

# Mach 1 Horizontal Pumping System



## Move your operations forward at the speed of sound with our re-engineered solution.

Our Mach 1™ Horizontal Pumping System (HPS) pushes performance boundaries with unmatched simplicity, interchangeable components, and integrated remote capabilities.

Our modular design serves a wide range of pressures and flows to cover many applications. The base skid can also be quickly modified onsite to match your operational parameters. To keep you connected to your assets at all times, the equipment may be pre-wired for instrumentation and Guardian™ automation and control for HPS.

The Mach 1 provides site flexibility and reduced lead times. Our HPS thrust chamber is assembled with top-brand, angular contact bearings. The skid system also features a rigid steel frame and modular components, which were designed using the latest 3D modeling software and Finite Element Analysis. This helps to resist motor torsion and limits vibration to extend pump life.

The new Mach 1 HPS product line complements the already vast pump portfolio that NOV offers to ensure you get the right pump for the right application, every time.

## Work smarter, not harder

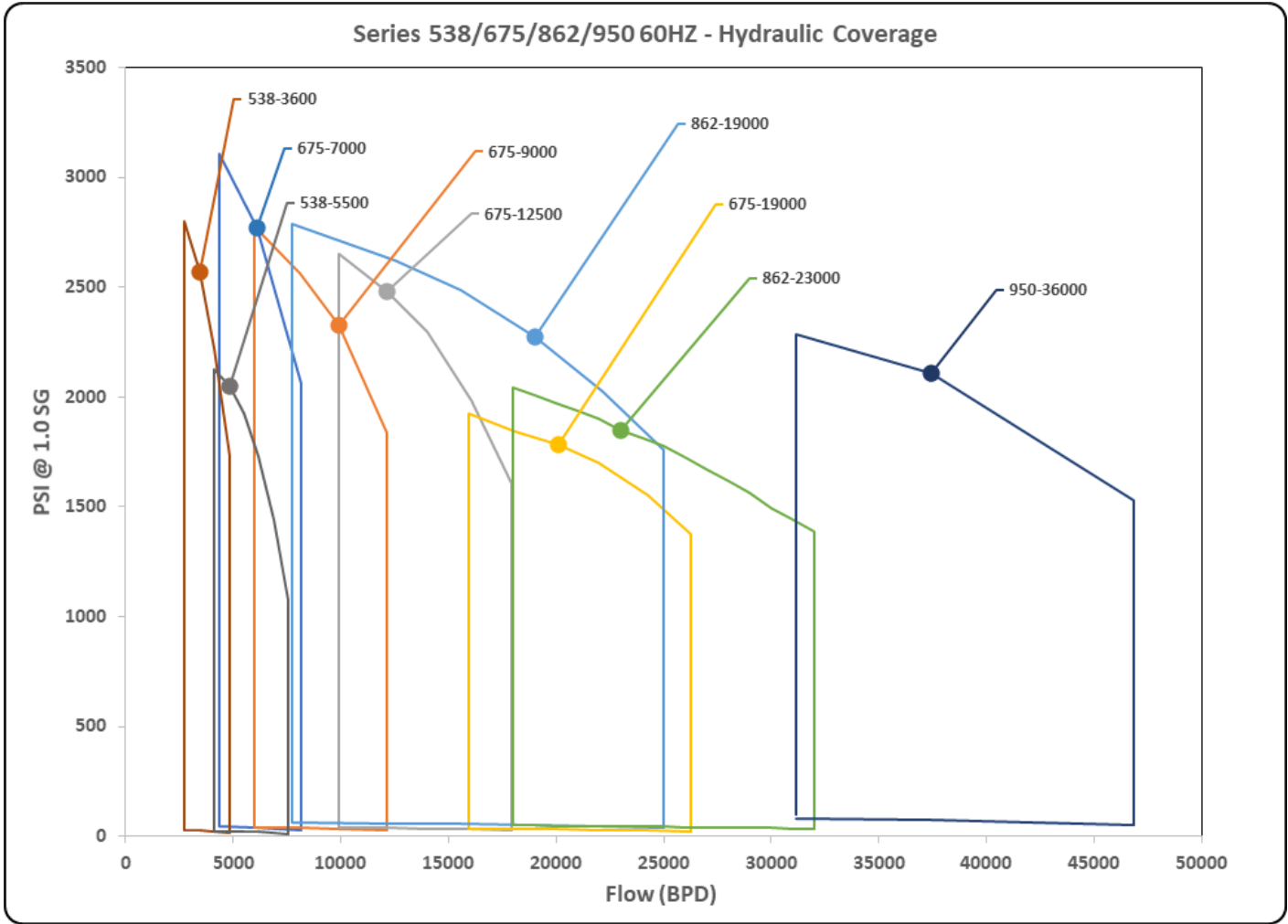
- GoConnect™ equipment monitoring solution powered by NOV Max. Reduce maintenance costs, extend the life of your assets, and avoid unplanned downtime.
- Exceed your production goals with the unmatched capabilities of our Guardian™ automation and control.

### HPS applications:

- Saltwater disposal
- Crude oil pipeline
- Natural gas pipeline
- Lean amine
- Enhanced oil recovery (CO<sub>2</sub> and water injection)

### Features and benefits

- OEM-agnostic components
  - Interchangeable fluid end and thrust chamber
- Robust, adaptable—steel frame and modular sections
  - Provides easy, streamlined installation for foundation, building, or trailer locations
- Centrifugal pump with impellers and diffusers
  - Eliminates daily maintenance costs, lowers environmental impact
- Minimal vibration operation
  - Increases meantime between failures and extends run life
- Back pull out thrust chamber design
  - Allows fast field service and repair while not disturbing the pump or piping



## Mach 1 Horizontal Pumping System Specifications

### Performance

Capacity.....105-1050 gpm  
 Discharge pressure.....Up to 4,000 psi  
 Suction pressure.....Up to 1,000 psi  
 Temperature range.....-20 to 280F°  
 Power.....Up to 1,500 hp  
 Testing capability.....Up to 1,000 hp

### 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