For more than 20 years, Windings has pioneered the development of electromagnetic solutions for critical upstream applications in the Oil & Gas industry. As a full-service provider, Windings is a leader in the design, test, manufacture and support of custom electric motors, alternators and related components engineered to survive and perform under the hostile conditions of downhole tooling.

**Core Competencies**

- Engineering Services
  - Application Analysis
  - Design Analysis & Simulation
  - Prototyping
- Manufacturing Optimization
  - Concurrent Engineering
  - DFMA Analysis
  - Process Documentation
  - Tooling and Fixture Design
- Part Production
  - Motors
  - Rotors
  - Stators

**Motor Technologies**

- Brushless DC
- Permanent Magnet DC
- Single- and Three-Phase Induction Motors

**Environmental Considerations**

- Temperatures to 260°C
- Pressures to 15,000+ PSI
- Aggressive Media/Fluids
- High Aspect Ratio Form Factor (L/D to 50:1)
- Reliability > 2,000 Hrs.
- Shock Tolerance to 50g
- Electrical Efficiency > 90%

**Key Differentiators**

- Provider of Custom, Integrated Electromagnetic Solutions
- Focus on Critical Applications in Extreme Environments
- Engineering Partner to Our Customers
- Customer Ownership of Custom IP
Application Examples

- Rotary Steerable Tooling
  - LWD/MWD Alternators
  - Hydraulic Pump Alternators
  - Hydraulic Pump Electric Motors
- Wireline
  - Hydraulic Pump Electric Motors

Certifications

- Dual certifications to the ISO 9001:2015 and AS9100 (Rev D) quality management systems.
- Employ J-STD-001 Application Specialists (Specifically to the Requirements for Soldered Electrical and Electronic Assemblies) and a certified trainer in J-STD-001 Application Specialist Training and J-STD-001 Space Addendum Application Specialist Training.

About Us

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