

# Horizontal Centrifugal Pumping Solutions

## We Custom Build to Meet Your Requirements . . .



. . . and Every Station is  
Dynamic Factory Tested to Insure  
Performance and Reliability

# User-Friendly and Custom Programmable Controls

Versatile and reliable, Horizontal Centrifugal Pumping Systems by Watertronics® have become a mainstay in sports turf and golf course irrigation. Engineered specifically for each application, HC models offer flexibility and are a cost-effective solution for large and small capacity irrigation requirements.

From the simplex model to any custom multi-pump configuration, the HC systems are available with options such as: Electronic Butterfly Valve (EBV) or Variable Frequency Drive pressure regulation, Watervision Remote Software Interface, custom built enclosures, and more.

## Programmable logic controls

Unique algorithms optimize pressure regulation and pump pressure characteristics to reduce pressure surges on the system.

**Fertigation logic** is incorporated into the station PLC which enables calibration, remote monitoring and control.

## Unique Watertronics® algorithm optimizes Variable Frequency Drives (VFD)

Watertronics unique software algorithm tunes the VFD pressure characteristics to each pump and each combination of pumps in the system. This assures near perfect pressure regulation from no flow up to full pumping capacity. Watertronics systems also incorporate ride-through protection to keep your system operational following a loss of power or an alarm condition.

## Virtual Vision™ II user-friendly, color operator interface

Watertronics offers an easy-to-use Touchscreen operator interface with full color TFT Active Matrix LCD display for monitoring alarms, changing pump sequencing, adjusting downstream pressure, changing filter flush duration, recording or resetting water usage, calibration and much more right at the touch of your finger.

## Monitor your pump station controls remotely with Watervision®

**Watervision®** is a user-friendly monitoring software package to control and monitor the pump station remotely from an office based PC via short haul, phone, radio or fiber optic modem.

**Pump-Link®** integrates with the irrigation central computer and allows you to manage the entire irrigation system including the water distribution controls in one application. It allows the irrigation system and the pump station to react to each other in "real time".



Watervision® controls the station remotely from your PC, and Pump-Link® integrates with your irrigation central software

Unique PLC algorithms to optimize pressure regulation and pump curve characteristics to reduce pressure surges on the system

Fertigation logic is incorporated into PLC enabling calibration, remote fertigation control



VirtualVision™ II User-Friendly Color Touch Screen Operator Interface - important functions right at your finger tip



Watertronics® fine tunes VFDs to achieve near perfect pressure regulation



Unitized skid construction with reinforced rolled steel base

# Watertronics® Built-In High-Efficiency Components



Nationwide Technical Service through PSN (Pump Service Network) for installation, start-up, maintenance and retrofitting

Every pump station is flow tested under simulated field conditions to reduce set-up time and provide you peace of mind



## Unitized skid construction

Watertronics skids are formed using a single continuous sheet of pre-punched steel that is free of welding seams or cracks and prevents potential for rust right from the beginning. Structural steel is welded underneath to maximize strength.

## Rust fighting coatings for superior product appearance and durability

All pump station components are painted individually prior to station assembly. A multi-step coating system which includes metal preparation, rust-inhibitive, baked epoxy prime coat, and a two-part ultraviolet insensitive baked polyurethane finish is used to produce a durable, rust-free product and an appliance-like look.

## Motors and pumps

**Motors** are inverter duty energy efficient and are available in various voltages.

**Pumps** are end-suction centrifugal high efficiency products.

## Freeze-Proof Heat Exchanger

Automatically self-draining to eliminate freeze damage.

## EBV Electronic Butterfly Valve

EBV Patented Electronic Butterfly Valve system (bypass backup mode for pressure regulation in the event of a VFD fault) compliments VFD controls by pressure regulating each across the line pump and provides 100% backup pressure regulation in the event of a VFD fault.

## Filters

Resist rust and corrosion and utilize pressure transducers upstream and downstream of the filter assembly for superior flushing performance, reliability and accuracy.

**Filter Flush Valve** uses a dirty water tolerant Electric Butterfly Valve rather than a Hydraulic Diaphragm Valve.

## Sustain and Jockey pumps

**Jockey pumps** eliminate the need to run a larger main pump for applications such as syringing and hand watering. Allows main pumps to come on line only when a higher flow is required.

**Sustain Pumps** keep the system pressurized and allow for hand watering.

Optional Patented EBV Electronic Butterfly Valve System used for bypass backup mode for pressure regulation in the event of a VFD fault

A jockey pump eliminates the need to run a larger main pump for applications such as syringing and hand watering.

Rust fighting multi-step coatings for durability and appliance-like look



Stainless Steel Filter that is impervious to corrosion, Filter Flushing Mechanism, Flush Valve utilizing an EBV System



# More Options That Can Make the Difference

Additional choices for Watertronics Horizontal Centrifugal Pumping systems:

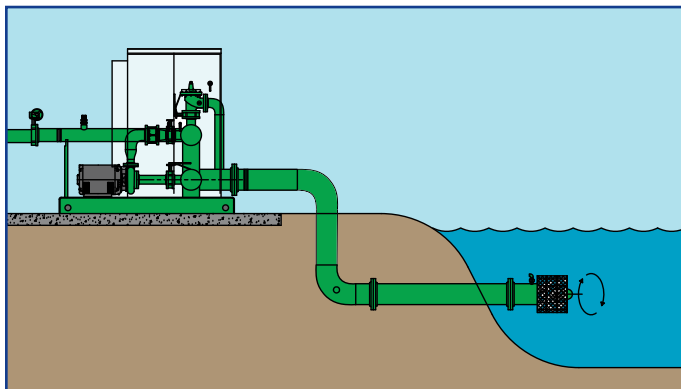
- Custom-built corrosion free composite enclosures
- Enclosure heaters and air conditioners
- Enclosure insulation
- Sustain/Jockey pumps
- Fertigation equipment and integrated controls
- Premium surge protection
- Filters and screens
- Choice of station colors (Sandstone, Green, custom)



**EZ Feed™ Injection Systems** integrate seamlessly with pump station control software. You can adjust and monitor at the panel's touch screen or remotely at your office PC.

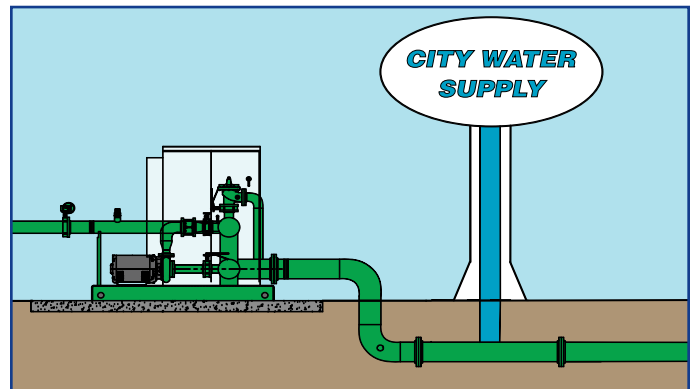


**Watertronics® composite enclosures** are corrosion-free, sound-attenuating, impact-resistant, and have an extended life.



## Pond / River Suction Lift

The most cost-effective solution for a water supply source is the centrifugal pumping system. Suction intake pipes are constructed from HDPE with or without float system. They can be individual units for each pump, or a common intake manifold supplying multiple pumps.



## Flooded Suction or Booster Model

Typical applications utilize positive pressure water sources such as a municipal water supply, wells, or reservoirs. Incoming pressure is boosted and regulated to the required system discharge pressure.