

Horizontal Surface Pumping System



Modular, resilient design allows rapid replacement, low maintenance costs, and increased uptime.

Our Horizontal Surface Pumping System (HPS) is designed with a focus on extended operational life, reduced maintenance and equipment costs, and flexible, easy deployment in ever-changing site conditions.

With a modular design that covers a wide range of high-pressure and flow applications, the HPS is a cost-effective alternative to expensive API pumps and maintenance-intensive positive displacement pumps. The HPS system is available with pre-wired instrumentation and the NOV Guardian VFD option, helping you prepare for the variety of conditions you'll encounter during operations.

Our HPS features an API 610-compliant seal system that can be replaced in as little as 15 minutes, using a process that does not disturb the motor and piping connections and requires minimal or no realignment. Leveraging decades of experience from the proven Mission™ Magnum™ centrifugal pump, our field-serviceable HPS thrust chamber is assembled with top-brand, angular contact bearings. Additionally, the L10 life rating matches API 610 standards of 25,000 hours up to 20,000 lbf of thrust. Providing site flexibility and reduced lead times, our HPS skid system features a rigid steel frame and modular components, which were designed using the latest 3D modeling software and Finite Element Analysis to resist motor torsion and limit vibration to extend pump life.

To find out how our HPS can provide a cost-effective solution for your specific application, contact your local NOV representative or visit us at www.nov.com/HPS.

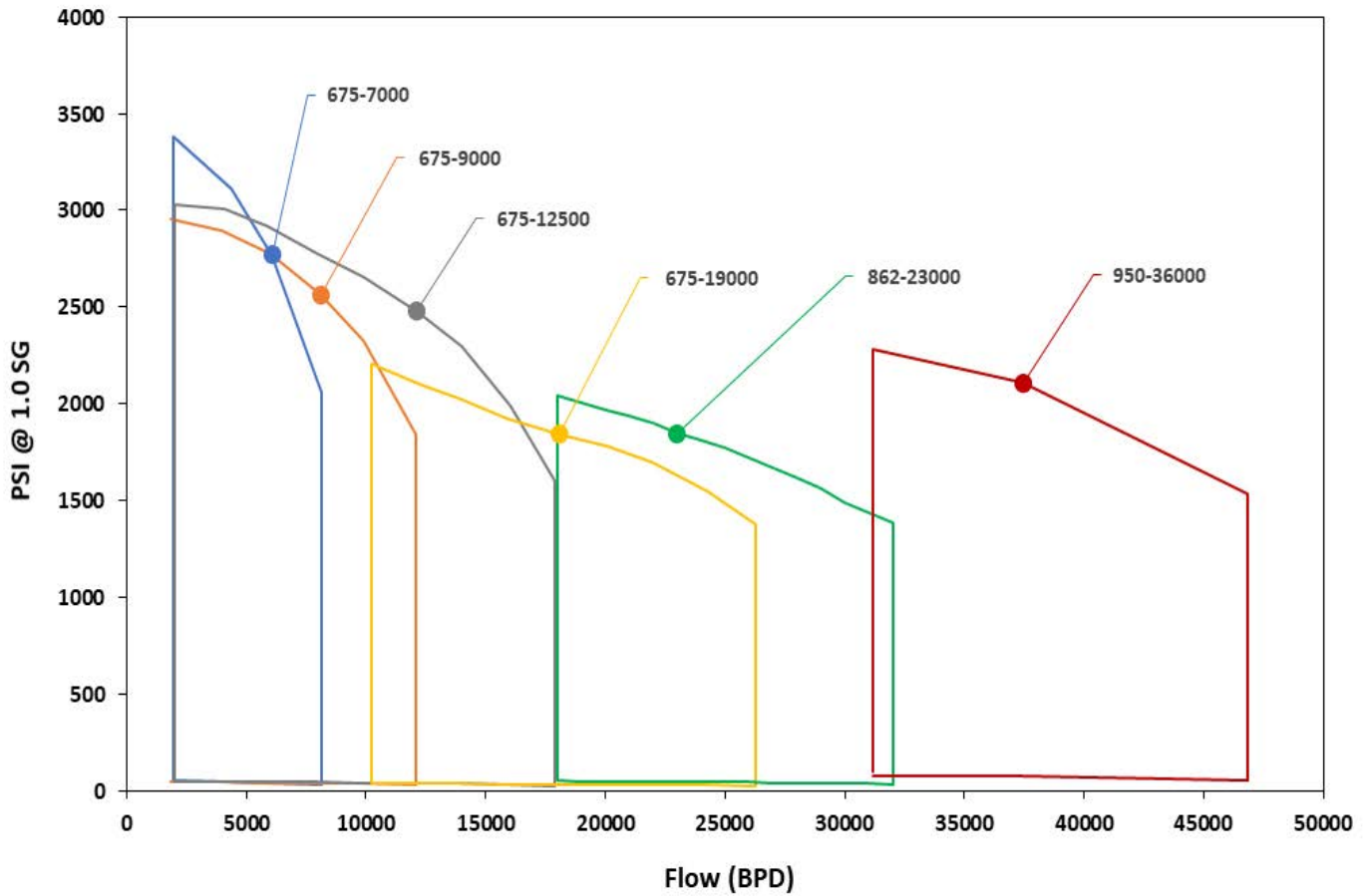
HPS applications:

- Salt-water disposal
- Crude oil pipeline
- Natural gas liquids pipeline
- Lean amine
- Enhanced oil recovery (CO₂ and water injection)

Features and Benefits

- API 610 seal design
 - Replace seals without motor or piping disruption
- Field-serviceable thrust chamber
 - Allows fast field service and repair while not disturbing the motor or pump
- Robust, adaptable—steel frame and modular sections
 - Provides easy, streamlined installation for foundation, building, or trailer locations
- Centrifugal pump, API features
 - Eliminates daily maintenance costs, lowers environmental impact
- Minimal vibration operation
 - Increases meantime between failure and run life

675/862/950 60HZ - Hydraulic Coverage



NOV Horizontal Surface Pumping System Specifications

Performance

Capacity.....105-750 GPM
 Discharge pressure.....Up to 3,000 PSI
 Suction pressure.....Up to 285 PSI
 Temperature range.....-20 to 280F°
 Power.....Up to 1,000 HP
 Testing capability.....Up to 1,000 HP
 Thrust capability.....Up to 20,000 Lbs

Materials

Impellers and diffusers.....Ni-Resist, Duplex Stainless Steel
 Shafts.....Monel®, Inconel®
 Suction and Discharge.....316 stainless steel
 Sleeve bearings.....Ni-Resist, tungsten carbide
 Flanges.....ANSI 150 up to 2,500 RF and RTJ
 Barrel housing.....Carbon steel, stainless steel