



Aviation MRO Component Testing Solutions



40+ Years in Test Systems

2,000+ Deployments Worldwide

Trusted by Leading MROs

Sciometric MRO Smart Solutions
Test with Confidence.
Ensure Compliance.
Maximize ROI.

MRO Smart Solutions



Modernize Your Maintenance. Maximize Test Reliability

Driving the Future of MRO Component Testing—One Test Stand at a Time.

For over four decades, Sciometric has designed and delivered high-performance test systems across the automotive, aerospace, heavy transportation, and energy testing industries. Today, we help Aviation MROs modernize their component testing operations with **cost-effective, custom-built turnkey systems** engineered for reliability, repeatability, and rapid ROI.

Automotive-Grade Precision meets Aviation Standards

We are specialists in **custom test stands**, with deep expertise in automotive powertrain and electric propulsion testing—including 40+ years supporting major domestic and European Automotive OEM global engine and EV battery manufacturing operations.

This automotive foundation translates directly to aviation MRO applications. We've identified significant overlap, especially in:

- **Linear, servo and rotary actuators** (door locks, valves, landing gear, control surfaces)
- **Electric motors and generators** (starters, wiper systems, IDGs)
- **CAN-based communication protocols** (Next-gen avionics components)
- **Precision measurement and signature analysis** (NVH, torque-to-turn, leak detection)

Every solution we design meets **stringent regulatory and OEM test procedures**—delivering both performance and compliance for critical aerospace components.

Test with Confidence. Comply with Precision

Sciometric is your trusted partner for precision measurement and monitoring in component testing and validation. Our systems support a broad range of critical metrics and measurands including:

MECHANICAL VALIDATION

- Force & Displacement
- Torque / Torque-to-Turn
- Noise & Vibration (NVH)
- Profile & Signature Analysis

SEALING & INTEGRITY

- Pressure, Vacuum Testing
- Leak Detection & Decay
- Flow Characterization

ENVIRONMENTAL & ELECTRICAL

- Temperature Profiling
- CAN/ARINC Communication
- Electrical Performance
- High Voltage AC, DC & Resistance

QUALITY & INSPECTION

- Vision & Image-based Inspection
- Dimensional Verification
- Surface Quality Analysis

Whether you're validating mechanical function, ensuring sealing integrity, or analyzing performance trends over time, Sciometric provides the data-driven insights that verify compliance, improve quality, and maximize throughput.

Component Testing Capabilities for Part 145 Repair Stations

Electro-Mechanical and Electrical Systems

- ◆ Starters, Fans, Generators
- ◆ Linear and Rotary Actuators
- ◆ Valves, Door Locks, Latches
- ◆ Wiper Motors and Systems
- ◆ Cargo PDUs

Engine & Fuel Accessories

- ◆ VSV Actuators
- ◆ Engine Driven Accessories
- ◆ Bleed Air and Anti-Ice Valves
- ◆ Fuel Control Units
- ◆ Pneumatic Systems
- ◆ Pneumatic Starters
- ◆ PRBC Valves
- ◆ Flow Control and Pressure Relief Valves

Galley and Cabin Equipment

- ◆ Coffee Makers, Boilers, Heaters
- ◆ Faucets, Compactors,
- ◆ Waste Water Systems
- ◆ Vacuum Generators

Landing Gear Components

- ◆ Brake Assemblies
- ◆ Locks and Solenoids
- ◆ Electro-mechanical Actuators
- ◆ Drop/Impact Testing

Air Circulation Modules



Standard RA Series Test Stand

Single and Dual Drive Configurations

Test multiple components—1 test bench

Reference ATA Chapters (STS-RA-2-30-100)

- 22-11-01
- 27-40-10, 27-52-06
- 30-40-14
- 30-45-51
- 52-34-03
- 49-20-xx, 49-40-01, 49-41-xx

Why Leading OEMs

CUSTOM TEST SYSTEMS WITHOUT THE OVERHEAD

Purpose-built solutions designed to your exact specification—eliminating the need for in-house engineering and allowing you team to focus on core business operations.

- Full project management from concept to commissioning
- Coordinate with your contractors and vendors
- Reduce internal engineering burden by 70-80%

PROVEN DELIVERY ON COMPLEX PROGRAMS

Decades of application and program management experience ensure your expectations for cost, schedule, and performance are consistently met.

- On-time delivery: 95%+ of projects meet or beat schedule
- Typical delivery: 90-150 days from order to acceptance
- Comprehensive FAT/SAT protocols and documentation

LEAN OPERATION, STRONG BACKING

Nimble and efficient with low overhead and fast execution—backed by the TASI Group, a multimillion-dollar holding company, for financial strength and stability.

- Fast decision-making, no bureaucracy
- Competitive pricing without sacrificing quality
- Long-term stability and support commitment

STRATEGIC GROWTH ENABLER

Free up your team to unlock new capabilities, win new contracts, and grow revenue faster by outsourcing test system development to experts.

- Expand Part 145 capabilities without capital investment
- Win new component contracts with proven test infrastructure
- Reduce time-to-market for new service offerings

SMART SOLUTIONS SCALED TO YOUR NEEDS

High-performance, integrated test stands engineered to meet MRO and Tier 1 budget realities.

- Test carts: \$50K-\$150K
- Semi-automated systems: \$150K-\$400K
- Full turnkey solutions: \$400k-\$1M

CUSTOM TURNKEY SOLUTIONS

We manage every phase of your test system—from initial consultation and design through build, integration, validation, and operator training.

- ◆ Requirements and specification development
- ◆ Mechanical, electrical, and software engineering
- ◆ Component sourcing and vendor management
- ◆ Factory acceptance testing (FAT)
- ◆ On-site installation and site acceptance (SAT)
- ◆ Comprehensive documentation and training

RETROFIT AND MODERNIZATION

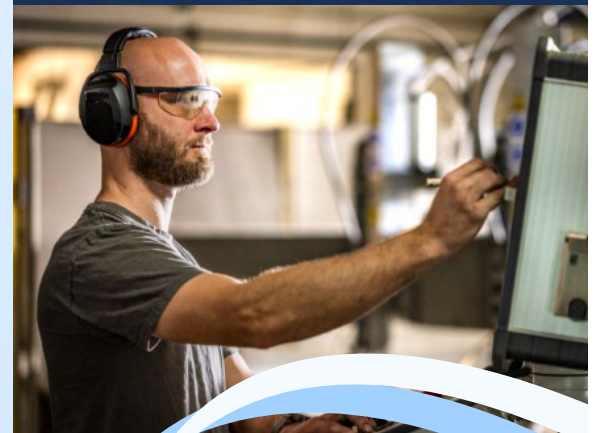
Extend the life of existing equipment and expand capabilities cost-effectively.

- ◆ Add new part numbers and test protocols
- ◆ Upgrade obsolete controls and instrumentation
- ◆ Enhance data collection and reporting
- ◆ On-site or return-to-factory service available

GLOBAL SERVICE AND SUPPORT

With over 40 years in business and customers on six continents, Sciometric offers responsive, localized support backed by global resources.

- ◆ North America: Rochester Hills, MI (engineering & assembly) | Windsor, ON (installation support)
- ◆ Global offices: Mexico, UK, Europe, India, China
- ◆ Remote diagnostics and troubleshooting
- ◆ Spare parts programs
- ◆ Annual calibration and preventive maintenance
- ◆ Software updates and enhancements



Sciometric MRO Test Solutions: Precision You Can Trust

At Sciometric, we understand that confidence in your test process is critical to delivering safe, reliable aircraft components. That's why our Integrated Systems Division (ISD) designs and delivers intelligent, flexible test solutions tailored to the unique demands of aviation MRO.

Whether you need:

- A compact, mobile test cart for simple functional checks
- A semi-automated bench system for production testing
- A fully integrated turnkey solution with robotic handling
- Modernization and retrofit of legacy equipment

Sciometric manages the entire project—from initial consultation and design through build, integration, validation, and training—ensuring your system is delivered on-time, on-budget, and ready to generate ROI from day one.

Ready to Modernize Your Component Testing?

Let's discuss your requirements.

Whether you're looking to expand capabilities, improve efficiency, or replace aging equipment, our team is ready to help you develop the right solution.

Contact us today for a complimentary Consultation:

- Review your testing requirements
- Discuss technical approach and options
- Provide budget-level pricing
- Share relevant case studies and references



Sciometric Instruments

US Manufacturing & Engineering Hub
1670 Star Batt Drive
Rochester Hills, MI 48309

248.733.5598 O
248.856.8145 M
www.sciometric.com

Global Headquarters
359 Terry Fox Drive, Suite 100
Ottawa, ON, K2K 2E7
Canada

NA Installation Support Facility
4570 Rhodes Drive, Suite 200
Windsor, ON, N8W 5C2
Canada

MRO Smart Solutions

Additional Offices
Mexico | United Kingdom
India | China

Sciometric Is Part of TASI Test and Automation

TASI Test and Automation is a global leader in advanced test, measurement, inspection, and assembly solutions, focusing on product integrity and automation across automotive, aerospace, medical device, and industrial manufacturing

