

# Turbomachinery Test & Measurement



T  
E  
S  
T

# Excellence in Testing

Test ● Measurement ● Services ●  
Data Acquisition ● Data Analysis ●  
Software ● Condition Monitoring ●

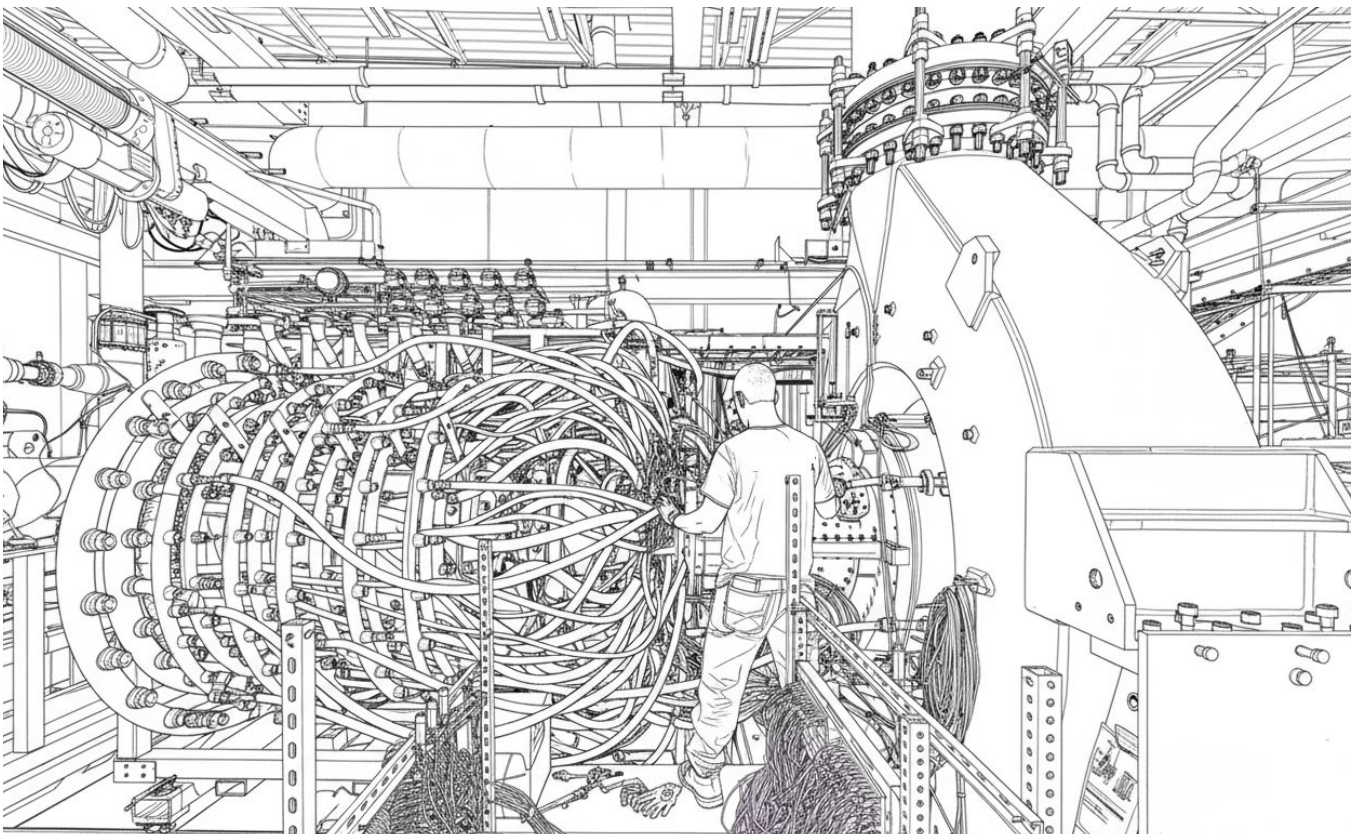
Test Cell ● Test Rig ● Test Setup ●  
Test Bench ● Test Room ● Test Bed ●  
Test Facility ● Test Stand ● Test Loop ●  
Test Equipment ● Test System ● Wind  
Tunnel Testing ● Component Testing ●

Turbomachinery ●  
Rotating Equipment ● Fan ● Blower ●  
Compressor ● Pump ● Wind Turbine  
Gas Turbine ● Steam Turbine ●  
Microturbine ● Motor ● Engine ●

# Overview

Soreen Turbomachine is a specialized engineering company focused on test and measurement solutions for turbomachinery and rotating equipment.

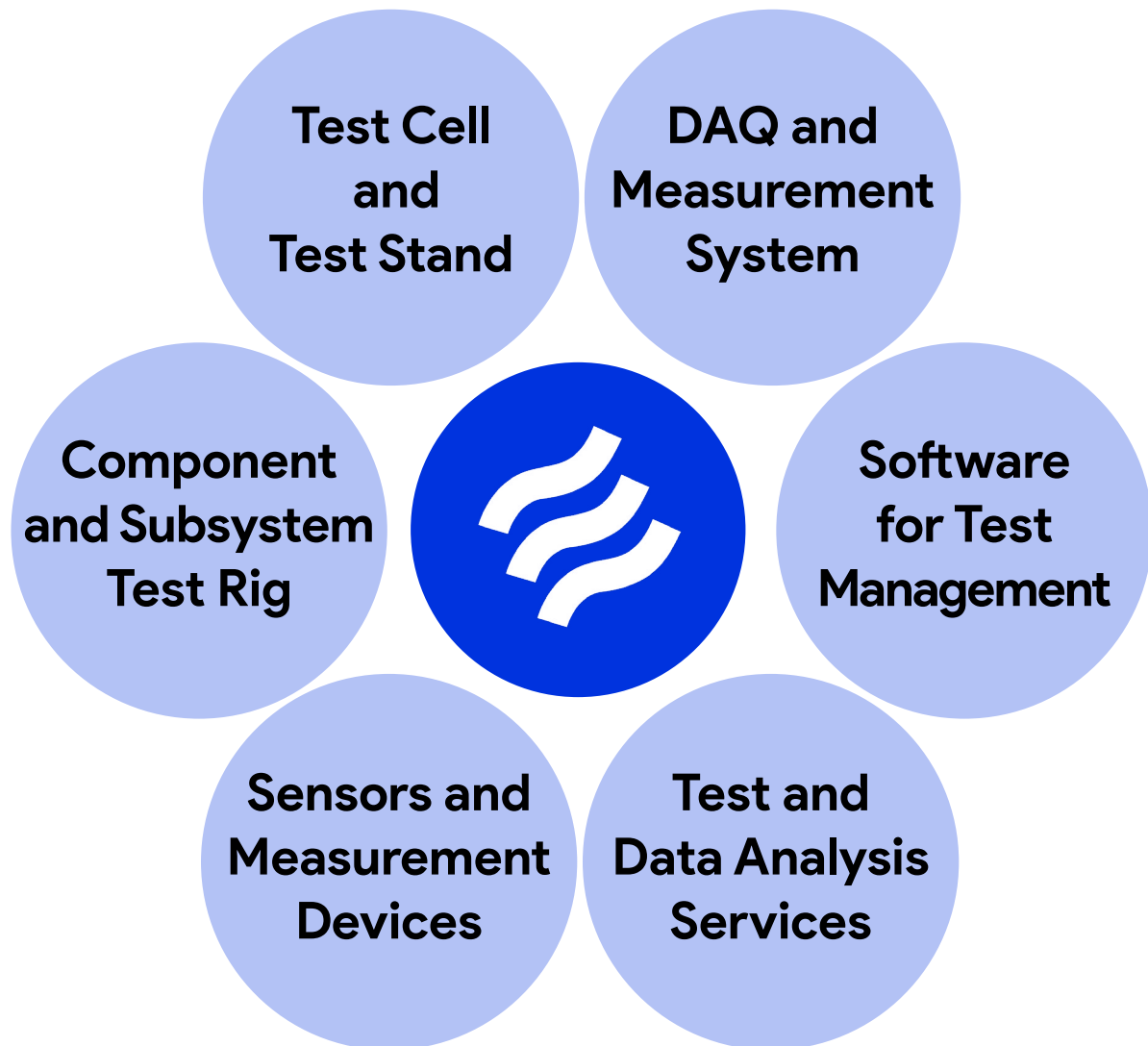
With deep expertise in both the design and manufacturing of advanced test systems, we provide custom-built test stands and measurement technologies tailored to the rigorous demands of rotating machinery.



# Six Pillars of Our Testing Solutions

- Turnkey Design and Construction of Test Cells and Full-Scale Test Stands
- Measurement and Data Acquisition Systems (DAQ)
- Software Ecosystem for Workflow and Test Management
- Professional Testing, Measurement, and Data Analysis Services
- Specialized Sensors, Probes and Measurement Devices
- Component-Level Test Stands and Subsystem Rigs

T  
E  
S  
T



# Test Cell & Test Stand

We deliver complete turnkey solutions for rotating equipment testing, from initial concept to full-scale execution.

Our workflow includes:

- Conceptual and Preliminary Design
- Detailed Design
- Fabrication
- Calibration
- Test & Measurement
- Analysis
- Commissioning
- System Development

Discover our full range of projects on our website.

**Compressor  
& Blower  
Test Stand**

**Turboprop  
& Turfshaft  
Test Cell**

**APU & GPU  
Test Cell**

**Microturbine  
& Microjet  
Test Cell**

**Fan  
Test Room**

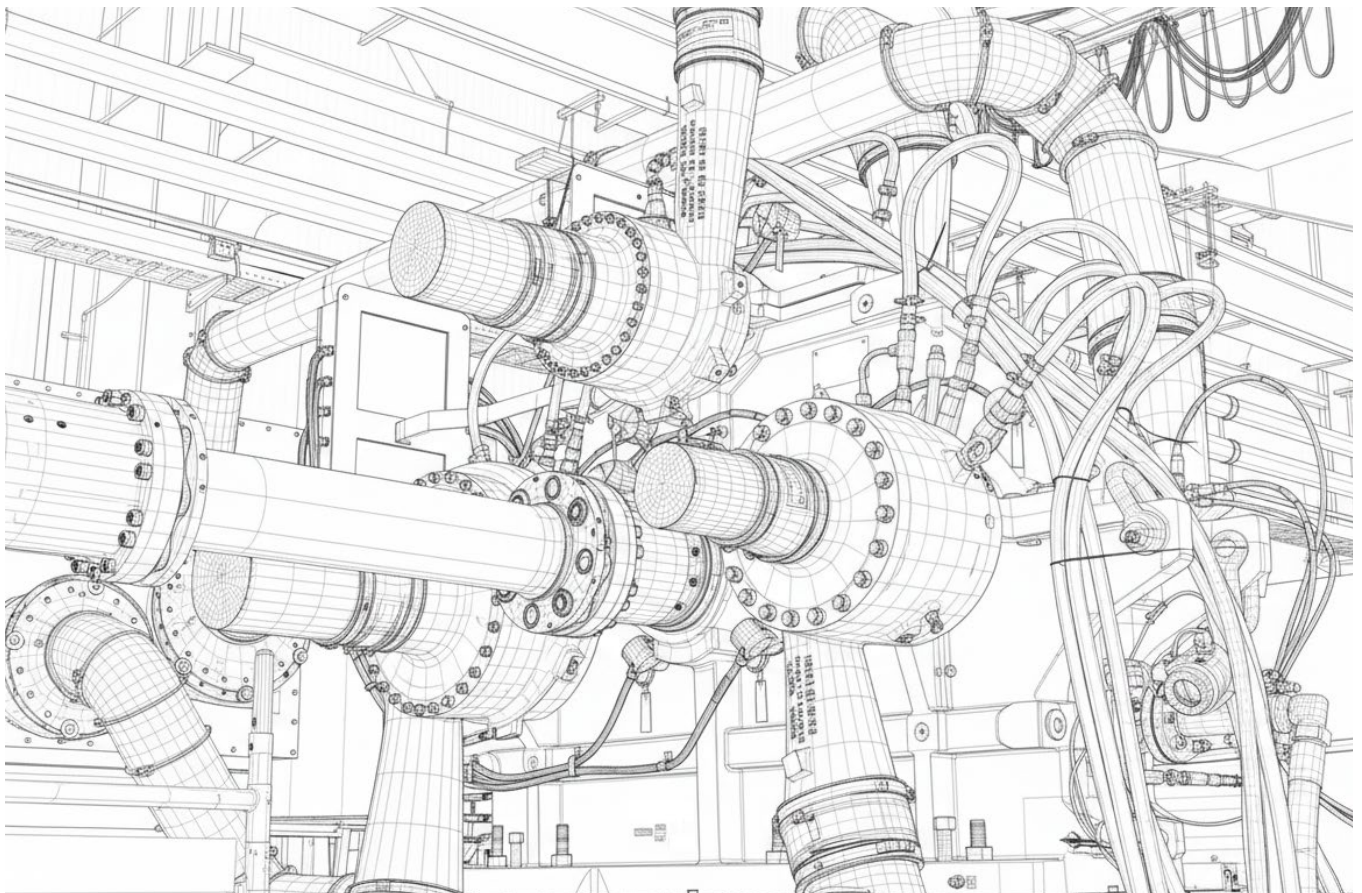
**Pump  
Test Stand**

**Gas Turbine  
Test Stand**

**Engine  
Test Cell**

**Dyno  
Test Bench**

**Motor  
Test Stand**



# DAQ Hardware & Measurement System

**T** We design and manufacture custom measurement and data acquisition systems tailored for both laboratory and industrial testing, with a focus on rotating machinery and aerodynamic experiments.

**E** Our systems range from 8 to 160 channels and support high sampling rates exceeding 1 MS/s, offering various configurations based on user requirements.

**S** Discover our full range of projects on our website.

Multi-Ch  
Pressure  
Scanner

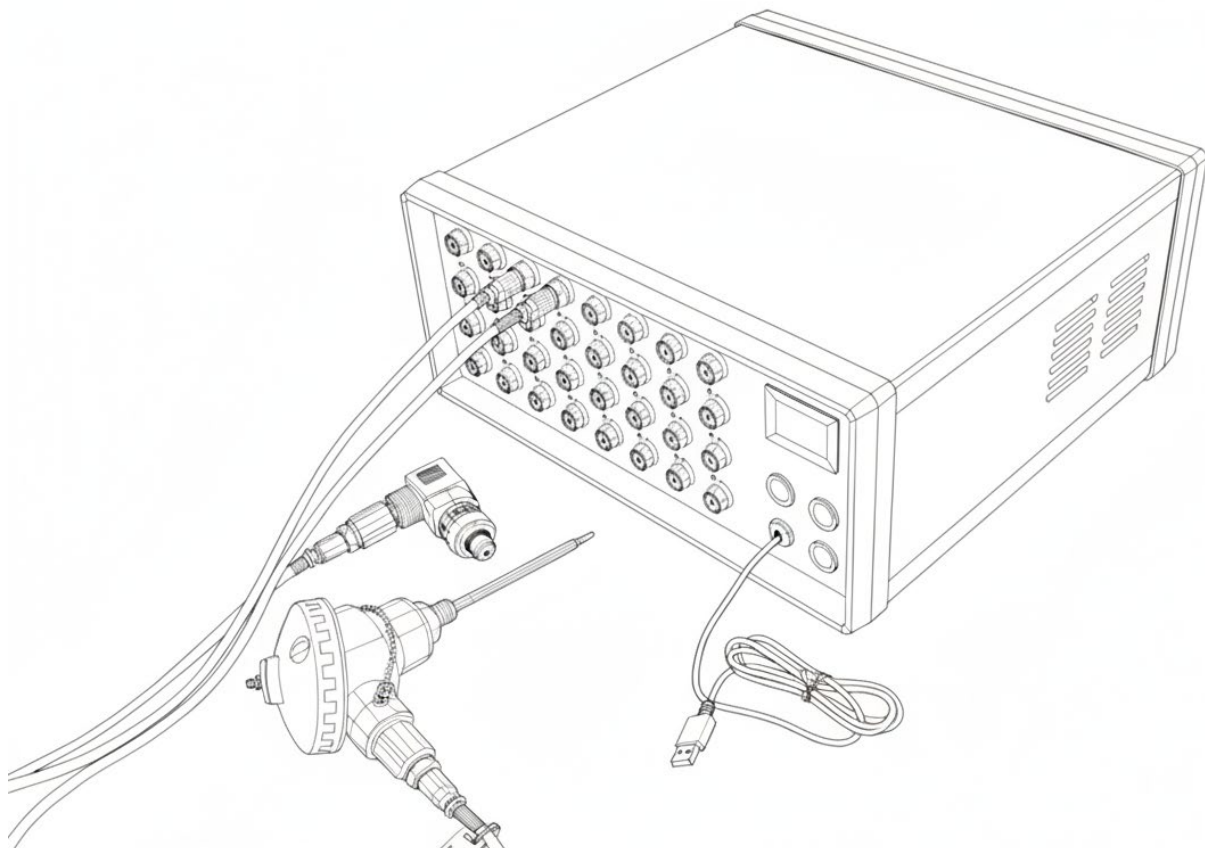
Multi-Ch  
Temperature  
Scanner

Special  
Designed for  
Compressor  
Testing

Pressure and  
Temperature  
Monitoring  
System

We engineer and manufacture a diverse range of measurement hardware, integrated with proprietary data acquisition software for real-time data logging.

Our systems provide seamless synchronization between hardware and software to capture and record critical test data instantly.



# DAQ Software

We specialize in developing customized data acquisition and monitoring software using the LabVIEW platform.

Our software solutions are designed to interface seamlessly with various sensors and hardware systems, providing real-time data visualization, logging, and analysis.

Discover our full range of projects on our website.

T  
E  
S  
T

Fan  
Performance  
Test Analysis  
Software

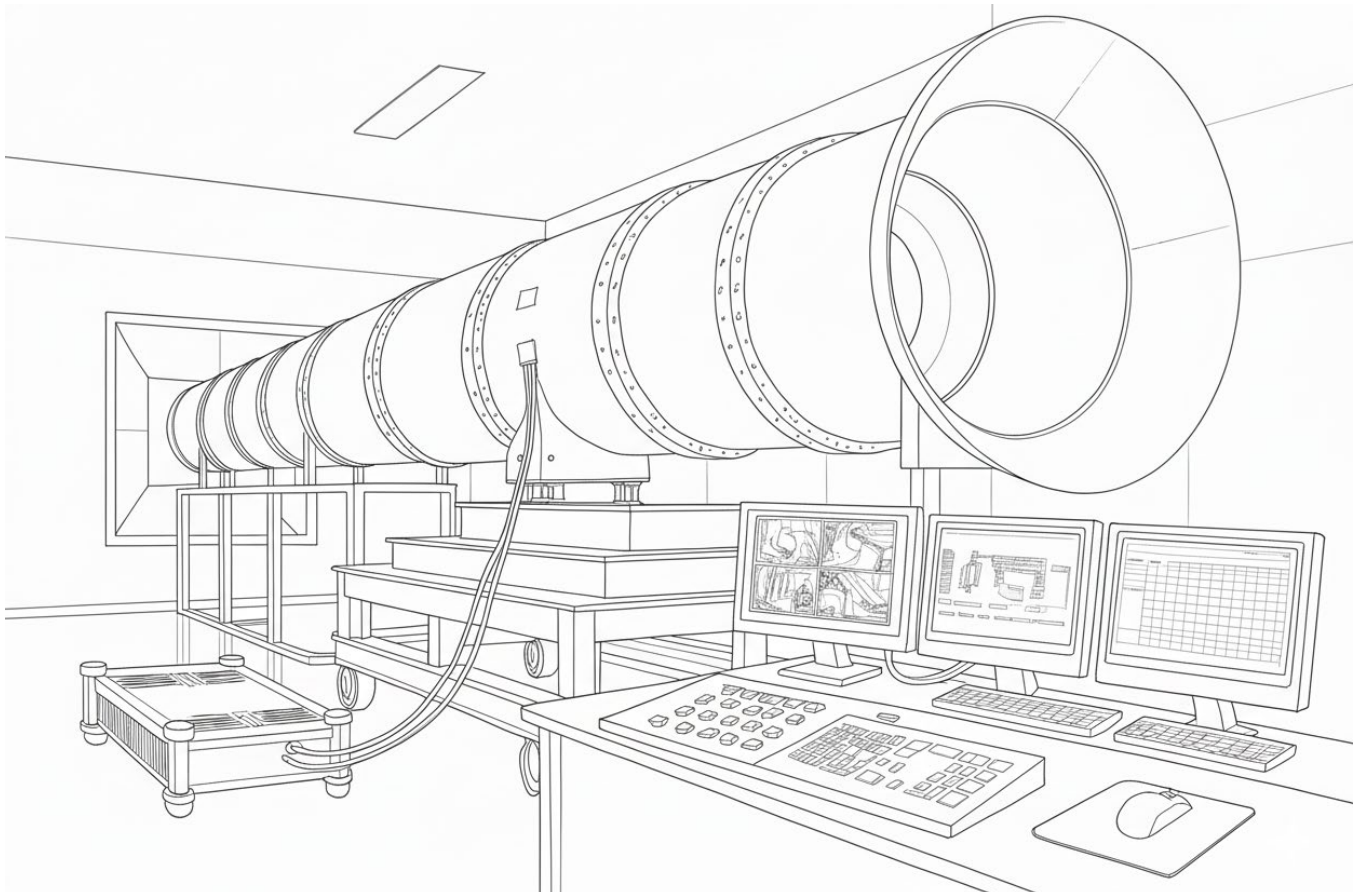
Compressor  
Performance  
Analysis  
Software

Compressor  
Performance  
Monitoring  
Software

Fan  
Performance  
Monitoring  
Software

Our software is specifically developed and optimized for turbomachinery and rotating equipment testing.

We provide tailor-made digital solutions that handle the unique complexities of high-speed data, ensuring maximum precision and efficiency in every test campaign.



# Software for Test Management

**Streamline Your Test Operations with  
Purpose-Built Software**

**T  
E  
S  
T**

Our software solutions are designed to simplify and standardize complex testing workflows. From procedure authoring and configuration to live execution, data capture, and post-test analysis, we support every phase of your test lifecycle, ensuring traceability, repeatability, and team-wide collaboration.

Inspection  
and Test Plan  
Software

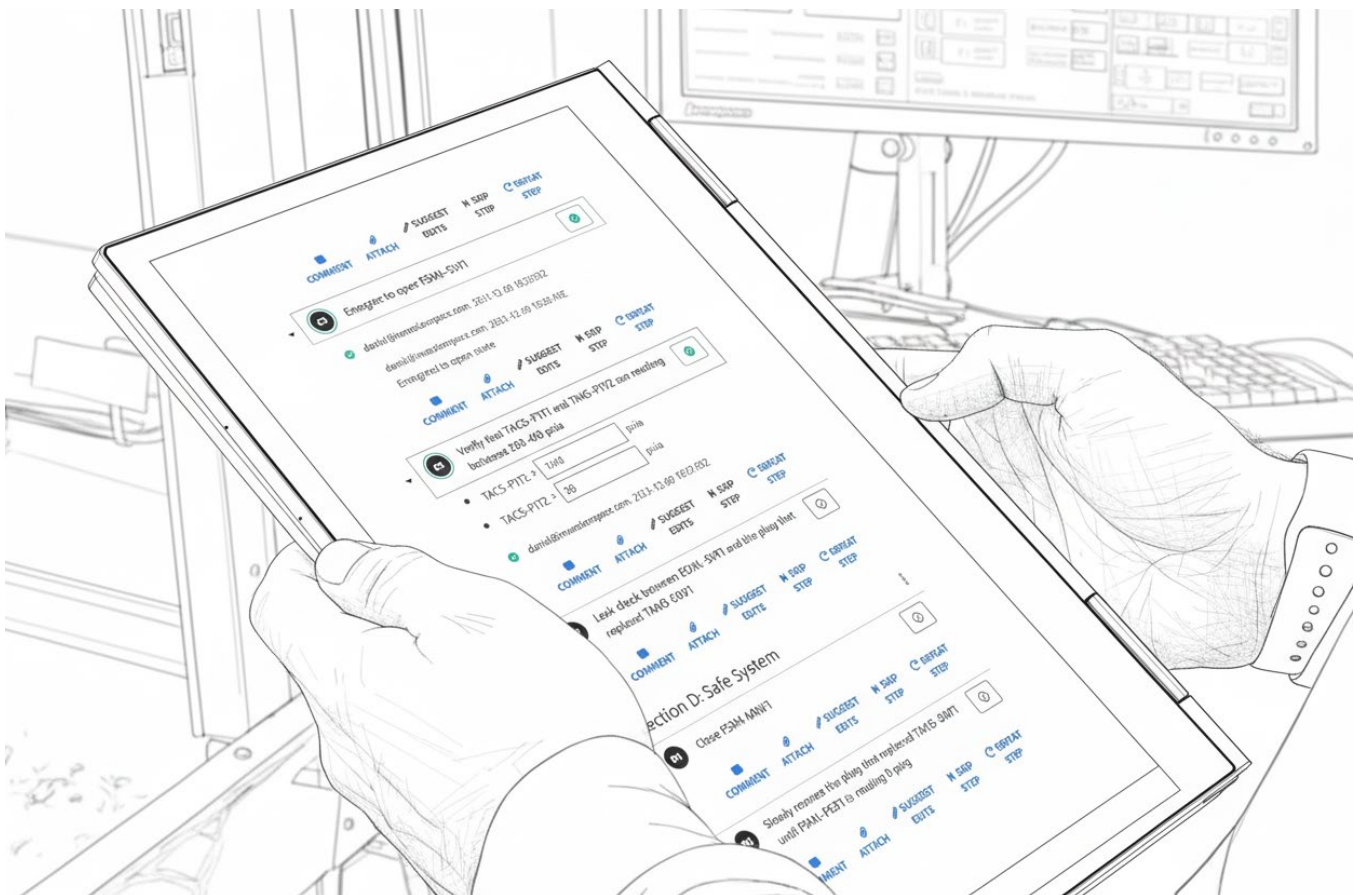
Test  
Workflow  
Software

Test  
Management  
Software

Test  
Schedule and  
Operation  
Software

Our sophisticated software ecosystem transforms complex turbomachinery testing into a streamlined, error-free digital operation.

By integrating real-time procedure execution with automated workflow management, we ensure maximum precision in every testing phase.



# Testing Services

We provide a wide range of specialized testing services for rotating equipment and turbomachinery. From performance evaluation and durability assessment to advanced measurement and analysis, our expertise ensures reliable results and supports the development of high-quality, efficient systems

Discover our full range of projects on our website.

**Condition  
Monitoring  
and Vibration  
Analysis**

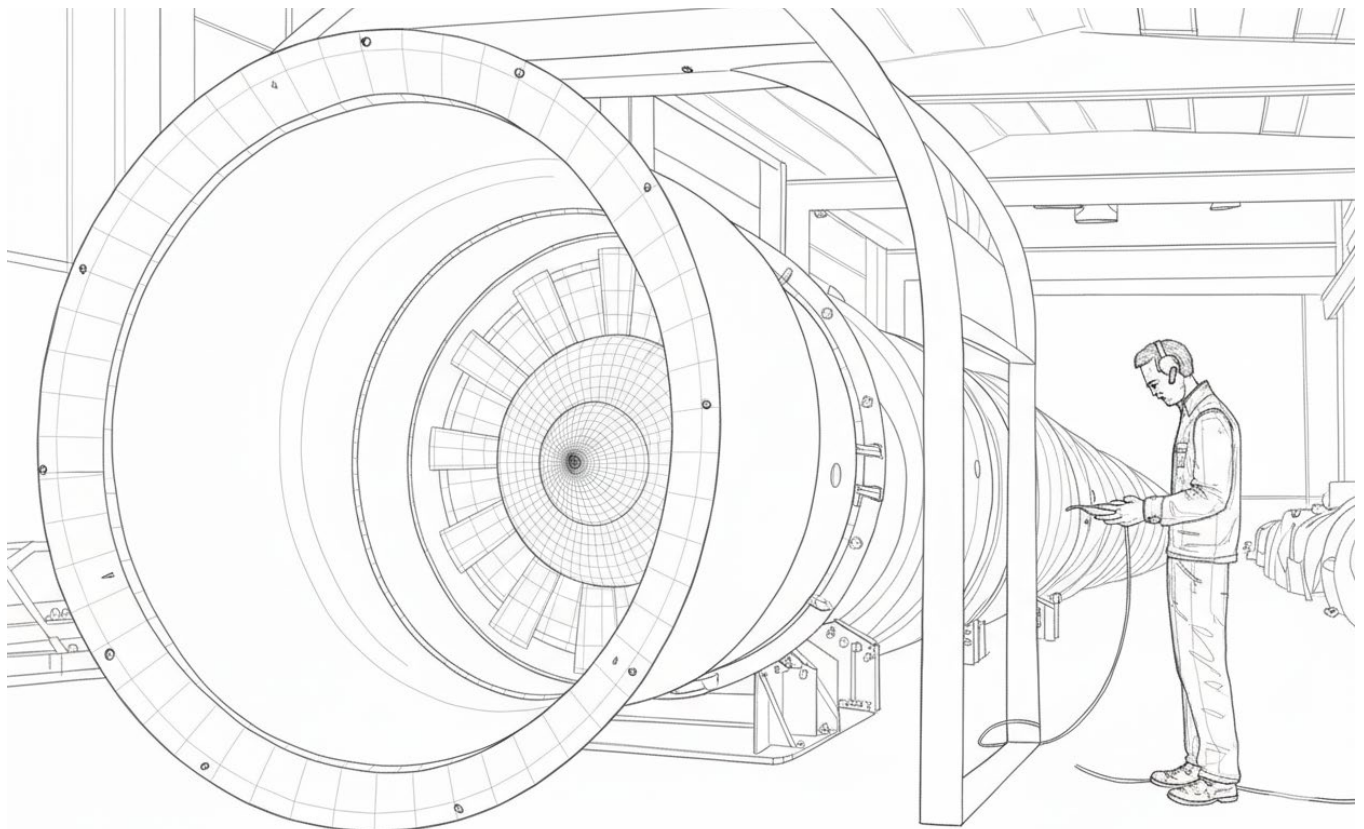
**Performance  
Test and  
Analysist**

**Mechanical  
Running Test  
Services**

**In-Situ  
Dynamic  
Balancing  
Services**

We provide expert on-site testing services, including condition monitoring and vibration analysis, dynamic balancing for components and full assemblies, mechanical and functional performance evaluations, and comprehensive testing of all auxiliary systems.

Our team delivers these essential diagnostics directly at your facility.



# Testing Sensors & Accessories

We provide advanced measurement solutions tailored for turbomachinery applications.

**T** Our portfolio includes high-precision temperature sensors for bearings, compressors, and turbines;  
**E** aerodynamic probes for pressure and temperature mapping; and calibrated flow meters such as Venturi tubes and  
**S** nozzles.  
**T**

Venturi  
and Nozzle  
Flowmeters

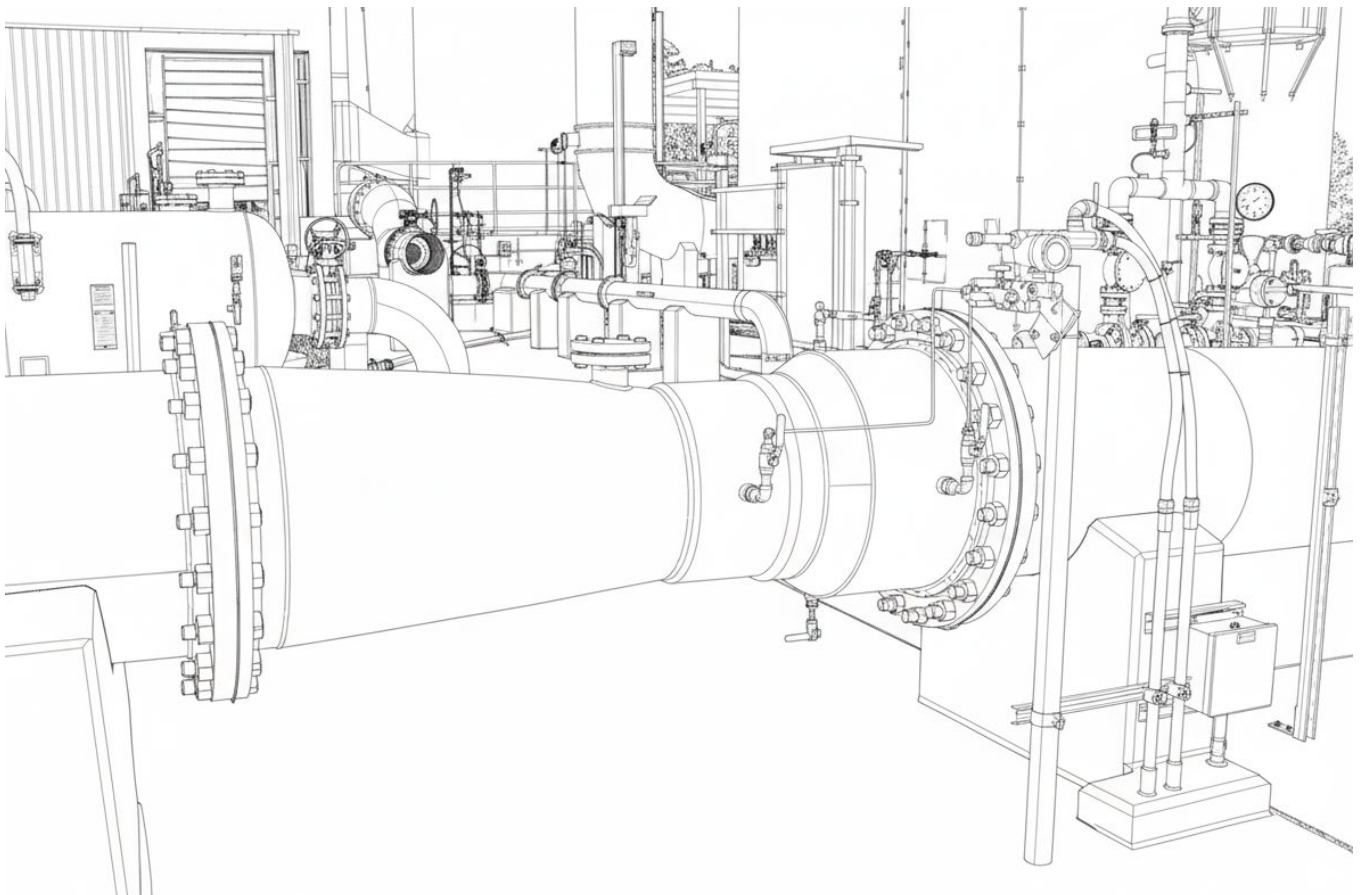
Multi-Hole  
Aerodynamic  
Probes

Temperature  
Sensors for  
Bearing and  
Turbine EGT

Thermowells

We engineer and manufacture auxiliary systems with maximum precision according to the latest global standards.

Every product is delivered with complete testing and inspection documentation to guarantee quality and full compliance with your requirements.



# Component Testing

We offer specialized testing services for critical components including Blades & Vanes, Impellers, Valves, Dampers & IGVs, Silencers, Seals, and Bearings.

T  
E  
S  
T

Our facilities provide precise performance evaluation, durability assessment, and compliance verification, ensuring reliability and efficiency across every stage of development.

Vane and  
Blade Testing

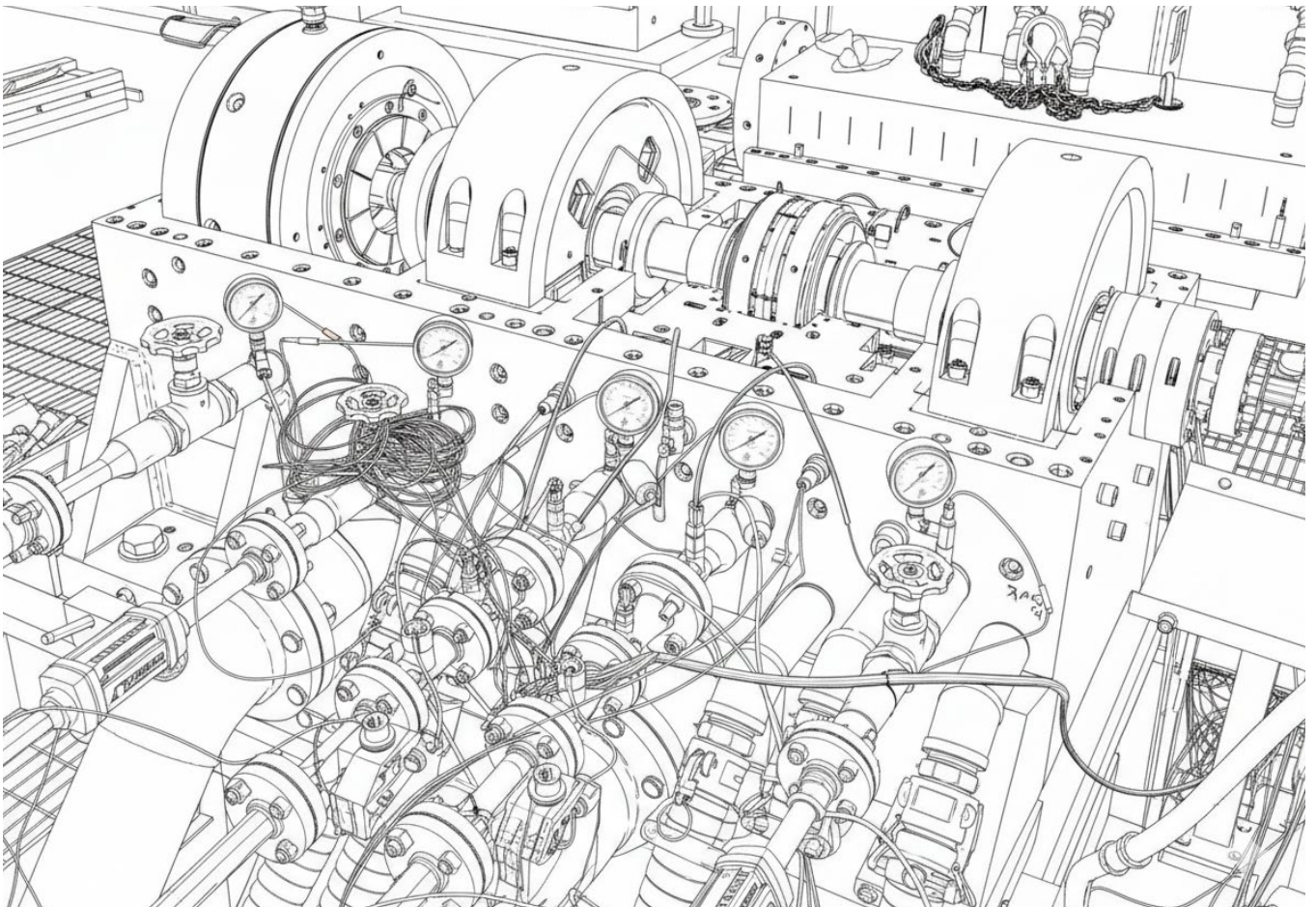
Bearing  
Testing

Valve Testing

Seal Testing

Beyond full turbomachinery validation, we perform rigorous standardized testing on individual components and sub-assemblies.

This ensures every part of your rotating equipment meets exact engineering specifications and international standards.



# Subsystem Testing

We provide specialized testing services for auxiliary systems such as Lube Oil System (LOS) and Cooling Water System (CWS).

T  
E  
S  
T

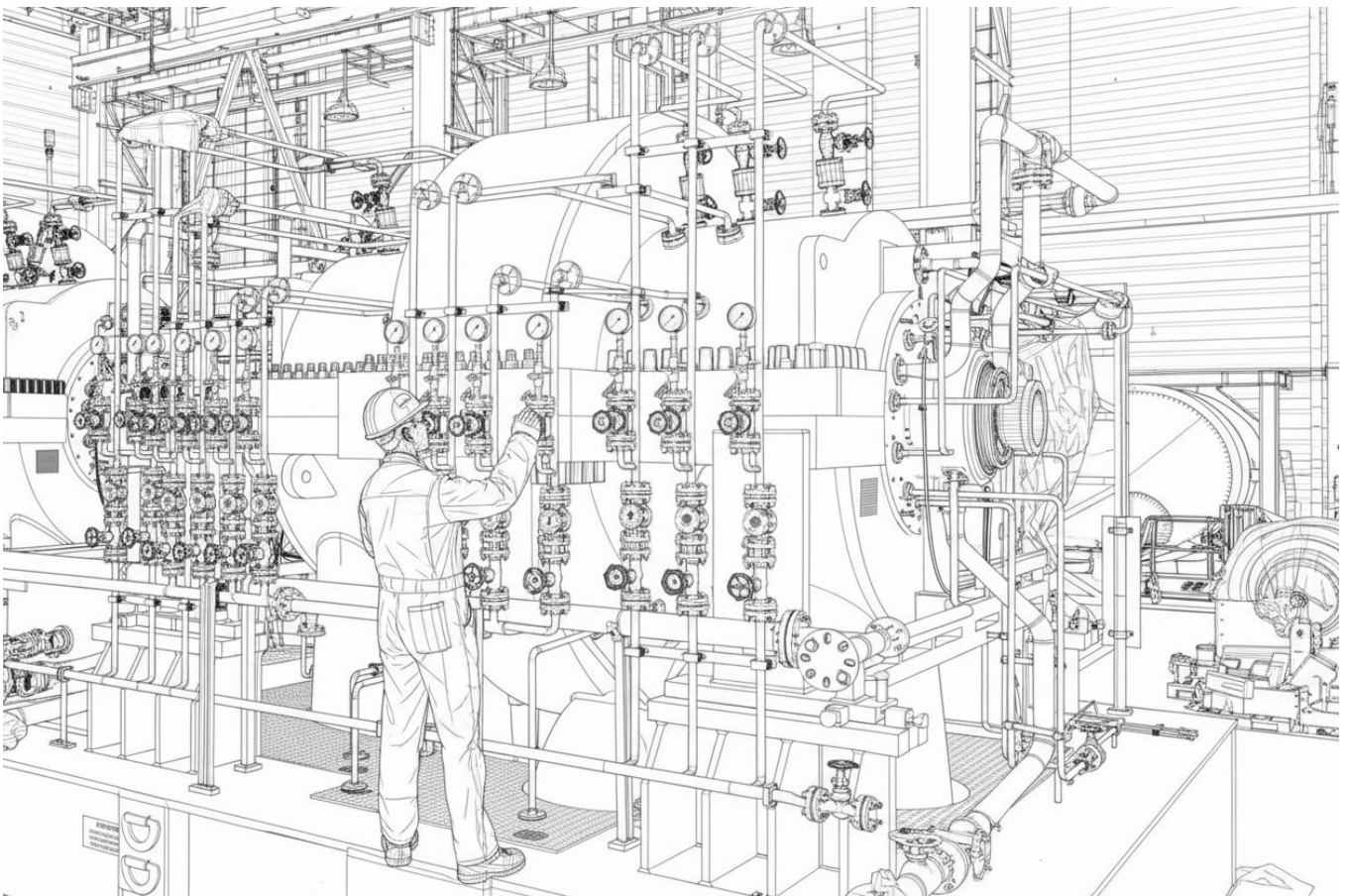
Our procedures ensure reliable operation, performance validation, and integration with rotating equipment and turbomachinery.

Functional  
Test of  
Lube Oil  
System

Functional  
Test of  
Cooling  
Water System

We provide expert test engineering and functional validation for auxiliary systems, including lubrication and cooling units, in full compliance with the latest international standards.

Our services ensure these critical systems operate reliably & efficiently under all conditions.



# Pioneering in Turbomachinery Testing Solutions

T  
E  
S  
T

## Soreen Turbomachine Engineering Co.

We stand at the forefront of the turbomachinery industry, providing a comprehensive and integrated value chain for testing and validation. Our mission is to empower aerospace, energy, and industrial sectors by delivering high-precision testing infrastructure and actionable engineering insights.

Through our expertise in turnkey test cells, advanced DAQ systems, and specialized instrumentation, we bridge the gap between complex design and operational excellence.

Please visit our website to discover our recent projects and portfolio. We are always looking for new challenges and strategic partnerships. Contact us today to start a collaboration.

[www.SoreenTurbo.ir](http://www.SoreenTurbo.ir)