |
| $\mathrm{H} 300-1200$ | 114.4 | 101.7 | 101.7 | 105.4 | $48 \times 72$ | $50 \times 60$ |
| $\mathrm{H} 300-2100$ | 118.5 | 105.8 | 105.8 | 109.5 | $63 \times 86$ | $72 \times 54$ |

Note: System height includes DLFC installed on the valve \& 2" elbow. If DLFC is installed on the drain line, $4^{\prime \prime}$ can be taken off of the total system height.

## H300 Series Side Mount Dimensions-Fiberglass Tanks

| MODEL | SYSTEM <br> HEIGHT | OUTLET <br> HEIGHTS | INLET <br> HEIGHTS | DRAIN <br> HEIGHTS | MINERAL <br> TANK | BRINE <br> TANK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| H300-300-SM | 95.6 | 51 | 51 | 58 | $24 \times 72$ | $30 \times 50$ |
| H300-300-30-SM | 94.6 | 51 | 51 | 58 | $30 \times 72$ | $30 \times 50$ |
| H300-450-SM | 94.6 | 51 | 51 | 58 | $30 \times 72$ | $39 \times 48$ |
| H300-600-SM | 95.3 | 51 | 51 | 58 | $36 \times 72$ | $39 \times 48$ |
| H300-750-SM | 100.9 | 51 | 51 | 58 | $42 \times 72$ | $42 \times 60$ |
| H300-900-SM | 100.9 | 51 | 51 | 58 | $42 \times 72$ | $50 \times 60$ |
| H300-1200-SM | 100.9 | 51 | 51 | 58 | $48 \times 72$ | $50 \times 60$ |
| H300-2100-SM | 105.3 | 51 | 51 | 58 | $63 \times 86$ | $72 \times 54$ |



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All dimensions $\pm 2$ " and are subject to change without notice. Use as reference only.
Call factory for optional tank \& dimensional configurations.
See website www.hellenbrand.com for more detailed information and complete brochure.
Product Improvement designs are subject to change without notice.

