The Strongest, Most Versatile Horizontal Pumping System in the World
The **Summit ESP** horizontal surface pumping system is an efficient alternative to positive-displacement, split-case and other surface pumping options. The system design is based on proven ESP pumps already in use in thousands of downhole applications. The multistage centrifugal pump is mounted securely on a modular skid, powered by a 2-pole motor, and protected by a robust thrust chamber.

### Applications
- Produced water injection/disposal (SWD)
- Crude oil transfer/boosting
- Liquid CO₂ boosting/injection
- Lean amine pumping (gas treating)
- NGL/light hydrocarbon, crude oil pipeline booster
- Cavern storage/salt dome leaching
- Boiler/steam generator-fed pumps
- Jet pump — power fluid pumps
- LACT (lease automatic custody transfer) booster
- Mine dewatering

### Benefits
- Lower initial cost
- Lower operating and maintenance costs
- Modular design with short lead times on new and replacement equipment
- Flexible designs from 800 to 35,000 BPD (23 to 1,020 USgpm)
- Back pull-out thrust chamber
- A single low pressure mechanical seal
- Minimal noise and vibration; pulse-free flow
- Environmentally and HSE friendly

### Summit Close-Coupled (SCC) Surface Pump
For 20–75 hp applications, SCC uses the motor bearings to absorb pump thrust and is ideal for smaller water injection, amine, crude oil transfer or LACT applications.
Features

A. Heavy-duty Skid
- Modular skid, designed using extensive FEA analysis
- Hoist mounting points to simplify installation

B. Motor
- 20–1,500 hp (15–1,100 kW) power units available
- Electric motor options include TEFC, WPII, TEAAC, with area classification Class I Div II; other options available
- Diesel, natural gas engine, steam or gas turbine

C. Balanced Spacer Coupling
- Maintenance free and helps reduce vibration
- Facilitates quick mechanical seal replacement without breaking pump or piping connections

D. Thrust Chamber
- Designed for increased reliability, seal support & access
- Back pull-out for quick seal change-out
- Seal failure won’t contaminate thrust chamber
- Minimal routine maintenance required

E. Mechanical Seal
- Single seal assembly, exposed only to intake pressure
- Available in component or various cartridge seal designs
- API 682 and all applicable API flush and quench plans to meet customer and application requirements

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**F. Intake Flange**
- 316SS ANSI raised face flange is standard, other materials and types are available up to 3,000 psi (207 bar)
- Intake can be rotated in 90° increments to accommodate suction pipework

**G. Pump**
- Flow range of pumps covers 800 to 35,000 BPD (23 to 1,020 USgpm)
- Discharge pressures up to 5,500 psi (380 bar)
- Mixed-flow stage design for; reduced abrasive wear, optimal efficiency and head per stage
- Ni-Resist is standard stage material; other materials available upon request
- Tungsten carbide or Graphalloy® bearings are available for wear resistance or low-lubricity fluids, respectively

**H. Discharge Flange**
- Lap-joint type, comprising 316SS wetted parts and CS flange, compatible with ANSI standards
- Available in raised face or RTJ classes up to 5,500 psi (380 bar)

**I. Instrumentation**
- Standard offering is intake & discharge pressure transmitter and vibration switch
- Skid mounted junction box is available to provide single-point wiring
- Available in standard and explosion-proof enclosures and customizable to suit customer or application requirements
Monitoring and Control Systems
Summit ESP offers 24-hours-a-day, 365-days-a-year remote well/Site monitoring staffed by petroleum engineers. The monitoring of sites allows the customer to avoid nuisance trips to the site by remotely starting and stopping the unit and adjusting setup points such as intake pressure, discharge pressure and speed of the unit. Monitoring integrated with Summit’s proprietary web-based sizing, equipment and field service tracking gives customers a 360° picture of their systems, backed by the best monitoring staff and service in the industry, who always strive to optimize production and minimize downtime.

ACS™-15 Variable-Speed Drives
Summit’s Adaptive Control System ACS™-15 variable-speed drives (VSDs) offer a variety of features that make them the best choice for your applications. They offer reliability, accuracy, flexibility, equipment protection, plug-and-play capabilities that ensure user-friendly operation and a long run life. They are recognized as the easiest drive on the market to both set up and operate with a touch screen color display. What’s more, its configuration capability provides the capacity for industry-leading flexibility in input/output (I/O), options and setup.

Standard Features
• Motor speed, current limit, over/underload settings
• Status beacon
• Auto restarts (time delay)
• Remote starts/stops
• Proportional integral derivative (PID) control
• Analog and digital inputs
• RS-232/485 communications, SCADA ready

Optional Features
• Pulse width modulation (PWM) sinewave filter
• 24/7 remote monitoring
• Active front end