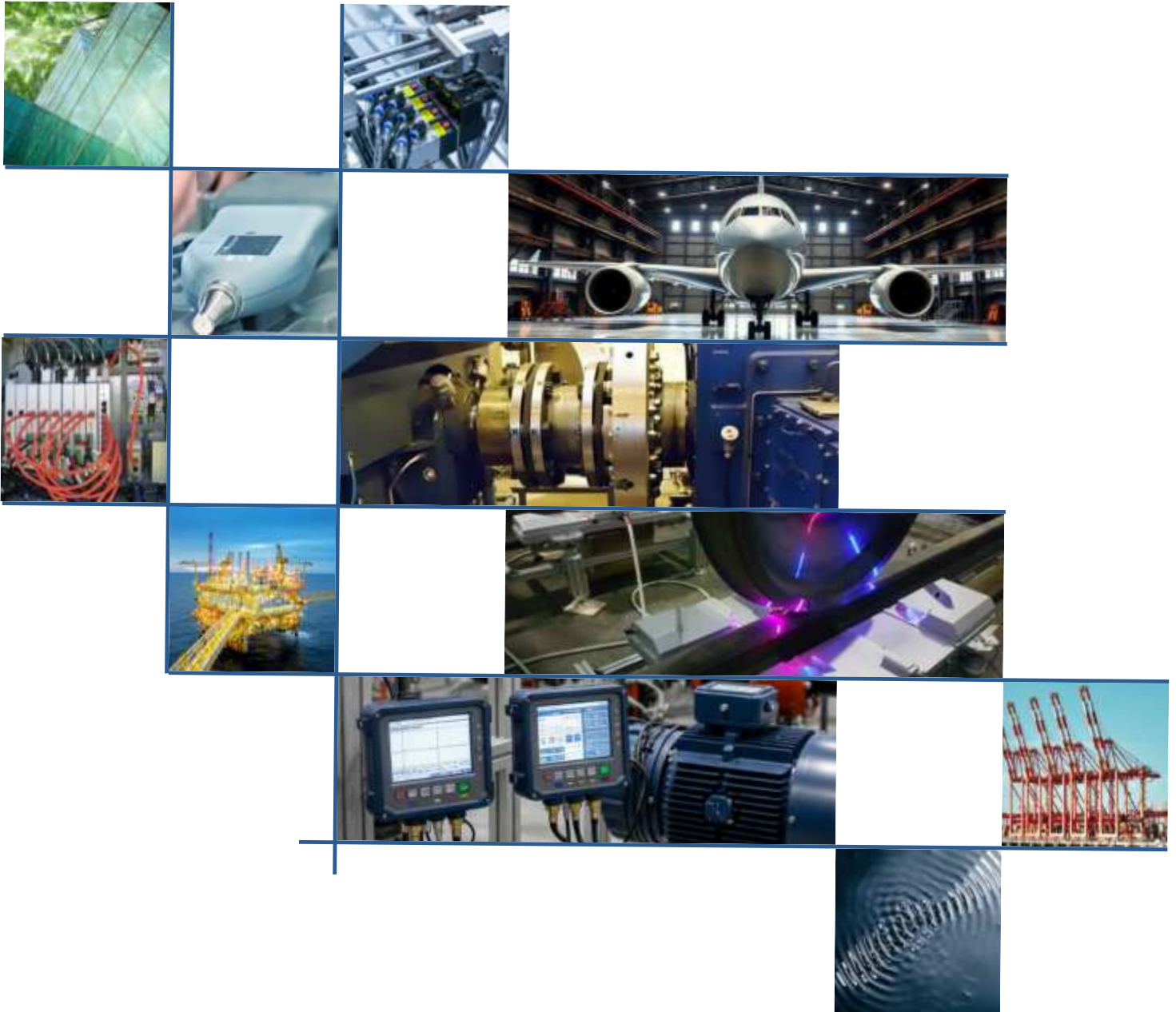











**GLOBAL TECH**  
INNOVATIONS



**SMART TECHNOLOGIES FOR  
SUSTAINABLE INDUSTRIES**

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# About Us



## Why?

We innovate to empower industries through smart, sustainable technology. Whether off-the-shelf or custom-engineered, our integrated sensor and automation solutions are designed to solve real-world industrial challenges. By understanding each client's goals, we co-create intelligent systems that enhance efficiency, precision, and performance, driving success across various industries.

## What?

We offer comprehensive technology and sensor solutions for industrial automation, process control, measurement systems, and digital transformation. From concept to execution, our expert team delivers customized turnkey solutions that combine precision, performance, and sustainability, helping businesses adapt and thrive for the future.

## How?

With years of expertise and global partnerships, Global Tech Innovations delivers excellence through innovation, reliability, and collaboration. Our advanced engineering processes, AI-driven insights, and IoT connectivity ensure seamless integration and measurable impact. We prioritize transparent communication and foster long-term partnerships built on trust, shared values, and results.

# Emerging Technologies:

At Global Tech Innovations, we believe technology is more than a tool – it's a bridge to a smarter, more connected, and sustainable world. We don't just deliver solutions; we create opportunities for industries to evolve, adapt, and thrive.



## OUR COMPANY

Global Tech Innovations (GTI) is a leading technology solutions provider with operations in the MENA and South Asian regions. We bring world-class industrial technologies directly to industries, supported by a streamlined delivery network and end-to-end integration services. From advanced measurement systems to sustainability-focused solutions, we empower businesses to optimize performance, meet compliance standards, and embrace innovation with ease and reliability.



## OUR VISION

Our vision is to become the most trusted partner for industries in the MENA and South Asian regions, known for delivering innovation, reliability, and sustainable solutions that transform the way businesses operate.



## OUR MISSION

Our mission is to make high-end industrial technologies easily accessible while simplifying sourcing and integration. We are committed to helping industries achieve efficiency, regulatory compliance, and sustainability, enabling them to grow smarter and stronger in a competitive world.



## LEADERSHIP

At GTI, leadership is about enabling industries with the right technologies, services, and values. Guided by our CEO and founding partners, we focus on innovation, integrity, and long-term partnerships. Our leadership philosophy is simple: connect global technologies with local execution, inspire confidence, and deliver solutions that create measurable impact.

# Sectors



# Manufacturing



At Global Tech Innovations, we view every industry as part of a smarter, connected ecosystem. Our mission is to empower sectors with intelligent, data-driven technologies that boost efficiency, reliability, and sustainability. We don't just offer solutions; we drive transformation through innovation and precision.

Every sector is unique, but all aim for purposeful performance. Our AI, IoT, and automation-powered technologies create responsive systems that think and adapt. Whether improving factories, energy grids, or urban mobility, our solutions deliver measurable, long-term value.

Collaboration drives progress, so we work with industry experts to create tailored solutions for real-world challenges. Together, we turn complex industrial environments into intelligent networks that boost productivity, safety, and sustainability.

GTI drives limitless innovation, combining precision and sustainability to help industries perform today and prepare for tomorrow. Our smart engineering ensures sectors operate seamlessly and intelligently.

# Aerospace & Defence Industry



High-performance test instrumentation and sensing solutions provide precise, real-time data for aerospace and defense, supporting structural vibration analysis, propulsion diagnostics, and flight readiness under extreme conditions.

Precision is vital in aerospace and defense. Instruments enable non-contact vibration testing, modal analysis, and structural diagnostics, detecting resonance and fatigue early to optimize materials, validate designs, and maintain safety.

Solutions using laser vibrometry, digital accelerometers, and 3D scanning provide high-resolution insights into mechanical integrity, performing reliably in extreme conditions for vibration testing, ballistic monitoring, and stress simulations.

Rugged, ISO-calibrated tools integrate with aerospace data systems, offering remote access for live monitoring and testing, enabling engineers to measure, analyze, and optimize components safely and efficiently.

# Education



At Global Tech Innovations, we believe education drives technological breakthroughs. By integrating advanced sensing and measurement systems into academic environments, we help students turn theory into hands-on learning and real-world engineering experience.

In today's fast-changing tech world, practical knowledge is as vital as theory. GTI brings industry-grade instrumentation to classrooms, enabling students to explore vibration, force, and control systems through smart, safe, and engaging tools.

Our partnership with educational institutions fosters innovation, not just equipment. GTI enables students and educators to work with real industrial technologies, sparking curiosity, creativity, and critical thinking to solve real-world engineering challenges.

Global Tech Innovations embeds innovation into learning, preparing students to lead in an automated, data-driven world. Our mission is to turn classroom knowledge into real-world impact across industries.

# Power Plant



Power plants demand precision and reliability. Global Tech Innovations provides smart instrumentation and monitoring solutions that prevent faults and ensure uninterrupted energy generation, combining robust sensing, automation, and control for thermal, hydro, and renewable facilities.

In industries where efficiency and safety are critical, GTI provides advanced monitoring tools that detect imbalances, misalignments, and fatigue early. With intelligent data integration and predictive diagnostics, operators can protect assets and optimize energy output.

GTI goes beyond measurement, enabling smarter, sustainable power generation. By integrating sensors and digital monitoring with automated controls, we support preventive maintenance, compliance, efficiency, and long-term reliability.

At Global Tech Innovations, we envision power plants operating with precision, safety, and sustainability. By integrating intelligent instrumentation and automation, we extend equipment life, minimize downtime, and enable smarter, cleaner, and more efficient energy.

# Construction Industry



In construction, technology drives safety, efficiency, and sustainability. Global Tech Innovations provides rugged, precision monitoring and control systems that deliver reliable data and insights from foundation to finishing.

Modern construction sites need real-time monitoring of noise, vibration, air quality, and structural integrity. GTI's smart sensing solutions empower engineers and contractors to detect risks early, ensuring safety, compliance, and on-time project delivery.

From vibration and acoustic analysis to air quality monitoring, GTI's durable, field-ready technologies capture accurate data continuously, optimizing site operations while ensuring resilience and accountability.

At Global Tech Innovations, we make construction as intelligent as it is strong. By combining precision sensing with smart analytics, our monitoring systems enhance safety, efficiency, and performance, shaping tomorrow's infrastructure today.

# Oil & Gas



The oil and gas industry demands precision, safety, and reliability. GTI provides advanced sensing and monitoring systems that withstand extreme conditions, bringing intelligence to every stage of production for enhanced efficiency, compliance, and safety.

In oil and gas operations, precision is critical. GTI's instrumentation monitors vibration, pressure, and structural stability, enabling predictive maintenance and optimized control across upstream, midstream, and downstream processes.

In oil and gas, resilience and precision are critical. GTI's monitoring tools deliver accurate data in extreme conditions, ensuring equipment integrity and worker safety with real-time analytics and robust performance.

At Global Tech Innovations, we help energy producers achieve safer, smarter operations. By integrating intelligent instrumentation and automation, we deliver the precision tools that ensure reliability, sustainability, and operational excellence in the oil and gas industry.

# Environmental Monitoring



Global Tech Innovations helps industries manage environmental responsibility with precision. Our monitoring systems track noise, air quality, and atmospheric conditions in real time, ensuring compliance, safety, and actionable insights for sustainable operations.

Sustainability begins with awareness. Smart tools—sound meters, dosimeters, and weather stations—help industries monitor environmental impact, ensure ESG compliance, and deliver reliable performance even in challenging conditions.

These solutions enable proactive environmental management. Real-time data, cloud integration, and solar power allow multi-site monitoring, ensuring safety and sustainability, with tools supporting both temporary and continuous audits.

Our mission is to make industrial sustainability tangible, achievable, and impactful. By combining precision instrumentation with advanced analytics, we enable companies to meet environmental standards and safeguard ecosystems, fostering a cleaner, safer, and more sustainable future.

# Rail & Road



Cutting-edge instrumentation solutions ensure safety, efficiency, and reliability in railways and road transport. High-precision tools withstand harsh conditions, providing data for predictive maintenance, infrastructure diagnostics, and long-term asset performance.

Rail networks require continuous inspection. Our systems measure braking, wheel profiles, track geometry, and switch wear, allowing operators to detect issues early. Handheld and automated solutions help maintain rail assets within performance thresholds for safer, more reliable journeys.

Rugged sensors and shock loggers monitor vibrations, impacts, and cargo tilt during transit. Real-time data helps prevent damage, optimize handling, and support predictive maintenance, extending vehicle and infrastructure lifecycles.

Rail and road monitoring solutions with automated reporting, modular setups, and mobile interfaces ensure seamless integration, enhancing safety, efficiency, and real-time cargo and rail asset monitoring.

# Health Industry



Advanced calibration, diagnostic, and testing tools enhance safety, accuracy, and compliance across medical devices, laboratories, and patient care systems, ensuring healthcare facilities maintain operational reliability.

Accuracy is critical in healthcare. Our instruments enable precise testing of medical sensors, operating room equipment, and prosthetics, supporting preventive maintenance, quality assurance, and safer patient care.

Advanced diagnostic tools assist healthcare teams in detecting anomalies, verifying instrument stability, and ensuring compliance. From calibrating sensors to assessing component integrity, these systems integrate seamlessly into clinical labs and research workflows.

Healthcare solutions include laser vibrometry, multifunction calibrators, electrical safety, and acoustic calibration tools. Rugged, portable, real-time diagnostics ensure equipment reliability, operational accuracy, and patient safety.

# Agriculture



Precision diagnostic tools help farmers and researchers make data-driven decisions. Handheld and portable systems provide real-time insights into soil, crops, and atmospheric conditions, supporting sustainable and efficient farming.

Modern agriculture requires accuracy and speed. Instruments like 7-in-1 soil analyzers and radiation meters measure pH, moisture, nutrients, and light, helping optimize inputs, maximize yield, and promote sustainable farming practices.

Solutions enable geo-tagged sampling, detailed data logging, and seamless workflow integration. From mapping nutrients to monitoring greenhouse lighting and solar exposure, these tools support precise decisions, productive harvests, and sustainable resource use.

All instruments are rugged and field ready, with intuitive interfaces, highcapacity storage, real-time display, and easy data export, bringing industrial-grade reliability to agriculture environmental research.

# Automotive



Advanced instrumentation solutions provide real-time insights into vehicle performance, safety, and reliability, supporting R&D, production control, and end-of-line testing in the automotive industry.

Automotive engineers use tools for vibration diagnostics, acoustic analysis, NVH optimization, and structural validation, providing precise feedback that improves fuel efficiency, safety, and component durability.

Instruments capture torque, strain, vibration, and acoustics in high-speed, high-stress conditions, offering insights for safer, more efficient vehicle designs and reliable manufacturing.

Automotive tools are rugged, integration-ready, and suitable for both lab and field use. Laser vibrometers, acoustic systems, and durable sensors provide contactless measurement, real-time data, and seamless compatibility with DAQ, SCADA, and PLC systems, empowering engineers to refine vehicle systems with confidence.

# Pharmaceuticals



Advanced monitoring tools enhance safety, compliance, and efficiency in pharmaceutical manufacturing. Precision instruments operate across cleanrooms, formulation areas, packaging lines, and utilities, delivering accurate noise and vibration measurements.

Maintaining low-noise, compliant environments is critical. Wireless noise dosimeters and vibration meters provide real-time insights, enabling auditing, risk mitigation, and regulatory compliance for safe and efficient pharmaceutical operations.

Instruments capture vibration and acoustic data from centrifuges, pill presses, HVAC systems, and mixers. Compact and wireless, they allow EHS and QA teams to track exposure accurately while maintaining production flow and GMP compliance.

Solutions offer real-time visualization, logging, and export, with cleanroom-ready, battery-powered designs. Intrinsically safe options ensure precise, reliable, and compliant monitoring throughout pharmaceutical production without disrupting operations.

# Cement and Mining Industry



Durable sensing and control technologies enhance reliability, optimize process flow, and reduce downtime in the demanding environments of cement and mining, supporting efficiency and personnel safety.

Precision diagnostics track vibration, thermal stress, and performance in crushers, conveyors, kilns, and mills, enabling early detection of issues and helping maintain process stability while extending machinery lifespan.

Rugged sensors, automated feedback, and laser vibrometry perform reliably in extreme conditions, integrating with legacy and modern systems to support condition-based maintenance and fault prevention.

Instruments feature heavy-duty vibration sensors, signal conditioners, high-temp transducers, and 4–20 mA integration for SCADA/PLC. Modular setups and smart accessories help mining and cement operators boost productivity, reduce downtime, and protect critical equipment.

# Fertilizer



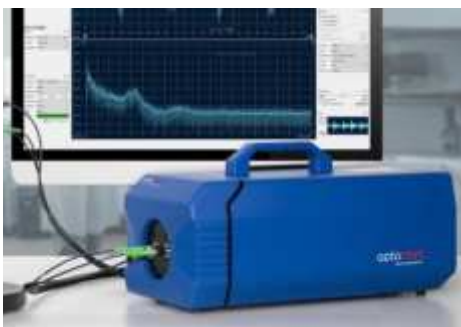
Precision monitoring and automation tools optimize fertilizer manufacturing while protecting equipment, personnel, and product quality. Solutions maintain efficient production in reactive or corrosive environments, ensuring safe and reliable operations.

Accurate control and reliability are vital in fertilizer production. Instruments monitor flow, vibration, pressure, and machinery across dryers, granulators, mixers, and packaging lines, helping detect faults, optimize energy, and maintain stable processes.

Rugged, corrosion-resistant sensors provide real-time visibility in fertilizer plants, reducing equipment stress, preventing downtime, and optimizing processes in abrasive, corrosive, or high-temperature environments.

Digital vibration transmitters, 4–20mA integration, laser vibrometry, and modular automation enable predictive maintenance, accurate process control, and durable, safe fertilizer production.

# Products



# Sensors

## Industrial Accelerometers

Industrial accelerometers and velocity sensors provide precise machine condition monitoring. Durable sealed construction and advanced sensing ensure stable vibration data, enabling predictive maintenance and reliable equipment monitoring.



## 4-20 mA Vibration Transmitters

Innovative Systems' durable 4–20 mA vibration transmitters provide continuous machinery monitoring with velocity or acceleration output and built-in fault detection. They enable early fault identification and support reliable predictive maintenance.



## Vibration Switches

Innovative Systems' durable vibration switches instantly detect unsafe vibration levels, supporting acceleration, velocity, or displacement monitoring. They protect motors, pumps, and industrial machinery, minimizing damage and unplanned downtime.



## Industrial Pressure Sensor

High-precision industrial pressure sensors provide real-time monitoring in turbines, pipelines, and combustion systems. Rugged ICP® and charge-mode technologies ensure reliable performance, accuracy, and safety in extreme industrial environments.



## Industrial Electronics

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## Ultrasound Sensors

Dual output vibration and ultrasound sensors provide early fault detection and machine diagnostics. They enable bearing fault detection and lubrication monitoring, supporting predictive maintenance and reliable condition monitoring.



## Wireless Triaxial Vibration Sensors

Wireless triaxial vibration sensors with temperature output provide reliable machine monitoring. With long range connectivity, extended battery life, and configurable reading intervals, they support efficient predictive maintenance in industrial environments.



## PRO Line Proximity Probe Sets

Proximity probe systems measure shaft displacement, vibration, and speed on critical machinery. They provide precise non contact monitoring, supporting reliable condition monitoring and predictive maintenance.



# Sensors

## Force Sensor

Rugged piezoelectric force sensors for precise, real-time measurement of dynamic forces. Compact and durable, they deliver accurate feedback in high-speed, high-load applications across industrial and research environments.



## Torque Transducer

High-precision torque transducers provide accurate torque measurement in dynamic applications. Rugged and reliable, they support motor testing, drivetrain diagnostics, and industrial monitoring with durable, high-speed performance.



## TMP Line Test & Measurement Hardware

Lightweight accelerometers and accessories support precise vibration testing in research and design applications. Titanium construction and wide frequency response enable accurate measurements for laboratory testing and dynamic analysis.



## Test & Measurement Sensors

High-performance accelerometers are engineered for precise vibration and shock measurement. Built for extreme environments, they support R&D, product testing, and engineering applications with reliable, accurate, and ISO-calibrated performance.



## Enclosures

Rugged industrial enclosures centralize and protect vibration monitoring systems. Designed for harsh environments, they simplify wiring, enhance safety, and support reliable predictive maintenance and efficient system management.



## Strain Sensor

Rugged piezoelectric strain sensors enable precise, real-time stress monitoring. Compact and durable, they provide accurate, repeatable measurements and integrate easily into industrial, R&D, and harsh environment applications.



## Accessories

Durable mounts, cables, and tools enable precise vibration sensor installation. Designed for safety and reliability, these accessories ensure accurate measurements and secure operation in demanding industrial environments.



## Industrial Cables

Rugged cable assemblies with PTFE and polyurethane jackets feature MIL-style, bayonet, and M12 connectors. Engineered for extreme conditions, they ensure reliable signal transmission and long-term industrial performance.



# Calibration System



## Vibration Sensor Calibrators

The SPEKTRA CV-10 is a portable, battery-powered vibration sensor calibrator. With a wide frequency range and rugged design, it ensures precise field calibration with NIST traceability and easy software integration.



## Microphone & SLM Calibrators

The SPEKTRA CS18 FF is a high-precision acoustic calibration system for microphones and sound level meters. Standards-compliant and traceable, it is ideal for certified labs and supports versatile, accurate testing.



## Pressure Sensors Calibrators

The SPEKTRA DPE-01 is a dynamic pressure calibration system for piezoresistive sensors. With precise amplitude and frequency ranges, it ensures reliable, traceable results for R&D, quality control, and compliance testing.



## CS Q-LEAP™ Calibration System

Advanced system for calibrating vibration and seismic sensors, operating from DC to 200 Hz with PTB traceability, integrated software, and support for sine calibration and vibration measurement.



# Vibration Testing



## Vibration Shakers

Vibration shakers provide precise, repeatable testing across industries. With force ranges from 2 lbf to 88,000 lbf, they support modal analysis, durability trials, and system-level testing.



## Modal Shakers

High-performance modal shakers enable precise structural dynamic testing. With force ratings from 2 lbf to 60 lbf, they support aerospace, automotive, and civil structure analysis with clean, repeatable excitation.



## Drop & Shock Test System

Advanced shock and drop test systems simulate real-world impacts. With customizable shock profiles and high acceleration capabilities, they ensure product durability and compliance with global testing standards.



## Long-Stroke Vibration Exciter

High-performance long-stroke shakers support precise structural testing. Ideal for vibration, seismic, and modal analysis, they deliver stable excitation with extended stroke capabilities for diverse industrial applications.



## High-frequency Vibration Shakers

High-frequency vibration shakers provide precise sensor calibration from 5 Hz to 50 kHz. With exceptional stability and ISO-compliant performance, they are ideal for MEMS, R&D, and sensor testing.



## Vibration Test Chambers

Integrated vibration and humidity test chambers simulate real-world environmental stresses. With temperature and humidity control, they ensure reliable product validation and compliance across industries and standards.



## Impact Hammers

Modally Tuned® impact hammers provide precise structural excitation. With built-in force sensors and interchangeable tips, they enable accurate modal analysis and structural health monitoring across applications.



# Condition Monitoring Tools

## Vibration Measurement

Advanced vibration analyzers with integrated thermal cameras deliver real-time diagnostics. Built for rugged reliability, they support predictive maintenance and condition monitoring in industrial environments.



## Equipment Balancing Tools

Advanced rotor balancing tools with integrated vibration analysis provide precise balancing and fault detection across a wide speed range, ensuring accurate and reliable performance.



## Shaft Alignment Tools

Advanced laser alignment systems for rotating equipment offer easy operation, high precision, and guided navigation, improving reliability and reducing downtime.



## Leak Testing Tools

Advanced acoustic imaging cameras enable accurate leak detection and fault identification, providing real-time visualization and improving safety in industrial environments.



## US Testing Tools

Advanced ultrasound and vibration analyzers for predictive maintenance feature dual sensor inputs, real-time diagnostics, and long-term data logging to detect faults early and optimize maintenance strategies.



## Borescopy Tools

Advanced 3D borescope systems provide precision internal inspections with 360° imaging, real-time measurements, and a rugged design, ensuring accurate, fast, and reliable field performance.



## Motor Testing Tools

SMARTdiagnostics® wireless motor testing tools provide real-time condition monitoring with scalable, data-driven insights to detect faults early, reduce downtime, and optimize predictive maintenance across industries.



## Infrared Thermography Tools

Advanced infrared thermography tools deliver fast, precise diagnostics with high-resolution imaging, Wi-Fi connectivity, and a rugged design, enabling efficient inspections for maintenance, electrical, and mechanical applications.



# Electrical Instruments



## Digital Multimeters

Rugged TRMS digital multimeters for accurate, safe testing. Featuring auto ranging, non contact detection, and durable IP rated design for reliable use in industrial and residential environments.



## Clamp Meters

Reliable clamp meters provide accurate AC/DC current testing with TRMS precision, non contact detection, and durable designs, ensuring safe and versatile measurements for industrial, commercial, and residential use.



## Power Quality Analyzers

Compact, IEC compliant analyzers deliver accurate energy usage and system disturbances, helping improve efficiency, ensure compliance, and support reliable electrical performance.



## Process Calibrator

Accurate, multifunction process calibrators are designed for reliable signal testing and loop verification. Ideal for industrial instrumentation, they ensure precise measurement, simulation, and calibration across demanding applications.



## Installation Testers

Reliable installation testers perform accurate electrical safety checks, including continuity, insulation, loop, and RCD tests, ensuring compliance and dependable diagnostics for residential, commercial, and industrial systems.



## PV Testing Tools

Reliable PV testing tools enable safe and efficient solar system checks. They support commissioning, maintenance, and performance analysis with accurate measurements for photovoltaic installations.



# Laser Vibrometry



## Classic Series

Experience precise, non contact vibration measurement with the CLASSIC series. Designed for research and industry, it delivers high accuracy data, modular flexibility, and reliable performance on all surface types.



## Smart Series

The SMART Series portable, all in one laser vibrometers delivers high resolution 3D vibration measurement. Designed for any scale, they provide fast setup, precise analysis, and flexible configurations for advanced testing.



# HSE Tools



## Classic Series

Achieve precise noise measurement with advanced Class 1 and Class 2 tools designed for environmental and industrial applications. These meters deliver accurate SPL analysis, data logging, and reliable performance for compliance and safety monitoring.



## Human Vibration Meters

Monitor hand arm and whole body vibration exposure with precision tools designed for occupational safety. These meters deliver accurate, real time data to support compliance, worker protection, and long term health monitoring.



## Noise Dosimeters

Wireless personal noise monitors with Bluetooth and real time tracking. Intrinsically safe versions ensure reliable, accurate noise exposure data for compliance in high risk industrial environments.



# Rail & Road Testing Tools



## Rail & Wheel Profile Measurement Tools

Portable MiniProf BT Systems Deliver high-accuracy, real-time rail and wheel profiling with Bluetooth connectivity. Smart software and mobile apps streamline data collection and support predictive maintenance.



## Brake & Switch Crossing Measurement Tools

Advanced tools for brake force and switch crossing measurements: sturdy, real-time wireless systems that enhance safety, make diagnostics easier, and enable predictive maintenance for improved rail performance.



## Transport Shock Data Logger

Track Shock and Tilt Events With the MONILOG® Shock-Display Curve 2. This rugged, reliable logger ensures cargo safety, providing precise shock event data and tilt measurements for improved logistics quality.



## 3D Automated Wheel Measurement System

Real-time, contactless wheel geometry analysis up to 350 km/h. Detects defects, integrates with systems, and enables non-intrusive monitoring and available in multiple speed variants.



# Rail & Road Testing Tools

## Continuous Track & Ride Monitoring System

A vehicle-mounted system providing real-time diagnostics and track geometry insights on in-service trains. It integrates GNSS localisation, vehicle, bogie, and axlebox sensors, with 4G connectivity and secure cloud platforms for seamless data access.



## Wheel Maintenance Measurement Tools

Laser-based tools designed for accurate wheel inspection in depots and workshops. Enable fast, contactless measurement of wheel diameter, profile, and back-to-back distance.



## FDK-124 Wheel diameter gauge

Compact, lightweight laser gauge for light rail vehicles, offering precise wheel diameter measurement with a large display and optional Bluetooth transfer. Range: 400–750 mm (custom ranges available), easy to handle in depots.



## Diameter Gauge

A contactless diameter measurement tool with a large digital display and optional Bluetooth data transfer. It offers a measurement range of 600–1400 mm.



## Wheel Profilometer

A laser profile scanning system that provides contactless measurement, along with wear database management software and Bluetooth data transfer.



## Back-to-Back Gauge

A contactless measurement tool with a large digital display, offering a range of 1340–1610 mm and an accuracy of 0.2 mm, ensuring precise back-to-back distance measurements.



## Light Rail Profilometer

A high-precision wheel measurement tool with optional Bluetooth transfer, a range of 400–750 mm, and a lightweight design ideal for depot environments.



# Automation & Control



## PLCs

Reliable, high performance PLCs and PACs for industrial automation. Modular, scalable, and secure controllers streamline operations, support complex process control, and deliver 24/7 uptime in harsh environments.



## HMI

Streamlined, rugged HMIs enhance operator efficiency and control. Real time system monitoring, seamless PLC integration, and customizable interfaces ensure smooth operations in harsh industrial environments.



## SCADA System

Scalable SCADA systems offer real time monitoring, secure remote access, and seamless integration. Designed for high efficiency, they provide centralized control and data acquisition across critical industrial operations.



## Junction Boxes

Rugged and reliable junction boxes designed for efficient vibration monitoring, enabling safe data collection, flexible sensor integration, and simplified installation in industrial environments.



# Agriculture Monitoring tools



## Portable Soil Tester

Conduct 7-in-1 soil analysis with built-in GPS for precise, real time data on temperature, pH, salinity, and more. Enhance crop yield, sustainability, and research accuracy in agriculture and environmental studies.



## Photosynthetic Active Radiation Tester

Accurate PAR measurements (400–700 nm) optimize plant growth by assessing light intensity for horticulture, agriculture, and environmental monitoring. Portable, easy to use and ideal for both field and lab settings.



## Portable CO<sub>2</sub> Tester

Real time CO<sub>2</sub> monitoring with high accuracy for indoor and industrial environments. Compact, lightweight, and equipped with USB/RS485 outputs, it ensures efficient data tracking and system integration for air quality management.



## Portable pH Testing instrument

Accurate, portable pH testing for field and lab use. Compact design, real time readings, and high precision performance, ideal for agricultural, environmental, and industrial applications requiring reliable water analysis.



# Weather Monitoring tools



## Portable Atmospheric Tester

Real time measurement of temperature, humidity, and air pressure with high precision sensors. Compact, portable, and durable for field and lab use, offering seamless data logging and system integration.



## Photosynthetic Active Radiation Tester

Accurate solar radiation measurement (0.3–3  $\mu\text{m}$ ) for solar, agriculture, and environmental applications. Lightweight, portable, and rugged, with real time data logging, USB export, and fast response for field use.



## Ultrasonic Weather Station

All-in-one weather monitoring system integrating wind speed, wind direction, temperature, humidity, pressure, PM2.5, PM10, noise, rainfall, and solar radiation sensors. Delivers accurate real-time environmental data with digital sensing and robust design



## Wind Speed Sensor (NBL-W-SS)

High-precision wind speed monitoring for environmental, meteorological, and industrial applications. Designed with carbon fiber construction for accurate measurements, reliable operation, and long-term outdoor durability.



# Weather Monitoring tools



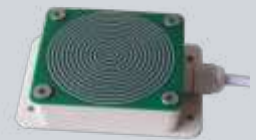
## Wind Direction Sensor (NBL-W-DS)

Precise 360° wind direction monitoring for environmental, meteorological, and industrial applications. Designed for reliable outdoor performance with stable measurements and seamless integration into monitoring systems.



## Rain & Snow Sensor (NBL-W-RSS)

Intelligent sensor for detecting rain and snow conditions with high sensitivity, featuring automatic heating to prevent interference and ensure reliable operation.



## Tipping Bucket Rain Gauge

Automatic rainfall measurement device for recording precipitation, intensity, and duration, suitable for meteorological, hydrological, and flood monitoring applications.



## Ultrasonic Snow Depth Sensor

Non-contact sensor using ultrasonic technology to measure snow depth accurately, enabling continuous monitoring in meteorological and transportation environments.



## Pyranometer Solar Radiation Sensor (NBL-W-SRS)

Sensor for measuring total solar radiation across a spectral range of 0.3–3  $\mu\text{m}$ , supporting environmental monitoring and solar energy analysis.



# ESG Products

## Digital Multimeters

Portable digital multimeter for electrical testing and troubleshooting. Designed for accurate measurements with a compact, easy-to-use form factor.



## EV Charging Station Testing Tools

Advanced tools for EVSE safety and performance testing, ensuring compliance with IEC standards. Ideal for installation verification and maintenance, they deliver accurate diagnostics and streamline charging station inspections.



## PV Testing Tools

Advanced, multifunctional PV testing tools for system safety, efficiency, and performance. Designed for field use, these devices ensure compliance with standards IEC/EN62446 and streamline photovoltaic system inspections and maintenance.



## Smart Energy Meters

Advanced smart energy meters for precise thermal energy monitoring. Ideal for HVAC, energy audits, and process systems, they ensure accurate data for optimizing energy efficiency and reducing operational costs.



## Lux and Solar Meters

Precise user friendly meters for accurate light and solar radiation measurements. Ideal for lighting evaluations, energy management, and solar panel efficiency testing, ensuring reliable results in diverse conditions.



## Water Consumption & Testing Tools

Advanced ultrasonic flow meters for accurate, non-invasive water flow measurement. Ideal for leak detection, system optimization, and regulatory compliance in applications ranging from municipal water to industrial systems.



## Laser Raman Spectroscopy Gas Analyzer

Compact and portable Raman-based gas analyzer for real-time multi-component gas measurement with high accuracy and fast response for industrial and research applications.



# ESG System

## Portable Emissions Measurement System (PEMS) – Gasboard-9805

Advanced on-board system for real-time vehicle emission measurement, capturing gas pollutants, particulate matter, exhaust flow, and environmental data under actual driving conditions.



## Handheld Biogas Analyzer – Gasboard-3200Plus

Compact, battery-powered analyzer for measuring CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>S, and optional gases, designed for portable use in biogas applications and on-site inspections.



## Noise Monitoring System

Remote controlled, Class 1 noise monitoring system for environmental and workplace analysis. Offers real time data, GSM/3G connectivity, and sustainable power options, ensuring precise monitoring and compliance for diverse applications.



## Emission Monitoring System

Advanced, multi parameter system for real time monitoring of industrial and environmental emissions. Ensures high accuracy, regulatory compliance, and operational efficiency, with rugged design and remote data tracking for diverse applications.



## Weather Monitoring Stations

Advanced stations provide real time, high precision atmospheric data including temperature, humidity, wind, and rainfall. Rugged, versatile, and suitable for agriculture, research, aviation, and environmental monitoring applications.



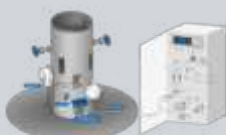
## Environmental Monitoring System

Advanced systems provide real time, multi parameter monitoring of weather, soil, and air quality. Rugged, scalable, and versatile, ideal for agriculture, research, urban planning, and environmental compliance applications.



## Continuous Emission Monitoring System (CEMS)

Real time monitoring of up to 14 gaseous pollutants with advanced technology for precise emissions analysis. Ideal for industrial compliance, optimizing operations, and supporting ESG goals.



## In-Situ Laser Raman Gas Analyzer – LRGA-3200EX

High-performance gas analysis system using Laser Raman technology for continuous, multi-component gas monitoring in complex and hazardous industrial environments.



# ESG Products

## Smart Valve Water Flowmeter

Smart valves for precise water flow management. Wi Fi enabled with app connectivity for remote control, real time adjustments, and scheduling, optimizing water usage for agricultural, industrial, and residential applications.



## Water Quality Analyzers

Advanced multi parameter analyzers for real time monitoring of water quality. Ideal for industries like pharmaceuticals, food & beverage, and power generation, ensuring compliance, safety, and operational efficiency.



## Power Quality Analyzers

Advanced tools for real time power diagnostics, monitoring harmonics, voltage drops, and energy inefficiencies. Ideal for optimizing energy systems and improving performance across industrial, commercial, and residential applications.



## Gas Detectors (Fixed and Portable)

Advanced gas detection solutions for industrial and personal safety. Fixed detectors provide continuous area monitoring, while portable units safeguard workers in hazardous environments, ensuring compliance and real time alerts.



## Portable Biomethane Analyzer – Gasboard-3200L

Portable analyzer using TDLAS and NDIR technologies for real-time measurement of CH<sub>4</sub>, H<sub>2</sub>S, CO<sub>2</sub>, and O<sub>2</sub>, with automatic calorific value calculation for biomethane applications.



## Engine Exhaust Measurement System – Gasboard-9801

High-precision system for simultaneous measurement of engine exhaust gases including THC, NO<sub>x</sub>, CO, CO<sub>2</sub>, and O<sub>2</sub>, designed for testing, research, and compliance applications.



## CVS System – Gasboard-9802

Full-flow dilution constant volume sampling system for accurate measurement of diluted vehicle emissions, supporting cold-start testing and compliant with major standards including Euro 7.



## Laser Raman Gas Analyzer

Advanced system for continuous multi-gas analysis using Raman technology, providing fast, reliable measurements for industrial process monitoring in harsh environments.



# ESG Products

## Noise Dosimeters

Advanced wireless noise dosimeters for accurate, real time monitoring of workplace noise exposure. Designed for safety professionals to ensure compliance and protect hearing health.



## Industrial Vibration Sensors

Advanced vibration sensors for real time monitoring of machine health. Detect early signs of wear, imbalance, and faults to optimize maintenance, reduce downtime, and improve operational efficiency in industrial environments.



## Infrared Gas Analyzers

Advanced infrared analyzers for real time monitoring of gas concentrations like CO<sub>2</sub> and hydrocarbons. Ideal for process control and emissions monitoring with low maintenance, non contact measurement.



## Fleet Fuel Consumption Monitors

Advanced fuel monitoring systems for real time tracking of consumption, fuel levels, and driver behavior. Optimize fleet performance, prevent theft, and reduce fuel costs with precise, integrated tracking and analytics.



## Fire Explosion Protection Sensors

Advanced sensors for detecting fire and explosion risks in hazardous environments. Certified for high reliability, they provide early warnings, ensuring safety and compliance in industries handling flammable materials.



## Wastewater Treatment Analyzers

Advanced analyzers for real time monitoring of key wastewater parameters like H<sub>2</sub>S, ammonia, and turbidity. Ensure compliance, optimize processes, and improve safety in wastewater treatment facilities with precision tools.



## Leak Testing Tools

Advanced handheld acoustic imaging cameras for leak and fault detection in noisy, hard to reach areas. Ideal for compressed gases, vacuum systems, and electrical components, improving diagnostics and efficiency.



## Solid Waste Management Sensors

Advanced sensors using ultrasonic and radar technology for real time waste monitoring. Optimize collection routes, reduce environmental impact, and integrate with smart systems for efficient waste management.



# Applications

Comprehensive industrial solutions delivering precision measurement, reliable monitoring, and advanced testing technologies across every application.



# Vibration



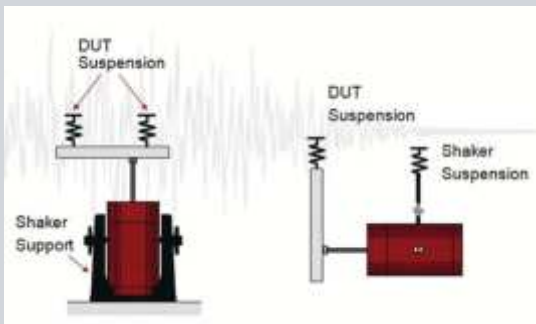
## Ground Vibration Monitoring System

Monitor and control vibration levels with accurate, real time data. This system delivers instant alerts to protect nearby structures, ensure safety, and maintain compliance during construction or industrial work.



## Impact Hammer Modal Testing System

Perform accurate vibration analysis with easy hammer based excitation and automated FRF capture. Ideal for fast, reliable modal tests in laboratories or field environments, supporting efficient structural diagnostics.



## Modal Shaker Testing System

Achieve accurate modal results with controlled shaker excitation and synchronized data capture. Ideal for reliable structural testing and detailed vibration analysis across engineering and research applications.



## NVH Testing

Identify and reduce noise, vibration, and harshness with advanced testing tools. These systems help engineers enhance comfort, reliability, and performance across automotive and industrial applications.

# Vibration



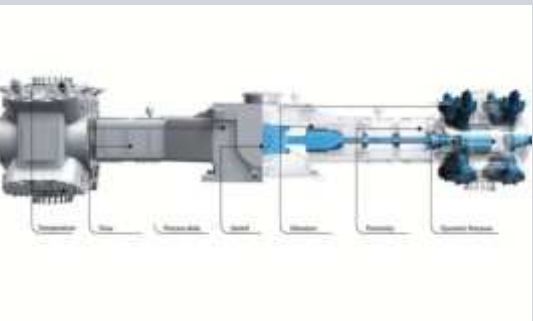
## Automotive Crash Testing

Advanced crash testing systems provide precise data on vehicle impacts, enabling engineers to optimize safety, structural integrity, and occupant protection while ensuring compliance with global standards.



## Brake Noise Monitoring

Detect and analyze brake noise and vibrations in real time to optimize performance. These systems help engineers enhance comfort, ensure safety, and meet automotive compliance standards.



## Reciprocating Equipment Monitoring

Track vibration, temperature, and pressure in real time to prevent machinery failures. These systems help industries maintain efficiency, reduce downtime, and extend equipment life through early fault detection and predictive maintenance.



## Space Cube Testing

Ensure CubeSat structural integrity with precise multi axis vibration testing. These systems deliver accurate data for launch readiness, durability validation, and compliance with aerospace testing standards.

# Vibration



## Structural Health Monitoring

Continuously track vibration, tilt, and structural performance with wireless sensors. These systems provide real time alerts and insights, helping prevent failures, improve monitoring accuracy, and ensure long term structural safety.



## Laser Wheel Measurement System

Measure wheel geometry accurately at high speeds with contactless laser systems. These tools provide real time data to prevent track damage, improve rail safety, and streamline maintenance for rail operators.



# Vibration



## Wireless Machine Condition Monitoring System

Track equipment health in real time with AI powered wireless sensors. These systems detect early faults, optimize performance, and help maintenance teams prevent costly downtime.



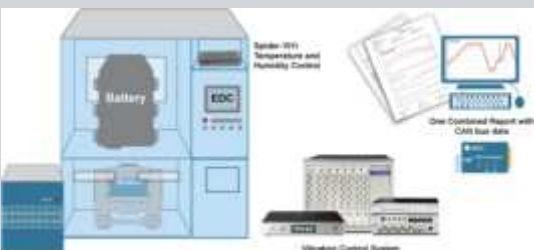
## Electric Drives Testing

Analyze torque, speed, and thermal behavior with precision testing systems. These tools help optimize motor efficiency, ensure compliance, and support automotive, industrial, and aerospace applications.



## GVT Testing

Perform full scale ground vibration testing with high channel systems to analyze frequencies, damping, and mode shapes. These tools ensure airworthiness, prevent flutter, and support aerospace certification.



## Battery Testing in Combined Environments

Advanced systems ensure lithium-ion batteries are tested under real-world conditions—temperature, humidity, vibration, and electrical input—helping validate safety and performance in EVs, aerospace, and electronics.

# Sound



## Acoustic Testing

Measure and analyze sound accurately to improve building acoustics and product designs. These systems ensure compliance, enhance comfort, and provide actionable insights across various environments.



## Building Acoustic Testing

Measure and analyze sound insulation and impact noise accurately in buildings. These systems help architects and engineers ensure acoustic comfort and meet regulatory standards efficiently.



## Noise Hospital Patient Comfort

Track and manage sound levels in real time to maintain a calm, healing environment. These systems help hospitals reduce noise, enhance patient well being, and support staff efficiency.



# Condition Monitoring Tools



## EZ-LubeCheck

Water and Particle Contamination Sensor monitors moisture and temperature in various oils (lubricating, hydraulic, engine, fuel), detecting water without reagents to prevent equipment failure, ensuring real-time monitoring and oil quality assessment.



## EZ-FeCheck

EZ Fe-Check is a portable device that quickly measures ferrous debris in oil samples, detecting abnormal wear and failures in systems like gearboxes, engines, and hydraulics. It helps reduce costs, prevent damage, and ensure reliability.



## EZ-SAM

Proper oil sampling ensures reliable analysis. Consider location, procedure, device, and cleanliness. Sample after 30 minutes of operation, using vacuum suction or valve/port methods to avoid contamination.



## EZ-TBN Check

EZ-TBN Check is an on-site solution for measuring Total Base Number (TBN) and optional water content, enabling accurate condition monitoring and timely oil change decisions for engines and lubricant systems.

# Condition Monitoring Tools



## WatchCon Ferro Analyzer I

WatchCon Ferro Analyzer uses electromagnetic induction to measure iron wear particles in oil, helping identify machine deterioration and prevent damage. It delivers fast, reliable results with a 2ml sample in 2 seconds.



## SF-FAC02

SF-FAC02 is a compact, portable kinematic viscosity tester for on-site lubricating oil measurement, offering high accuracy, temperature control, and a rechargeable lithium battery.



## Shaft Alignment Tools

Advanced laser alignment systems provide precision alignment for rotating equipment, with ultra-fine resolution and guided navigation to improve reliability and reduce downtime.



## US Testing Tools

Advanced ultrasound and vibration analyzers support predictive maintenance with dual sensor inputs, real-time diagnostics, and long-term data logging for early fault detection.

# Condition Monitoring Tools



## Equipment Balancing Tools

Advanced rotor balancing tools with integrated vibration analysis deliver precise balancing, fault detection, and reliable performance across a wide speed range.

## Data Acquisition (DAQ) Systems

### Spider-80X Machine Condition Monitoring System

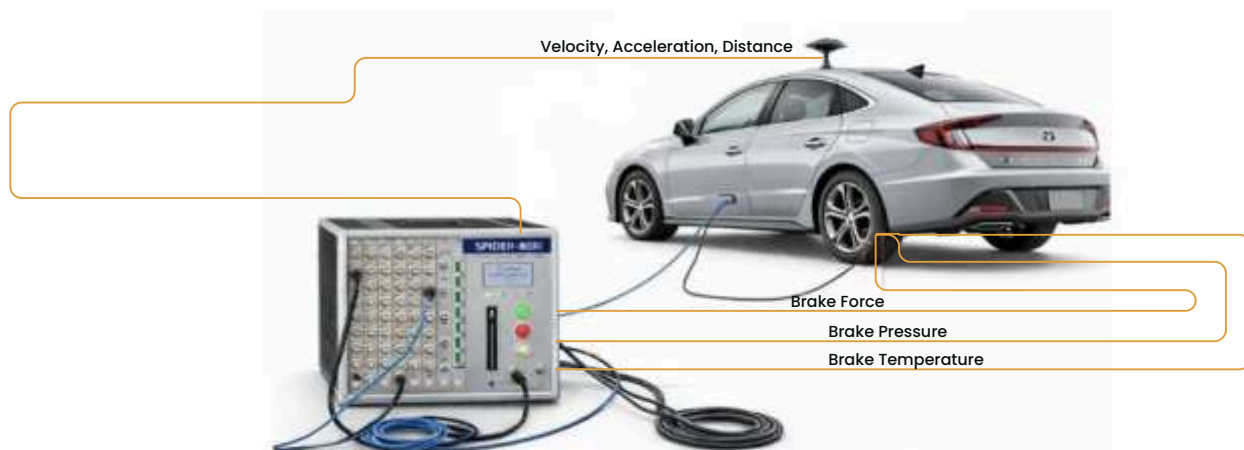
Spider-80X Machine Condition Monitoring System delivers precise multi-channel vibration analysis, flexible tachometer-enabled inputs, and scalable system expansion for rotating machinery diagnostics, combining synchronized Ethernet connectivity, modular storage options, and robust front-end design in a compact, industrial-ready monitoring solution.



## Portable Data Acquisition (DAQ) Systems

### CoCo-80X/90X

CoCo-80X handheld analyzer delivers high-precision data recording, real-time signal analysis, and route-based condition monitoring across multiple industries, combining powerful multi-channel performance, intuitive touchscreen interface, and advanced connectivity in a lightweight, field-ready system.



# Oil Testing System

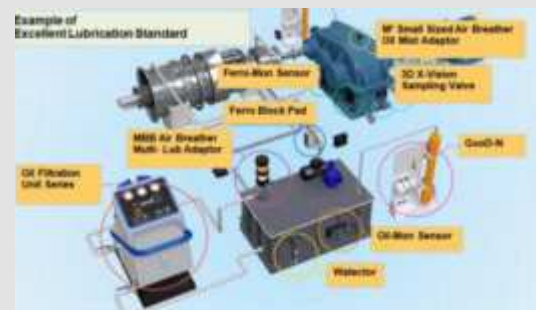
## GoD N (Dry Nitrogen Purging Unit)

GoD N extracts dry nitrogen from utility air, injecting it into equipment to generate positive pressure, block contaminants, and remove moisture, enhancing lubrication reliability and extending oil life. Low-maintenance with semi-permanent lifespan and minimal consumables.



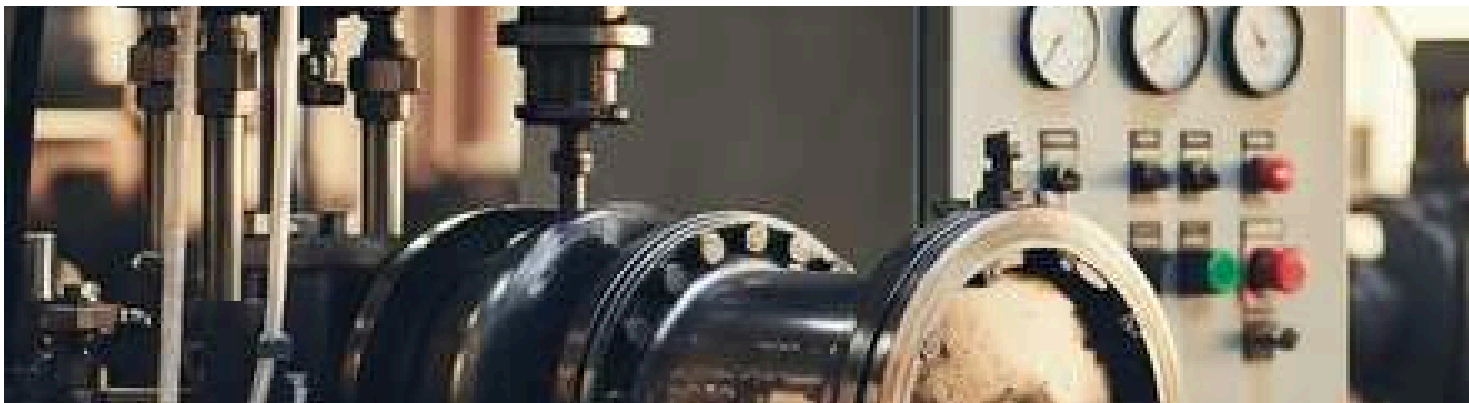
## OFU Filtering Machine

LubricationPlus® OFU is a portable off-line oil filtration unit designed for reliable contamination control, removing particles, water, varnish, and degradation by-products while enabling real-time oil condition monitoring for industrial lubrication and hydraulic systems.



## TOMs F(T/PE) Purifier

TOMs-F uses advanced ion exchange technology to remove contaminants, moisture, acids, and degraded by-products like varnish and sludge from lube and hydraulic oils, ensuring system reliability and prolonging oil life. It features high-performance filtration, water removal, and real-time oil status monitoring (optional).



# Environmental



## Agriculture Monitoring System

Monitor soil, weather, and crop conditions in real time to optimize yields and conserve resources. These systems provide actionable insights for sustainable, data driven farm management and support better planning for irrigation, crop health, and resource efficiency.



## Forest Fire Weather Station

Monitor environmental conditions in real time to prevent and respond to wildfires. These stations provide alerts, sensor data, and AI driven insights for effective forest safety management and support early detection and rapid response.



## Noise & Heat Mapping of Sites

Capture real time sound and thermal data to identify hazards and optimize operations. These systems enhance worker safety, ensure compliance, and improve site efficiency with actionable insights and continuous monitoring.



# Laser Vibrometry



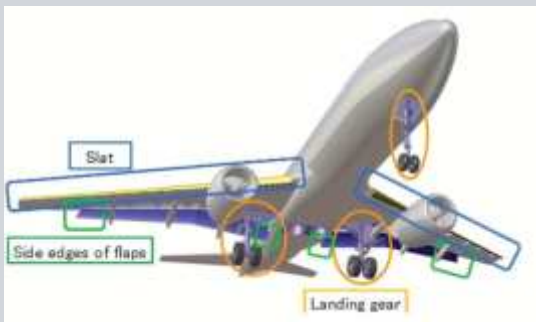
## Cell and Tissue Research using Laser Vibrometry

Global Tech Innovations provides Optomet's non contact laser vibrometry systems for precise analysis of cellular and tissue vibrations, enabling real time monitoring of mechanics and elasticity while preserving sample integrity and supporting advanced biomedical research.



## Aeroacoustics Testing

Measure and analyze airflow induced noise to optimize vehicle designs. These systems help engineers reduce turbulence noise, enhance comfort, and ensure compliance with global standards.



## Analysis of Wing Vibrations

Measure and analyze wing vibrations with high precision laser systems to ensure structural integrity. These tools help engineers optimize designs, detect risks early, and maintain aerospace compliance.



## Brake Noise Monitoring

Detect and analyze brake noise and vibrations in real time to optimize performance. These systems help engineers enhance comfort, ensure safety, and meet automotive compliance standards.

# Laser Vibrometry



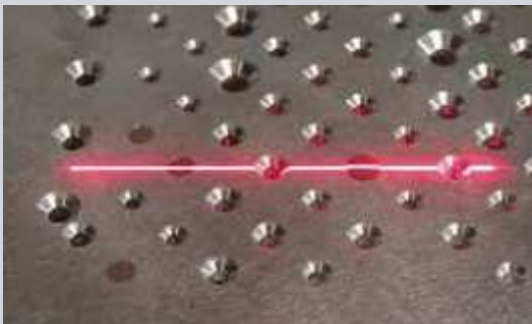
## Haptic Displays Testing

Measure and analyze vibrations and force responses to optimize haptic interfaces. These systems help engineers enhance user experience, ensure consistency, and improve product performance across devices.



## Precise vibration analysis in the Wind Tunnel

Measure structural responses under simulated flight conditions with high precision laser systems. These tools help engineers optimize designs, ensure stability, and maintain aerospace and automotive compliance.



## Testing Riveted Joints with Laser Vibrometry

Analyze riveted joints with high precision, non contact laser systems to detect flaws and ensure structural integrity. These tools help engineers optimize joint performance and maintain aerospace and industrial compliance.



## Ultrasonic welding through Vibration analysis

Monitor and optimize ultrasonic welding in real time using high precision vibration systems. These tools ensure consistent weld quality, reduce defects, and enhance productivity across automotive, electronics, and medical manufacturing.

# Services

Comprehensive industrial solutions delivering precision measurement, reliable monitoring, and advanced testing technologies across every application.



# Plant Wireless Vibration Monitoring System

Enhance plant reliability with real-time wireless vibration monitoring for smarter, predictive

## Real-Time Insights for Smarter Maintenance

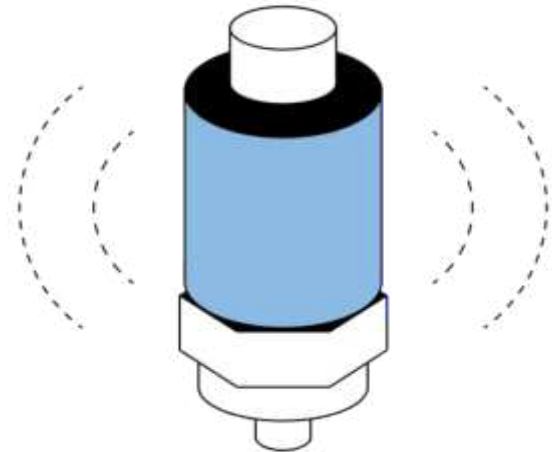
Continuous machine health visibility allows maintenance teams to detect even the smallest irregularities before they escalate into major issues. By replacing manual checks with automated, real-time insights, maintenance staff can respond faster and schedule repairs at optimal times. This proactive approach not only reduces unplanned downtime but also extends the lifespan of critical machinery, ensuring smoother and safer plant operations.

## Advanced Analytics for Predictive Reliability

Powered by intelligent algorithms and AI driven data processing, wireless vibration monitoring systems analyze long term trends, identify developing faults, and accurately predict when maintenance should occur. This eliminates guesswork and supports more efficient resource allocation, reducing operational costs and preventing safety risks. By transforming raw vibration data into actionable insights, these systems help plants achieve higher reliability, improved uptime, and a more strategic approach to equipment health management.

## Designed for Modern Industrial Environments

Built to withstand demanding industrial conditions, these systems combine rugged, high precision vibration sensors with secure wireless communication technologies. They seamlessly integrate with IoT platforms, cloud dashboards, and existing plant infrastructure, making implementation simple and scalable. Whether deployed in manufacturing facilities, energy plants, or continuous process industries, wireless monitoring enhances visibility across the entire equipment ecosystem, enabling teams to manage performance from anywhere.



### Your Benefits

- Detect issues before failures occur.
- Minimize disruptions and unplanned shutdowns.
- Anticipate failures with AI-driven insights.
- Monitor asset health anytime, anywhere.
- Reduce repairs and optimize resources.
- Expand coverage without extensive cabling.



# Comprehensive Solutions for Real-Time Equipment Monitoring

Enhance plant reliability with real time wireless vibration monitoring, enabling predictive maintenance and minimizing downtime.

## Real-Time Insights for Smarter Maintenance

Wireless vibration monitoring systems provide continuous, high-resolution insights into machinery health, allowing maintenance teams to detect anomalies before they escalate into costly failures. By delivering real-time data, these systems reduce unplanned downtime, improve operational efficiency, and enable teams to schedule maintenance proactively, ensuring smooth and reliable plant operations.

## Advanced Analytics for Predictive Reliability

Designed for demanding industrial conditions, these systems combine rugged, precision sensors with secure wireless connectivity, making installation simple and scalable. They integrate seamlessly with IoT platforms, cloud dashboards, and existing plant infrastructure, allowing operators to monitor equipment performance remotely and make informed decisions from anywhere at any time.

## Designed for Modern Industrial Environments

Advanced AI driven analytics analyze vibration patterns and trends over time, accurately identifying potential faults and predicting maintenance requirements. This data driven approach eliminates guesswork, enhances equipment reliability, optimizes resource allocation, and extends the lifespan of critical machinery, ultimately reducing maintenance costs and improving plant productivity.



## Designed for Modern Industrial Environments

With flexible deployment options for both new and existing equipment, wireless vibration monitoring systems improve operational visibility, enhance safety, and support long term reliability. By combining real time monitoring, predictive analytics, and seamless system integration, these solutions empower plants to operate smarter, safer, and more efficiently in today's fast paced industrial environment.

### Your Benefits

- **Wireless Connectivity:** Secure, long range data transmission for remote monitoring
- **Real Time Alerts:** Instant notifications for vibration anomalies
- **AI Driven Insights:** Advanced analytics for predictive maintenance
- **Scalable Design:** Supports plants of all sizes and complexities
- **Energy Efficient:** Low power sensors for extended operation
- **Seamless Integration:** Easily integrates with SCADA and ERP systems

# Sensors & Tool Calibration

Ensure accurate, reliable performance with professional calibration services designed for all industrial sensors and tools.

## Reliable Calibration for Maximum Accuracy

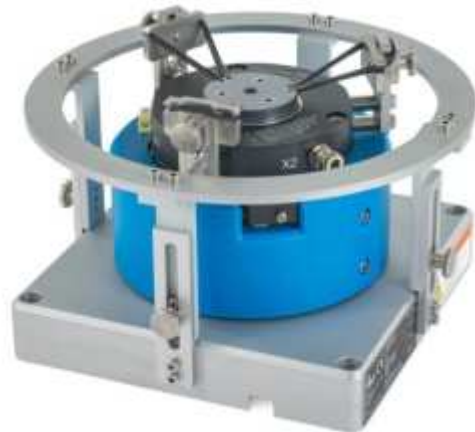
Precision is the heart of every successful measurement system. Our Sensor & Tool Calibration services are engineered to restore the exact accuracy of your instruments, ensuring reliable performance across all industrial environments. By using certified standards and advanced calibration equipment, we eliminate measurement drift and bring your devices back to optimal performance. These services not only enhance productivity but also support compliance with international quality standards.

## Comprehensive Solutions for Every Application

Whether you operate sensitive laboratory sensors or heavy duty industrial tools, our calibration solutions are tailored to meet diverse operational needs. Each instrument undergoes detailed testing, adjustment, and verification to guarantee consistent accuracy. From environmental influences to long term equipment wear, our experts address all factors that affect measurement reliability. The result is precise, repeatable performance that supports better decision making and operational efficiency.

## Fast, Flexible, and Industry- Ready Services

We understand that downtime can impact performance and productivity. That's why we offer quick turnaround times, on site calibration options, and detailed reporting for full traceability. Every calibration includes a compliance ready certificate outlining test results and standards used. With a combination of expertise, modern facilities, and customizable service plans, we provide calibration solutions designed to keep your operations running smoothly and efficiently.



### Your Benefits

- Faster prototyping with quick validation
- High precision production with consistent quality
- Custom solutions tailored to your requirements
- Scalable manufacturing from small batches to full series



# Calibration System for Vibration Sensor

## CQ-LEAP™ SINE with APS 129

Advanced system for calibrating vibration and seismic sensors, operating from DC to 200 Hz with PTB traceability, integrated software, and support for sine calibration and vibration measurement.



## CS Q-LEAP™ SINE with SE-09

High-frequency vibration calibration system for sensors and measurement systems, operating from 5 Hz to 20 kHz with PTB traceability, integrated software, and support for sine calibration, sweep, and vibration measurement.



## CS Q-LEAP™ SINE with SE-13

Low-frequency calibration system for seismic sensors and geophones, operating from 0.2 Hz to 400 Hz with high accuracy, PTB traceability, and support for vibration simulation and measurement.



## CS Q-LEAP™ P-SINE with SE-09

Primary calibration system for vibration sensors and measurement systems, operating up to 20 kHz with high acceleration capability, PTB traceability, and integrated software for calibration and reporting.



## CS Q-LEAP™ SINE with SE-20

Versatile vibration calibration system operating from 3 Hz to 10 kHz, offering high acceleration, PTB traceability, and support for sensor calibration, vibration testing, and analysis.



## CS Q-LEAP™ SINE with SE-29

High-frequency calibration system operating up to 20 kHz, providing precise vibration sensor calibration with integrated software, PTB traceability, and support for advanced testing applications.



## CS Q-LEAP™ P-SINE with SE-13

Primary and secondary calibration system for low-frequency applications such as seismometers and geophones, operating from 0.1 Hz to 400 Hz with high payload capacity and PTB traceability.



## CS Q-LEAP™ P-SINE with SE-29

Primary calibration system for vibration sensors operating up to 20 kHz, offering high accuracy, PTB traceability, and integrated software for efficient calibration and data management.



# Comprehensive Solutions for Precision & Reliability

Maintain top-tier accuracy and performance with professional sensor and tool calibration designed for critical industrial applications.

## Complete Support From Concept to Final Product

Our Production & Prototyping services guide you through every stage of product development, from early idea exploration to full scale manufacturing. We translate your requirements into functional concepts, ensuring each design meets both technical and commercial goals.

## Efficient Series Production with Quality Assurance

Once the prototype is validated, we transition seamlessly into series production using controlled processes and high precision equipment. Every component is manufactured with strict quality standards to ensure consistent performance, durability, and reliability.

## Customized Solutions for Every Industry

Whether for industrial systems, consumer products, or specialized technical applications, our team delivers tailored solutions that fit your operational needs. With expertise across multiple sectors, we ensure you receive efficient, scalable, and cost effective production results.

## High-Precision Prototyping for Fast Validation

Using advanced tools and rapid manufacturing techniques, we create accurate prototypes that help you test functionality, performance, and usability. This process enables fast adjustments, reduces development risks, and ensures your product is fully optimized before moving to production.



### Your Benefits

- Accelerate product development and validation.
- Reduce design risks before full-scale production.
- Ensure high precision and consistent quality.
- Streamline transition from prototype to production.
- Customize solutions to specific application requirements.
- Scale manufacturing efficiently and cost-effectively.

# Calibration System for Shock

## CS Q-LEAP™ SHOCK with SE-221

High-precision system for vibration and shock sensor calibration, featuring PTB traceability, integrated software, and full compliance with ISO 16063-22 and ISO 17025.



## SE-201

Pneumatic shock exciter designed for high-precision testing and calibration of shock transducers and measuring instruments, offering wide amplitude range, excellent repeatability, and automated performance in compliance with ISO 16063-22.



## CS Q-LEAP™ P-SHOCK with SE-221

High-precision system for primary and secondary calibration of shock sensors and measuring instruments up to 200,000 gn, featuring PTB traceability, integrated e-Cal™ software, and full compliance with ISO 16063-13 and ISO 17025.



## P-SHOCK with SE-201

Pneumatic shock exciter for high-precision testing and secondary calibration of shock transducers and measuring systems, offering wide amplitude range, excellent repeatability, and stable automated performance in compliance with ISO 16063-22.

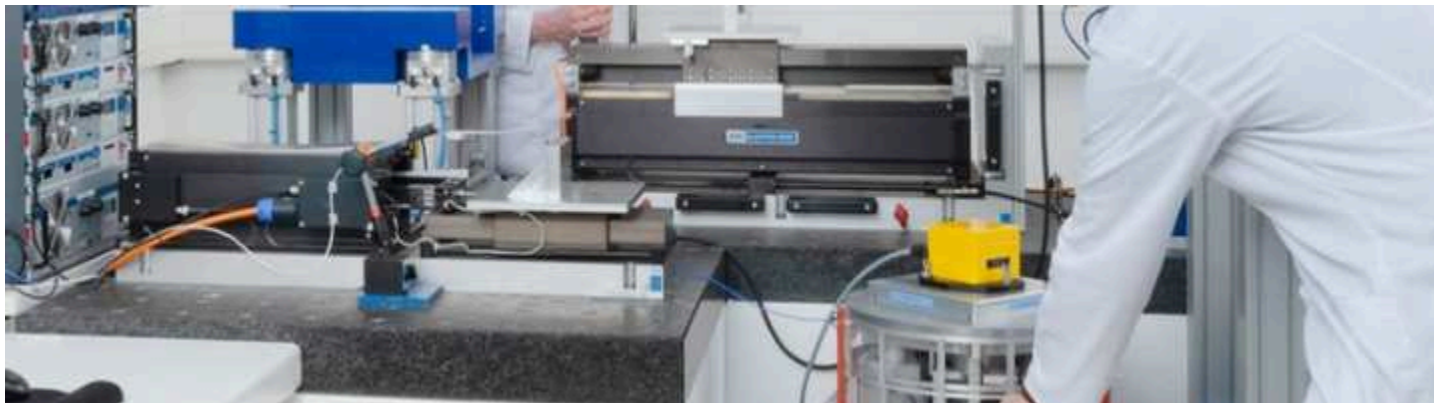


# Calibration System for Rotation Rate



## CS Q-LEAP™ GYRO with DRE-01

CS Q-LEAP™ GYRO with DRE-01 delivers precise angular velocity calibration and rotary excitation, combining ISO 17025 compliance, integrated software, and compact high-torque design in a reliable solution.



# Calibration System for Acoustics



## CS18 FF

High-precision system for secondary calibration of microphones, sound level meters, and acoustic sensors, featuring integrated anechoic chamber and full compliance with IEC 61094-8 and IEC 61672 standards.



## CS18 SPL

Pressure chamber system for secondary calibration of microphones and acoustic instruments, offering precise low-frequency calibration and compliance with IEC 61094-5 and IEC 61672 standards.



## CS18 SPL-VLF

Pressure chamber system for secondary calibration of microphones and measuring chains in the infrasound range, delivering high-precision measurements with low uncertainty.



# Pressure Sensor Calibration System

## DPE-02

High-pressure impulse system for dynamic calibration and testing of pressure sensors, delivering fast shock pulses, wide pressure range, and efficient automated performance.



## DPE-01

Dynamic pressure exciter for secondary calibration of pressure sensors, delivering precise low-pressure generation across a wide frequency range for accurate testing and measurement.



# Mobile Calibration System

## CV-10

The CV-10 delivers mobile measurement and calibration of acceleration, velocity, and proximity sensors, combining user-friendly operation, PTB-traceable accuracy, and a powerful vibration exciter in a lightweight, battery-powered, portable system.



## CV-05

The CV-05 delivers handheld vibration calibration and functional sensor testing, combining ISO 8041 compliance, compact robust design, and reliable on-site performance in a portable, battery-powered solution.



# Comprehensive Solutions for Sensor Accuracy and System Integrity

Ensure accurate vibration monitoring and system reliability with advanced calibration and loop checking solutions.

## Ensuring Accurate Sensor Performance

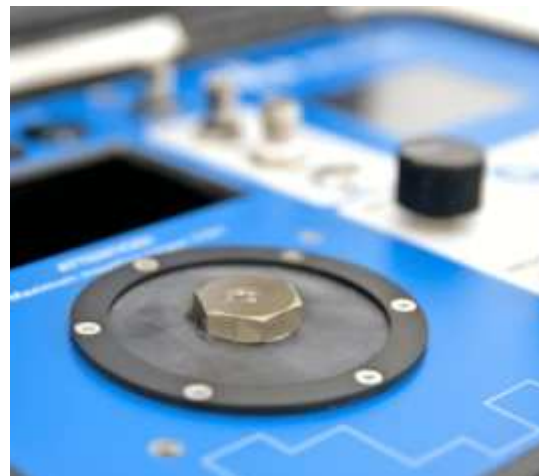
Vibration sensor calibration is critical for maintaining the precision and reliability of industrial monitoring systems. By carefully adjusting and verifying each sensor, calibration ensures that measurements reflect true machine conditions under all operating circumstances. Accurate sensors allow maintenance teams to make informed, data driven decisions, enabling predictive maintenance strategies, reducing unexpected equipment failures, and optimizing overall operational efficiency across plants and facilities.

## Designed for Modern Industrial Environments

Our calibration and loop checking services are designed to meet the diverse needs of industrial environments. With portable solutions for on site or in lab calibration, detailed data logging for audits, and customizable service plans tailored to unique operational requirements, these services help industries achieve both accuracy and compliance. By combining precision calibration, thorough loop verification, and flexible deployment options, plants can maintain long term equipment reliability, ensure safety, and support regulatory standards with confidence.

## Maintaining System Integrity

Loop checking plays a vital role in validating the complete signal path between sensors and the monitoring system. It ensures seamless communication, identifies potential wiring issues, signal interruptions, or misconfigurations, and confirms that the entire system operates as intended. By performing comprehensive loop checks, industries can prevent costly downtime, maintain continuous equipment monitoring, and ensure that all connected devices deliver reliable, synchronized data for safe and efficient operations.



### Your Benefits

- Guarantees sensor accuracy for dependable monitoring
- Ensures seamless communication from sensor to system
- Meets international standards for calibration and testing
- Supports both field and in lab calibration requirements



# Comprehensive Solutions for Sensor Accuracy and System Integrity

Optimize vibration monitoring with advanced calibration and loop checking for accurate, reliable system performance.

## Precision Calibration for Reliable Sensors

Calibration ensures that every vibration sensor provides precise and dependable measurements under all operating conditions. Accurate sensors allow maintenance teams to detect early signs of equipment wear or faults, supporting predictive maintenance strategies and reducing unexpected downtime across industrial operations.

## Flexible Solutions for Industrial Needs

Our services offer both portable, on site solutions and in lab calibration, making them suitable for diverse industrial setups. Customizable plans and precise testing equipment ensure that calibration and loop checks meet specific operational requirements while maintaining international compliance standards.

## Enhanced Safety and Operational Efficiency

Verified sensor performance and system integrity improve plant safety by identifying potential failures before they escalate. Along with detailed reporting and data logging, these services enhance equipment longevity, support regulatory compliance, and enable smoother, more efficient industrial operations.

## Comprehensive Loop Verification

Loop checking validates the entire communication path between sensors and monitoring systems, ensuring seamless signal transmission and detecting any wiring or configuration issues. This process maintains system integrity, prevents costly errors, and guarantees that data from all sensors is accurate and actionable.



### Your Benefits

- **Precision Calibration:** Ensures sensor accuracy for reliable monitoring
- **Loop Verification:** Confirms seamless signal transmission from sensor to system
- **Portable Solutions:** Designed for field and in situ calibration needs
- **Compliance Ready:** Meets international standards for calibration and testing
- **Data Logging:** Comprehensive reporting for audit and maintenance records
- **Customizable Services:** Tailored calibration plans for specific industrial needs

# Calibration System for Testing Solution

Exciter / Device Name	Picture of the exciter	Type of Device	Sensors / Instruments Tested or Calibrated
SE-09		High-frequency vibration exciter	MEMS sensors, accelerometers, vibration sensors
SE-13		Air-bearing vibration exciter (high payload)	Seismic sensors, geophones, low-frequency vibration sensors
SE-16		High-frequency vibration exciter	Small sensors, MEMS devices, accelerometers
SE-20		Spring-guided vibration exciter	Vibration sensors, accelerometers, sensor characterization
SE-21		High-frequency vibration exciter (cubic armature)	Multi-axis vibration sensors, accelerometers, electronic devices
SE-29		High-frequency vibration exciter	Larger vibration sensors, geophones
SE-14		Spring-guided vibration exciter	General vibration sensors and calibration lab testing
APS 113-AB		Air-bearing long-stroke vibration exciter	Low-frequency sensors, seismic sensors
APS 129		Long-stroke vibration exciter	Geophones, heavy seismic sensors
APS 500		Long-stroke vibration exciter	Compact low-frequency vibration sensors
APS 600		Long-stroke vibration exciter	Heavy seismic sensors, geophones








# Calibration System for Testing Solution

Exciter / Device Name	Picture of the exciter	Type of Device	Sensors / Instruments Tested or Calibrated
APS 113		Ball-bearing long-stroke vibration exciter	Structural sensors, modal testing sensors
APS 400		Long-stroke vibration exciter	Structural vibration testing (buildings, bridges)
APS 420		High-force long-stroke vibration exciter	Aerospace structural testing sensors
SE-201		Pneumatic shock exciter	Shock sensors, shock transducers, measurement chains
SE-220 HOP-MS		Shock exciter	Acceleration sensors, environmental shock testing
SE-221		Shock exciter (ISO 16063-22 calibration)	Shock transducers, shock sensors
DRE-01		Dynamic Rotation Exciter	Gyroscopes, angular velocity sensors, MEMS rotation sensors
SQ-6		Electro-acoustic coupler	½" microphone capsules, acoustic measurement devices
SQ-4.1		Acoustic coupler	1" microphones
SQ-03		Pressure generator	Pressure sensors, pressure transducers
SQ-101		Compact anechoic chamber	Acoustic sensors, microphones



# Calibration System for Testing Solution

Exciter / Device Name	Picture of the exciter	Type of Device	Sensors / Instruments Tested or Calibrated
DPE-02		Dynamic pressure exciter	Pressure sensors (shock/impulse)
DPE-01		Dynamic pressure exciter	Pressure transducers
PC-01		Piezo exciter (single axis)	Piezoelectric sensors
PC-X		Piezo exciter (multi-axis)	Piezoelectric sensors, MEMS
FDG-15		Flux density generator	Magnetic field sensors, magnetometers



# Our Partners



# Our Clients

 <p>كالدس CALIDUS</p>	 <p>أدنوك للحفر ADNOC DRILLING</p>	 <p>ساتورب satorp</p>	 <p>NIMR</p>
 <p>PUREHEALTH+</p>	 <p>MAN MAN Energy Solutions</p>	 <p>SIEMENS energy</p>	 <p>Fatima Fertilizer Company Limited</p>
 <p>GCC Lab المفتمر الفليبي</p>	 <p>EMERSON</p>	 <p>ENEC الإمارات للطاقة النووية</p>	 <p>ENGIE</p>
 <p>الغرير Al Ghurair</p>	 <p>ممترو دبيي Dubaimetro</p>	 <p>الاتحاد للقطارات ETIHAD RAIL</p>	 <p>Atlas Copco</p>
 <p>LUCKY CEMENT</p>	 <p>شركة نفط الكويت National Oil Company</p>	 <p>غاز الامارات EMIRATES GAS</p>	 <p>BUREAU VERITAS</p>
 <p>MARI ENERGIES</p>	 <p>FFC</p>	 <p>Weg</p>	 <p>بروج Borouge</p>

# Our Locations

### United Arab Emirates Office

GlobeTech Innovative Solutions FZCO IFZA Properties, Dubai Silicon Oasis, Dubai, United Arab Emirates. P.O. Box: 342001



Dubai

DUBAI CREEK HARBOUR

دبي

NAD AL SHEBA 1

نَد الشيبا 1

NAD AL SHEBA

نَد الشيبا

WARSAN 2

ورسان 2

GlobeTech Innovative Solutions FZCO

### Pakistan Office

Global Tech Innovations (Pvt) LTD Office No.1, Mezzanine Floor, Vision Arcade, Business Square, Block A, Gulberg Greens, Islamabad, Pakistan



Islamabad

اسلام آباد

Sohan

سوهن

اسلام آباد

Thanda Pani

ٹھنڈا پانی

Hanif Sons Sofa

10 Foam Centre

recently viewed

Global Tech Innovations (Private) Limited



## Pakistan Office

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