



**SINGLE-SOURCE  
SUPPORT IN  
PRODUCT  
DEVELOPMENT**

[www.aerodyn-global.com](http://www.aerodyn-global.com)



Welcome to

## AERODYN ENGINEERING INC.

Aerodyn Engineering Inc. (AEI) provides unparalleled customer services and support to Aerospace, Power Generation, Automotive, and Industrial customers with high-quality instrumentation, test services, and analysis that is ISO-9001:2015 Registered. We are dedicated to exceeding our customer's expectations for response and quality.

Aerodyn offers you a single source for advanced machining, gas stand testing, instrumentation, and design services. Take advantage of our experience and commitment to assisting our clients with new product development. Offering all of these services in one location saves our customers time and is cost effective.

*We base our business on long-term relationships of trust and value.*

**ISO-9001:2015 REGISTERED**





## **INSTRUMENTATION – DESIGN – TEST**

### **DESIGN**

*AEI's unique design capabilities and expertise offer turnkey solutions to our customers' product development projects.*

- Advanced mechanical design
- Electromechanical design
- Software we use includes UG, SolidWorks, ANSYS, ProEngineer, and Autodesk Inventor



### **DEVELOPMENT ASSEMBLY**

- Heavily instrumented test vehicles
- Tooling/fixture design and fabrication
- Offsite build support



### **ADVANCED MACHINING**

*Our manufacturing facility allows for even the toughest jobs to be designed, fabricated, and inspected – all with exceptional quality and accuracy.*

- |                                      |                    |
|--------------------------------------|--------------------|
| • Five-axis machining (Mori Seiki)   | • Balancing        |
| • Electrical discharge (EDM)         | • Assembly         |
| • Four-axis lathes (Okuma)           | • CMM inspection   |
| • Prototype to low volume production | • Exotic materials |
| • Welding, brazing, grinding         |                    |





## GAS STANDS

The Aerodyn gas stand testing center features the most sophisticated technology for new product development and testing.

- Three large turbocharger gas stands
- Performance, burst and containment, and durability
- 3 kg/sec and 700°C mass flow per stand
- Hot flow testing for valves, nozzles, and components



## VIBRATION TESTING

AEI provides a single source solution for your vibration testing needs.

- Onsite dynamic testing
- Electrodynamic and piezoelectronic shaker
- 20,000 pounds force
- Temperature/humidity environmental testing
- Elevated temperature vibration testing



## DATA ACQUISITION

Aerodyn provides worldwide field testing and data acquisition.

- High-speed dynamic data systems
- Temperature, pressure, strain, and accelerometers
- Laser displacement probes



## SLIP RING SYSTEMS

*AEI manufactures the premier line of high-speed, data quality slip rings for the transfer of sensor signals from rotating components to stationary data systems.*

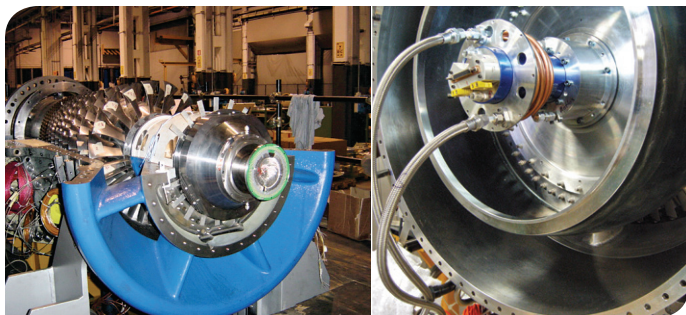
- Up to 150,000 rpm
- 16 to 744 contacts
- Low noise signal transfer
- Design and fabrication of installations
- Routing schemes



## CALIBRATION

*AEI designs, fabricates, assembles, and calibrates rakes and probes to our customers' specifications.*

- Flow calibration up to .95 Mn
- Load/force calibration
- Pressure/temperature calibration



## INSTRUMENTATION

*AEI provides design, fabrication, and installation of sensors to meet challenging applications.*

- Advanced instrumentation serving aerospace and industrial customers
- Design, fabrication, and calibration of sensors and systems
- Aero-thermal dynamic sensors
- Rakes and probes
- Rotating strain, temperature, and pressure



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