



For more than 50 years, Windings has provided engineered electromagnetic solutions for critical applications in Aerospace and Defense. As a full-service provider, Windings is a leader in the engineering, optimization and manufacturing of custom electric motors, generators and related components including rotors, stators, lamination stacks and insulation systems.

Core Competencies

- Engineering Services
 - Application Analysis
 - Design Analysis & Enhancement
 - Testing & Simulation
 - Tooling & Fixtures
- Optimization
 - Performance
 - Manufacturability
 - Reliability
 - Cost
- Manufacturing
 - Prototypes
 - Low Rate Initial Production
 - Full Rate Production

Key Differentiators

- Focus on Critical & Challenging Applications
- Co-development of Customer-Specific Solutions
- Optimization for Performance, Manufacturability & Reliability
- Customer Ownership of Unique IP

Motor Technologies

- Brushless DC
- Permanent Magnet DC
- Wound Field DC
- Single- and Three-Phase Induction
- Synchronous (Motors and Generators)
- Switched Reluctance
- Transverse Flux

Past Performance

- **F-35 Joint Strike Fighter**
(Stators for undisclosed applications)
- **Tomahawk, JASSM, Taurus Cruise Missiles**
(Engine power generators)
- **Javelin Missile**
(Stators for fin actuation)
- **AN/TPY-2 Transportable Radar**
(Stators for undisclosed applications)
- **AN/TPS-80 Ground/Air Task Oriented Radar**
(Stators for undisclosed applications)
- **Apache Attack Helicopter**
(Stators for undisclosed applications)