

Equipment Specifications/Scope of Work

Project Equipment Scope:

Prefabricated, self-contained, Variable speed, (VFD), 25 HP horizontal centrifugal pump station with piping, valves, and enclosure. Controls will be an operator interface with software programming written specifically for this project. A formed and reinforced base platform and enclosure with lockable lid contains all manifolding, pumps, motors and control panels (disconnect mounted externally) to provide an integral unit ready for easy installation, anchored to a concrete pad. Full load amps = 40 (est). Pressure drop start configuration. Power supply 480v/3ph/60hz

STANDARD CONTROLS & EQUIPMENT INCLUDE:

- External mounted NEMA 3R main disconnect panel
- U.L listed control panel
- Multi-line operator interface display featuring:
 - Flow readout
 - Pressure readout
 - Flow totalizer
 - Elapsed run time display
- Alarm conditions with safety shutdown:
 - Low discharge pressure shutdown
 - High discharge pressure shutdown
 - VFD fault shutdown
 - High pump temperature shutdown
- Overload, single phase, phase imbalance/low voltage protection
- Surge protection for main station and solid state controls
- Variable Frequency Drive pressure regulation
- Stainless steel pressure transducer
- One (1) 25 HP, 3600 RPM horizontal centrifugal pump and EISA compliant ODP motor. Pump to be cast iron with a bronze impeller and mechanical seal.
- Silicone filled pressure gauges with isolation valve on suction and discharge piping

- Station discharge isolation valve
- Full flow by-pass piping with QTY (3) isolation valves inside station enclosure
- Baked and cured two part polyurethane ultraviolet insensitive paint
- One operator and maintenance manual

Station Performance: 450 GPM @ 48 PSI Boost. Dynamic Inlet Pressure = 32 PSI

ADDITIONAL EQUIPMENT & SERVICES TO BE INCLUDED WITH PUMP STATION:

- Forced fan air cooled ventilated marine grade aluminum pump station enclosure and stainless steel base, unpainted, with lockable access cover
- Internal Sound Dampening Material
- 6" Netafim Combination Hydrometer / Normally Open Master Valve
- Optical Isolator for sharing flow sensor
- Dead front external disconnect panel
- Vandal resistant red alarm light
- Pressure Drop Start
- Cloud based remote monitoring w/ 5yr subscription package
 1. Include Local Start-Up
 2. Include Crane to Off-Load and Set Pump Station
 3. Include Domestic US Freight from Factory to Job Site: FOB Factory
 4. Shipment: A firm delivery date will be established and transmitted to owner when deliveries are confirmed.
 5. Equipment submittal data electronically sent to the owner.

DELIVERY AND SET-UP: (contractor responsibility)

1. Contractor will be responsible for having job site readily accessible for station delivery.
2. Contractor will provide the equipment and personnel required to unload and/or set the pump station.
3. Contractor will be responsible for primary electrical hookup to pump station.
4. Contractor will be responsible for making all piping connections.

5. Contractor will be responsible for fence modifications if required for installation.
6. Contractor will be responsible for wet well, slab, or concrete work

START-UP:

1. Factory Manufacturer Representative Start-up to be included
2. Contractor will notify the Owner one week in advance of the desired start-up date.
3. Factory Manufacturer Representative Start-up Report

WARRANTY:

Pump station products to be free of defects in materials and workmanship for a period of two (2) years from the date of startup, but not later than 27 (27) months from the date of invoice, unless modified by customer with the selection of an extended warranty option.

Design is based on a Watertronics 9000 Series. Booster Variable Speed Pumping System. U.L. Approved Package Pumping System. Model Description WMBV-9000-2-25-480-3-450-80. **(OR EQUAL)** substitute equipment requests must meet the design criteria to be considered.