High Flow Booster Stations

GRUNDFOS ENGINEERED SYSTEMS

Grundfos Engineered Systems (GES) creates opportunities to design and manufacture custom systems when a Grundfos pre-engineered booster system cannot fit the conditions required. This further expands Grundfos footprint as a leading manufacturer in the water utility marketplace. There are no limitations on the type, size and quantity of pumps that can be packaged together. GES packaged systems come with a multitude of options including: energy efficient pumps, valves, intelligent controllers and VFDs for your specific equipment requirements. Specialty accessories such as chemical dosing skids, analyzers, generators, etc. may be added on the skid to create a site specific engineered solution. These skid mounted systems may be designed for temporary/portable use and can be enclosed in a variety of fiberglass and steel options.

The GES packages arrive pre-wired, pre-piped and pre-commissioned. A Grundfos Engineered System will eliminate the headaches of cost over-runs and unforeseen operational problems often experienced with a component system. Total packaged cost and production schedule are accurately determined long before installation is completed.

Key Features and Benefits

- Single source responsibility; packages are designed, fabricated and tested by the same manufacturer of the pumps
- NSF / ANSI 61 and 372 certified Grundfos pumps
- NSF / ANSI 61 and 372 compliant components and design
- ISO 9001 manufacturing facility provides quality construction and value-added services
- Simplified power distribution for complete single-point input power connection
- Controlled manufacturing environment for on time delivery to site
- Innovative designs using 3D CAD modeling and dedicated engineering effort translate into lower initial cost, longer pump life, and lower maintenance costs
- GES team of engineering, and manufacturing experts support our customers from concept design to installation and beyond
- GES facility manufacturing footprint of over 240,000 sq ft with heavy crane bays for large systems
- Pressure testing of all finished piping and components up to 300 psi as required by project
- Continuity test of all 480V power wiring for proper phasing and grounding

GES provides innovative solutions for a variety of systems including:

- Storm Water Pumping Stations
- Raw Water Intake Systems
- High Flow Booster Stations
- Temporary/Portable Pumping Systems

APPLICATIONS

- Water distribution
- Raw water intake
- Water treatment
- Wastewater treatment
## GES High Flow Booster Stations Technical Data

### Control variant

<table>
<thead>
<tr>
<th>Hydraulic data</th>
<th>GES Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head, H</td>
<td>max. 690 ft</td>
</tr>
<tr>
<td>Flow, Q</td>
<td>max. 32,000 gpm</td>
</tr>
<tr>
<td>Liquid temperature</td>
<td>max. 200° F</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>max. 300 psi</td>
</tr>
</tbody>
</table>

### Pump and motor data

| Number of pumps | as specified |
| Motor power     | max. 600 hp |

### Check valves

- Non-slam: 2 - 24 in

### Isolation valves

- Butterfly: 2 1/2 - 24 in
- Ball Valve: 3/4 - 2 in
- Gated: ○

### General materials and fittings

- Pipe supports: welded to frame
- Decking: 1/4 in. gage hot rolled
- Channel base frame: 4 - 14 in

### Piping

- Carbon steel: ●
- Carbon steel, NSF rated epoxy coated: ○
- Stainless steel 304/316: ○

### Approvals

- ISO 9001: ●
- ETL listed: ○
- NSF Compliant: ○

### Motor Control Center

- UL Listed Control panel with HMI: ○ ●
- As Required: max. 400 A
- VFDs: ○ ●
- Instrumentation: ●
- GRM, SCADA integration: ○

### Options

- Flowmeter: ○
- Pressure reducing valve (PRV): ○
- Chemical dosing system skid: ○
- Hydropneumatic tanks, NSF rated: ○
- Trailer, portable design: ○
- Enclosure: ○

○ Available as option or accessory
● Available as standard