Over the years, I have experienced the progression of multiple service companies, and the result is always the same. As a company expands upwards and outwards, their attention to service declines, losing sight of their customers in pursuit of better balance sheets. When I formed Valiant, I sought to put that pattern to rest. From the beginning, we have set out to redefine service in the oil and gas industry by delivering value-added solutions and upholding a high standard of integrity in all areas of our business conduct.

Turbulent market conditions over the last 5 years have forced operators to constantly redefine their strategy to remain profitable, often leading to shutting in substandard wells or focusing on cost reduction measures. I started Valiant during the most severe time of the downturn for one reason alone: to restore excellence to the industry that I believe in.

Valiant was founded on a belief that helping our customers be successful is our first and last priority, and it’s from that seed that we have built our foundation for success. As more than just an artificial lift supplier, Valiant is a partner in solutions for operators large and small. From applications engineering and manufacturing to installation, field service, and well monitoring, we have the tools and the people to keep your operations running smoothly and ensure you achieve your targets through improved well performance.

Throughout all levels of our organization, we pride ourselves on attracting some of the most experienced professionals in the industry, and we continuously leverage the ingenuity and talent of our teams to demonstrate mastery in our areas of expertise. By combining innovative technology with field experience, we have developed a diverse portfolio of tools and systems designed specifically to meet the current and future needs of operators while keeping pace with the expanding landscape.

In an industry characterized by continuous evolution and unpredictability, producers rely on their service companies to remain flexible and responsive to dynamic production conditions while delivering the most advantageous solutions for their operations. As a lean, independent, and global organization, Valiant is focused on providing turnkey solutions designed with our customers’ objectives at the forefront while reinforcing our pillars of safety, quality, and service.

Our organization has grown over the years to span countries and continents, but our vision remains unified. Stemming from our collective passion for greatness, the Valiant vision is driven by a fierce and unyielding will to go beyond the status quo and settle for nothing less than exceptional service when it comes to our customers, our employees, and our global partners. No matter the market conditions, we are loyal to our stakeholders and firm to our values.

With service at the heart of our mission and a core focus on artificial lift, Valiant is committed to building long-term partnerships founded in trust, communication, and a shared vision for seizing the opportunities that lie ahead.

Gareth C. Ford
Founder, CEO & President
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It’s the foundation from which we address an operator’s interests, and it begins the moment we start a conversation with the customer.

Valiant is a lean, low-overhead service provider, which enables us to deliver consistent, quality service to our customers. As an independent supplier with a singular focus on artificial lift, we are committed to providing flexible solutions tailored to your needs. We believe “service” means being responsive, reliable and adding value in everything we do; whether we’re fixing someone else’s equipment, lending our expertise to optimize your production, or installing and servicing our equipment in the field.

We pride ourselves on being the easiest service company to work with, redefining what service means to our customers.

Valiant did an excellent job from the time we placed the order until the install.

Looking forward, I think we are going to make a great team.
Around the world, oil and gas fuel innovation, improve our standards of living, and expand our horizons. We are proud to help bring that energy to the surface. Through technology, we are connecting the world and building a bright future for generations to come.

WE ARE THE ENERGY PROVIDING ENERGY

Valiant delivers a portfolio of reliable technologies and services designed for Electrical Submersible Pumps (ESP) and Horizontal Pumping Systems (HPS). We utilize a global supply chain to provide these reliable, cost-effective solutions.

By combining downhole systems with customized surface controls, automation, and monitoring, we work to reduce your operating costs, minimize downtime, and increase your bottom line.
YOUR PARTNER IN SERVICE, SOLUTIONS, AND PRODUCTION SUCCESS

Raising the Bar in Field Service
Installation, testing and repair of ESP and HPS systems, power cable, and variable speed drives, as well as servicing a wide range of global suppliers

Engineering Solutions for Long-Term Productivity
Application engineering and development of fit-for-purpose solutions based on the specific needs of your well

Delivering Peace of Mind with Quality Assurance
Pump, motor, seal, drive and cable testing prior to delivery, cable spooling, and routine pump rotations when idle

Increase Uptime with Real-Time Data
Remote monitoring, automation, and data collection for proactive performance tracking and optimization

Hit Production Targets with Zone™
Proprietary equipment sizing, configuration, and predictive modeling to ensure seamless transition from the engineering lab to the field

Take Corrective Action with In-Depth Root Cause Discovery
Detailed tear-down reports and dismantle, inspection, and failure analysis with corrective recommendations
We believe safety is the responsibility of every individual at the scene. Across our organization, our commitment to safe practices is backed by comprehensive HSE and Quality Management systems. By cultivating a safety-first culture and engaging our people with proactive safety initiatives, we can fulfill our promise of always delivering reliable, uncomplicated service to our customers.

Leading Accountability In Oilfield Safety

We are committed to creating the safest possible working environment for our employees

- **Health and Safety Programs** fuel continuous training, practice, and hazard prevention skills
- **Behavioral Job Safety Analyses (BJSAs)** for all assignments ensure risk assessment is conducted before work is started
- **Routine Safety Audits** in the shop and field keep personnel at forefront of latest HSE practices and regulations
- **Stop Work Authority** for all personnel grants any individual the right to stop work when conditions or activities are unsafe

Our passion for safety goes beyond our people, it extends to their families and the greater communities in which we do business.

Therefore, in addition to driving engagement internally, Valiant strives to serve as a public advocate for safety by promoting the health and well being of people around the world.
Endeavour® ESP Systems
DESIGNED AND CONSTRUCTED FOR EFFICIENT LIFT, DURABILITY, AND RELIABLE PRODUCTION

With Endeavour® Electrical Submersible Pumping Systems, harsh, abrasive, corrosive, and otherwise challenging downhole environments are no obstacle.

Features

› High-efficiency stage designs
› Available in Floater and robust Compression, AR Compression, and ARM construction
› ARM (Abrasion Resistant Modular) pump construction with a unique bearing geometry
› Specialized gas handling designs for high gas volume production
› Optional coatings and materials for critical applications and extreme production conditions
› Reinforced flange connection configurations for deviated, abrasive, or tight-radius applications

Benefits

› Increased production, durability and run life in abrasive, corrosive, gassy, and scaly well conditions
› Excellent radial and downthrust protection and extreme durability in the presence of sand, solids, and gas content
› Wider operating range and deeper setting depths
› Optimized runlife and reduced downtime and replacement costs, even in hostile conditions
› Increased production efficiency & lower operating costs
› Reliable ESP deployment and run life in challenging wells with high calcium, paraffins, asphaltenes, or scale
### ESP Pump Flow Rate Coverage (bpd) - 60 Hz/3500 rpm

<table>
<thead>
<tr>
<th>PUMP SERIES</th>
<th>ESP PUMP HOUSING DIAMETER (O.D.)</th>
<th>RECOMMENDED ESP OPERATING RANGE (60 Hz/3500 rpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA</td>
<td>3.38” (85.73 mm)</td>
<td>300–3,400 bpd 48–541 m³/d</td>
</tr>
<tr>
<td>VC</td>
<td>4.00” (101.6 mm)</td>
<td>200–7,500 bpd 27–1,193 m³/d</td>
</tr>
<tr>
<td>VE</td>
<td>5.38” (136.7 mm)</td>
<td>400–14,000 bpd 64–2,226 m³/d</td>
</tr>
<tr>
<td>VF</td>
<td>5.62” (142.8 mm)</td>
<td>10,000–23,500 bpd 1,590–3,736 m³/d</td>
</tr>
<tr>
<td>VG</td>
<td>6.75” (171.5 mm)</td>
<td>2,200–35,500 bpd 350–5,644 m³/d</td>
</tr>
</tbody>
</table>

Field-proven for long-lasting performance
Valiant offers three-phase, two-pole induction motors and four-pole permanent magnet motors. Available in a variety of diameters and ratings, our designs are proven across a wide range of applications to provide the lifting forces required to achieve targeted production rates.

The high-quality, durable construction of Endeavour® motors delivers robust performance able to withstand corrosive and abrasive well elements. For extremely challenging environments, motors are available in ferritic stainless steel housings. Flame spray coatings are also available for added protection.

### Features

- Locking style rotor bearing to reduce friction and wear
- Tape-in motor lead design
- Rugged, proven designs with conservative ratings
- Permanent magnet motor technology, backed by an incident-free safety record
- Corrosion resistant housing, head and base metallurgies
- Advanced motor design for high horsepower and applications
- Shaped bar rotor and stator configuration for induction motors

### Benefits

- Reliable and efficient performance
- Enhanced durability, extended run life and sustained production
- Minimized operating/power costs
- Improved corrosion resistance
- High equipment reliability and power efficiency

Maximize recovery over extended ESP run times
### Induction Motors

<table>
<thead>
<tr>
<th>MOTOR SERIES</th>
<th>HOUSING DIAMETER (O.D.)</th>
<th>MINIMUM CASING SIZE</th>
<th>SINGLE MOTOR HORSEPOWER RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>60 Hz</td>
</tr>
<tr>
<td>V3</td>
<td>3.75&quot; (95.3 mm)</td>
<td>4.5&quot; (114.3 mm)</td>
<td>15–60</td>
</tr>
<tr>
<td>V456</td>
<td>4.56&quot; (115.8 mm)</td>
<td>5.5&quot; (139.7 mm)</td>
<td>24–216</td>
</tr>
<tr>
<td>V562</td>
<td>5.62&quot; (142.7 mm)</td>
<td>7.0&quot; (177.8 mm)</td>
<td>48–456</td>
</tr>
</tbody>
</table>

### Permanent Magnet Motors

<table>
<thead>
<tr>
<th>MOTOR SERIES</th>
<th>HOUSING DIAMETER (O.D.)</th>
<th>MINIMUM CASING SIZE</th>
<th>SINGLE MOTOR HORSEPOWER RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>60 Hz</td>
</tr>
<tr>
<td>V450 PM</td>
<td>4.50&quot; (114.3 mm)</td>
<td>5.5&quot; (139.7 mm)</td>
<td>48–432</td>
</tr>
<tr>
<td>V562 PM</td>
<td>5.62&quot; (142.7 mm)</td>
<td>7.0&quot; (177.8 mm)</td>
<td>100–1,000</td>
</tr>
</tbody>
</table>

### ESP Motor Horsepower Coverage - 60 Hz

![ESP Motor Horsepower Coverage - 60 Hz](image-url)
Valiant’s Endeavour® seals offer enhanced durability with the addition of specialized elastomers rated to withstand high bottom-hole temperatures and high load thrust/enhanced high-load bearings for abrasive or deep wells.

### Features

- Tandem configurations for all sizes and applications
- Labyrinth and bag chamber combinations available in most series
- High-volume oil chambers
- Multiple shaft seals
- Abrasion-resistant models with tungsten carbide bearing support
- Corrosion-resistant housings available
- Up to four chambers in one housing
- Corrosion-resistant Monel trim fasteners and plugs
- 100% factory testing for all units

### Benefits

- Reduced motor failure and extended run life
- Fewer H2S and CO2-related failures
- Greater pump down thrust capacity
- Improved motor performance across a range of ESP applications

**Note:** Designs are available for all environments, including deviated and hot holes.

Located between the motor and the pump intake, the seal section is designed to extend the operational life of ESP systems by equalizing downhole pressure and preventing the intrusion of damaging wellbore fluids.
Don’t let gas get in the way

To ensure reliable production, enhance run life, and reduce equipment wear and tear in wells with high gas-to-liquid ratios, Valiant Artificial Lift Solutions offers the Intercept™ suite of gas management solutions.

Our portfolio includes versatile technologies to ensure optimal ESP performance in dynamic downhole conditions.

- Standard, Inverted, and Positive Seal Shrouds
- Gas-Handling Helico-Axial Stages
- Tapered Pump Designs
- Vortex and Rotary Gas Separators
- Pulse® VSD Proprietary Gas Lock Mitigation Programming

Avoid
Divert gas in the wellbore from entering the ESP to reduce stress on the system and minimize production obstacles

Process
Homogenize the gas-fluid mixture to improve production through the pump and leverage natural lift properties

Separate
Separate bubbles from production fluid and guide free gas back out into the annulus

Control
Monitor downhole conditions and adjust ESP operation to reduce cycling due to gas
Valiant Artificial Lift Solutions offers a wide selection of Transit™ power cable specifically suited to withstand the complete spectrum of challenging downhole conditions.

### Features
- Tested according to the latest API and IEEE recommended practices
- Galvanized or Monel armor for durable downhole protection
- Flat or Round cable types #1 - #6
- Cable spooling, testing and repair
- Motor Lead Extension (MLE) splicing

### Benefits
- Durable downhole protection for improved motor performance
- Dependable construction for a range of applications:
  - Deviated Wells
  - Extreme Heat
  - Slim Diameter
  - High Gas
  - Corrosive Conditions
HIT PRODUCTION TARGETS WITH ZONE™ ANALYSIS

Correct initial sizing is essential to optimizing production and run life of ESPs. Valiant utilizes Zone™ analysis software to ensure every ESP system is designed to satisfy the operator’s desired production range for any given application.

In addition to producing comprehensive sizing and design reports, Zone helps operators predict future performance and conduct ESP stress analysis for successful deployment in unconventional and deviated wellbores.

› Identify best efficiency point to enhance production and maximize system run life

› Compare multiple production scenarios and model performance over time

› Input latest production data to identify where system is operating on pump curve and prioritize optimization efforts

› Evaluate stress areas in high curvature wellbores and fine-tune depth selection for improved ESP run life and reliability

› Quickly produce design reports with minimal input requirements

› Size ESPs for complex environments, including deviated wellbores, high gas production, abrasive or solids-laden well conditions, tight-radius applications, high horsepower requirements, and more
Pulse® Controls and Optimization
Valiant Artificial Lift Solutions provides the Pulse® technology collection, offering innovative optimization tools that help boost productivity and efficiency while keeping costs in control.

**Downhole Monitoring**

- Monitor real-time ESP performance with reliable sensor readings that interact with surface controls for smarter production.

**Surface Controls**

- Reduce operational costs with application-specific programming provided by variable speed drives (VSDs) for ESP and horizontal pumping systems.

**Talking Wells®**

- Enhance system runlife while saving time and money with real-time monitoring, analysis, and optimization services.
Easy to install and operate, Pulse® downhole ESP sensors deliver the reliable and accurate readings necessary to drive production optimization.

Pulse sensors are available in an assortment of capabilities and ratings to perform in any production environment. Our surface monitoring systems integrate with Pulse Variable Speed Drives to provide an interface for viewing and recording data from the sensor.

Sensor surface equipment readily connects or adapts to RF-SCADA and virtually all other wireless or wired SCADA control systems.

**Measurements**

- Intake Pressure and Temperatures
- Internal Motor Temperature
- X&Y Vibration
- Current Leakage
- Pump Discharge Pressure
- Water Ingress and X,Y,Z Vibration
- "Q" for Extreme Accuracy
Valiant Artificial Lift Solutions offers Pulse® Variable Speed Drives (VSDs) to provide operators with advanced control and automation capabilities for ESP and HPS applications.

Available in ratings from 48 to 1,121 kVA, Pulse drives provide application-specific programming to enhance system performance, extend equipment run life, and reduce operators’ daily cost of production.

Features

› Full integration of monitoring technologies to optimize production

› High clarity 7” color touchscreen display

› Customizable programming

› Proprietary gas-lock mitigation software for ESPs

› Control starts, auto-restart settings, motor speed, current, and load settings

› Sinewave filter as standard harmonics output modifier

Valiant’s streamlined VSD interface allows quicker programming for more efficient and intuitive controls.
Time-saving surveillance for smarter production

Talking Wells® is Valiant’s premier asset management suite developed to reduce unplanned downtime and help operators make informed decisions that are critical to success.

Our tiered monitoring, analysis, and optimization services allow customers to choose the level that’s best suited for their needs while achieving measurable results.

### Basic

- Access real-time data to monitor operating performance, productivity, and system efficiency
- Receive automated text, email, and voice alarms
- Change frequency, start/stop, and trip parameters remotely
- View run life, root cause of failure, and trending reports

### Enhanced

- All features from Basic package
- Eyes-on surveillance identifies potential failures sooner
- Operational reports provide pump curve analysis and recommendations for proactive intervention
- Routine cycling reports pair equipment history with performance data to prioritize field service
Backed by our passion for service and track record of quality solutions, Valiant is the preferred choice for operators who need hands-on support.

Every application presents its own unique set of challenges, and operators need service providers that can deliver equipment and experience fit for the job. As a solutions-oriented company, Valiant is focused on helping you reach production targets safely and effectively by delivering reliable pumping systems and providing responsive service tailored to your needs.

Let Us Do the Work For You

You don’t have to be an expert in artificial lift to work with us. We make production easy, so you can spend less time managing suppliers and more time enjoying worry-free operations.

› SIZING & DESIGN
› QUOTING & DELIVERY
› INSTALLATION & INVOICING
› MAINTENANCE & OPTIMIZATION

We think we have the best service in the industry. Give us the opportunity to prove it to you.