Engine Testing

PERFORMANCE IS A PROMISE. DURABILITY IS THE PROOF.

Don't just design a powerful engine. Build a reliable one. At Propulsion Systems Laboratory (PSL), we provide the rigorous, data-driven testing you need to move from theory to reality. We push your engines to their absolute limits to uncover their true potential and guarantee their long-term reliability.

Partner with us to validate your design, mitigate risk, and deliver an engine that performs flawlessly under pressure.

Our Specialized Engine Testing Services

We provide a comprehensive suite of testing capabilities focused on one goal: delivering the actionable data you need to build a superior engine.

Endurance Testing: Forging Long-Term Reliability

Your engine's reputation is built over years, not hours. Our specialized endurance testing subjects your engines to prolonged operation under varied and demanding load conditions, simulating a full lifetime of use to definitively evaluate long-term reliability and expose potential issues before they reach the field.

- Benefit: Go to battle with proven durability and mitigate the risk of costly in-service failures.

Performance Mapping: Optimizing Power & Efficiency

Unlock every ounce of potential from your design. We conduct detailed performance mapping to optimize engine output across the entire operating envelope. This is paired with precise measurements of fuel efficiency, giving you a complete picture of your engine's capabilities.

- Benefit: Achieve best-in-class performance and fuel economy, giving you a critical competitive edge over the competition.

Development & Durability Analysis: Engineering for Robustness

The Decisive Edge is Engineered Here. In our controlled, repeatable test cell environment, we forge battlefield dominance. Through meticulous engine development, component validation, and precision ECM calibration, we deliver the unwavering reliability and optimized power your mission demands.

- Benefit: Eliminate variables, guarantee performance, ensure overmatch, enhance structural and thermal robustness, prevent unexpected failures, and extend the engine's operational service life.