

Municipal Pumping Stations

Watertronics Municipal

Watertronics is your source for complete packaged pumping systems to control pressure and flow. Stations can be equipped with horizontal centrifugal, vertical multi-stage, vertical turbine, or fully submerged pumps. Combine these pumps with Electronic Butterfly Valves (EBV's), Variable Frequency Drives (VFD's), or a combination of EBV's and VFD's for precise fluid control.

Standard Features

- · Heavy duty unitized construction
- High efficiency pumps and motors
- All welded, galvanized piping
- U.L. listed, NEMA4 rated control cabinet
- TouchScreen Operator Interface
- DCS telemetry interface with mod bus
- EBV or VFD pressure regulation
- Lightning/surge protection
- Solid state flow and pressure sensors
- · Flow-based pressure regulation
- Full factory testing prior to delivery
- Field start-up and commission

Optional Features

- Custom-built enclosures
- · Choice of station color
- Enclosure heaters and air conditioners
- Enclosure thermal and sound insulation
- Filters and strainers
- · Chemical additions and control
- SCADA software interface
- Premium surge protection
- Magnetic Induction Flowmeter
- Multiple Dynamic Sensing Algorithms
- Ductile iron, ni-resist, stainless, and HDPE



Dynamic Testing / Performance Verification

Every **Watertronics** pump station is performance tested before it leaves our factory. Pressure, flow, voltage, amperage, power factor and Kilowatt usage are automatically recorded in small flow output increments. This data is printed and presented to the customer as verification of the station's performance. Additional tests include temperature, vibration, pump sequencing and pressure regulation. Since all **Watertronics** pump stations are "test driven" at our factory, you are assured of a pump station that will perform as specified.

pal Pumping Systems

Watervision® TouchScreen Operator Interface

Watertronics offers the most user-friendly operator interface available. All pertinent information about the pump station is displayed on a full graphics screen many times larger than a "text-only display". Monitoring alarms, changing pump sequencing, adjusting downstream pressure, changing filter flush duration, recording or resetting water usage, calibration, and much

more is at the touch of your finger.



Electronic Butterfly Valve (EBV) Pressure Control

Compare **EBV** technology to hydraulic pressure reducing valves.

All the functions you've come to expect from **VFD** systems are incorporated in **Watertronic's** exclusive **EBV** design, along with many benefits not found elsewhere, for any price.

• Computer controlled, precise pressure regulation. Set the desired pressure with the push of a finger on our operator interface and the electronics take over. No valves to adjust. No unscheduled maintenance.

Overview

System

Logging

Alarms

Flow

- Smooth, surge-free ramping-up of the system pressure with gradual repressurization anytime the pressure drops below an adjustable set point.
- Automatic restarts after a fault condition. Our control system assures that a nuisance fault will not shut the system down.
- Automatic, demand-based pressure regulation. This means energy savings, less stress on the piping and more uniform pressure delivered to the end user.

Variable Frequency Drive (VFD) Pressure Control

Watertronics' unique software algorithm tunes the **VFD** pressure regulation 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 the system operational following a loss of power or an alarm condition. If an alarm condition occurs, our software takes a *snapshot* of the pump station operating conditions prior to shutdown, and then decides how best to repressurize the piping system.



Rugged Skid Construction & Durable Finish

Watertronics skids are superior because they are formed, using one continuous sheet of pre-punched steel that is free of seams and cracks. Structural steel is welded underneath to maximize strength. All pump station components are painted including the top and bottom of the skid. This process includes a two-part epoxy undercoat and polyurethane

topcoat. Both primer and finish coat are baked and cured at 165F in our computer controlled, automotive-grade spray booths. (Watertronics unique skids stay cleaner and resist corrosion

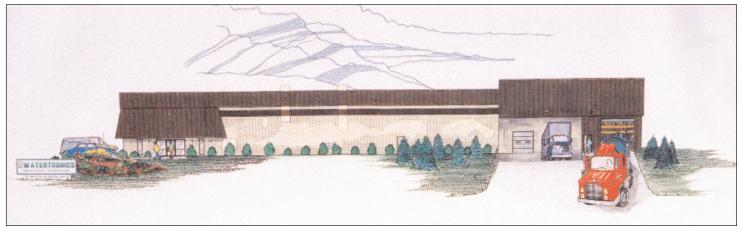
providing longer life and a better looking station for years to come).







Watertronics corporate office and manufacturing facilities are located in Hartland, Wisconsin. There are two existing facilities that are used for fabrication, assembly, blast/paint, testing, engineering, shipping/receiving, service, sales and administration. A new expansion scheduled for completion by December 2003, will increase our fabrication and assembly capabilities plus substantially enlarge the dynamic testing area. Through the new expansion, **Watertronics** will have 52,000 square feet under roof.



Artist's rendering of the proposed expansion of the Watertronics Fabrication building

