



## Product Overview

The EXCEL Fiberglass Package Lift Stations for sewage and stormwater combine a heavy duty fiberglass basin with a high quality range of grinder and non-clog pumps to provide a prefabricated lift station solution for many applications.

Fiberglass is a resilient light-weight material with excellent chemical resistance and is extremely strong. The basin is engineered to be free standing yet, fully capable of withstanding ground pressure. Holes can easily be cut for vent and conduit penetrations on site and inlet connections are field installed.

The standard lid is a cast iron manhole cover and frame that can be cast in concrete to create a H20 traffic-rated cover. The standard control panel includes a NEMA 4X enclosure that automatically operates simplex or duplex pumps and includes a high level alarm.

EXCEL's unique integrated valve chamber removes the valves out of the wet is an often utilized option for these package lift stations.

The fiberglass basins can also be used as neutralization and buffer pits in industrial waste treatment systems, holding tanks in tank farms, stormwater detention chambers, solids settling pits and dump tanks in water and wastewater treatment systems.

EXCEL's standard range of submersible grinder and non-clog pumps provide dependable solutions for a wide range of domestic, commercial and industrial pumping applications.

#### Applications

- Commercial and Domestic Sewage
- Septic Effluent
- Industrial Waste
- Stormwater

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## Advantages



### Designs





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### Package Pump Systems

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- 1) Factory pre-assembled for fast installation
- 2) Heavy-duty cast iron lids: Suitable for traffic when cast in concrete
- 3) H2S Resistant durable fiberglass construction
- 4) Plug or gate valves for pump isolation and check valves for reverse flow preventation
- 5) Optional bypass connection, air-release valve or flow-meter in valve vault
- 6) Integrated valve vault eliminates the need to enter the wet well for service
- 7) Multiple piping materials available:
  - SCH80 PVC or CPVC
  - Ductile Iron
  - HDPE
  - Stainless Steel
- 8) Guide rail system allows for easy pump removal
- 9) Submersible non-clog, chopper, vortex, or grinder pumps available to handle a wide range of applications
- 10) Sludge baffle prevents solids build-up

11) Fiberglass or steel anti-floatation flange available



### EXCE Application and Design

Excel fiberglass pump station designs are versatile to fit your commerical wastewater or septic effluent needs. We invite you to discuss specific projects that are in initial planning or design stage, and our engineering team will assist you with the following services.

- 3-D Drawings and Renderings
- Project Specifications
- Design & Application Assistance
- Budget Proposals
- EPA & PTI Assistance

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- A) Optional Standby Generator
- B) Optional Wet Well Wizard Blower Enclosure
- C) Control Panel

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- D) Optional Lift Station Hoist Crane
- E) Optional Integrated Hatch Access Doors
- F) Vents
- G) Inlet
- H) Wet Well Wizard

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## Installation References

#### Secure Operations & Admin Facility - Fort Belvoir, VA

Duplex Sanitary Pump Station with Traffic Rated Cast Iron Covers

- •Sulzer-ABS submersible non-clog pumps with 270 GPM at 47 TDH
- •6 ft. diameter x 39.5 ft. deep integrated fiberglass wet well topped with a traffic rated reinforced hatch cover opening
- Duplex control panel with NEMA 4X stainless steel enclosure rated at 7.5 HP, 460 Volt, Three Phase





#### The Ashford at Sturbridge - Hillard, OH

Duplex Integrated Pump Station

- Engineered Pumps Chopper Pumps with a flow rate of 13,000 GPD at 12-15 feet TDH
- •5 ft. x 16 ft. deep integrated fiberglass wet well with anti-float flange
- Duplex control panel with NEMA 4X stainless steel enclosure rated at 3 HP, 240 Volt, Three Phase with VFDs

#### Lucas County Inlands Court - Toledo, OH

Arborvitae Wrapped Centrifugal Grinder Integrated Pump Station

- •Barnes submersible grinder pumps with a flow rate of 11 GPM at 25 TDH
- •4 ft. x 13 ft. deep integrated fiberglass wet well with 4 ft. x 5 ft. deep integrated valve vault basin
- Duplex ArcSentry<sup>™</sup> control panel with NEMA 4X stainless steel enclosures rated at 2 HP, 240 Volt, Single Phase





#### Michigan Dept. of Transportation - Hillsdale County, MI

Hunter Green Duplex Integrated Pump Station

- •Sulzer-ABS 4 in. submersible non-clog pumps with 220 GPM at 30 TDH
- •6 ft. x 13 ft. deep integrated fiberglass wet well with 45° sludge baffle in bottom of wet well
- •Hunter green duplex control panel with NEMA 4X stainless steel enclosure rated at 3 HP, 460 Volt, Three Phase



# Maintenance Plus

Is it difficult for you and your team to remember to complete your regular pump maintenance? Have peace of mind with our Maintenance Plus plan. Depending on your plan, we will complete a full service on your pump system annually, semi-annually, or quarterly. If anything goes wrong with your pump, we have the resources to repair, replace, or maintain your pump station for seamless downtime and ideal upkeep. We want to be there for you to help prevent when you'll need us most.

Our pump station preventative maintenance checks include seal and overhaul kits with:

- A detailed pump station electronic inspection report
- Clean and check the level of operations of the controls
- A pump down test for each pump and record of the level drop
- Amperages drawn and checked from each pump
- Each pump motor megged to test the motor's insulation
- An ohm check on each seal fail resistor

#### Maintenance Plus can help with:

Planning downtime and avoiding long delays

Knowing your pump station is running efficiently

Preventative maintenance

Extending your pump station's lifespan

Overall pump station knowledge through training



•And more!





#### **Common Wastewater Industry Challenges**

- Increasing Asset Ownership Cost from Maintenance of Ageing Infrastruture
- Inflated Installation Costs of Traditional Concrete Pump Stations
- Traditional Concrete Stations are Compromised by Hydrogen Sulfide (H2S) Corrosion, unless protected by an interior coating that is costly to install and maintain.
- Groundwater Infiltration (I&I) Into Sanitary Sewer System

#### **Contact Us for a Fiberglass Pump Station Solution**

#### **Design Criteria for Fiberglass Pump Stations**

- What is the average daily flow rate in gallons per minute (GPM) into the pump station?
- What is the proposed forcemain size, length to discharge point and construction?
- What is the grade elevation at the proposed pump station location?
- What is the grade elevation at the proposed discharge point of the forcemain?
- What is the gravity sewer invert pipe elevation?
- Confirm the jobsite electrical service details.
- Advise if emergency power connection or standby power service is required.
- Advise if remote communication system is required.



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EFG-FG005 4/22