

stress analysis services



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Acceleration & Vib



- Dynamic/Piezo-electric sensors: acceleration, force & pressure
- Impulse hammers, sensor signal conditioners, & sensor cables
- Calibration Services for dynamic sensors from all manufacturers



Vibration test controls for electrodynamic & servo-hydraulic shakers:

- Test modes: Sine, Random, Shock, SoR, RoR, SRS, & more
- Features: Fatigue Damage Spectrum, Kurtosis, Field Data Replication, Transient Capture, & more



Advanced vibration test equipment: Electro-dynamic shakers, slip tables, head expanders and multi-axis shakers.



- Point-lasers & 2D/3D line scanners (triangulation & time-of-flight technology)
- Confocal chromatic displacement measurement systems
- Hi-accuracy position, thickness, & surface measurements



Non-contact capacitive displacement sensors, gap sensors, bore gauges, parallelism and density sensors with matching capacitance amplifiers, data acquisition systems, linearization



- LVDT displacement transducers for all applications
- Signal conditioning, amplifiers & digital displays



- Load Cells & Force sensors
- Torque sensors: reaction, rotating & wireless
- Multi-axis transducers
- Instruments: Digital displays & hand-held meters
- Calibration systems & services



Custom force, torque & strain measurement:

- Custom strain gage installation on components
- Data acquisition & field instrumentation services
- Custom transducer design & calibration
- OEM transducer manufacturing



Displacement

Force

Flow



Flow meters: Turbine, Coriolis, magnetic, positive displacement, oval gear, & more.

- COX precision turbine flow meters for gases & liquids
- EXACT dual rotor turbines
- FLOW DYNAMICS NVLAP flow calibration services
- High precision flow meter calibration systems



Pressure

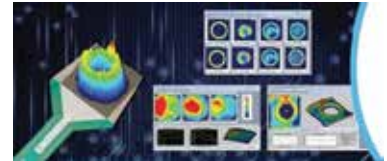


Pressure & level solutions for municipal, industrial, & process:

- Sensors for hostile service including slurries
- Submersible pressure & level sensors



Thin-film tactile pressure & force measurement for gaskets, seals, grip/ergonomics, seating/bedding, brakes, tires, roller-nip & many other applications.



Data Acquisition



Ethernet/EtherCAT-based data acquisition and control solutions (24-bit, 100kHz A/D per channel) for test cells, test labs, portable/in-vehicle, & stand alone/data-logger applications.



High performance data acquisition including:

- Synergy multi-mode systems: recorder, scope, spectral, modal, & combustion analyzer
- Echelon in-vehicle DAQ: I/O, CAN, GPS, & video. IP-68



High-speed, high-channel count signal conditioning & data acquisition solutions for aerospace, military, university, & other research testing applications.



Wireless



The smallest, lightest, most power efficient, wireless measurement systems for torque, acceleration and other sensing application.



PM/CM



- Easy-Laser shaft, pulley, & base alignment systems
- Ultrasound-based leak detection & fault detection
- LubeExpert - Ultrasound lubrication analysis



OEM Sensors/Custom



- Custom OEM force, pressure & torque
- Sensor design & manufacturing
- Amplifiers & integrated electronics
- OEM transducer manufacturing



Manufacturer of force sensors & other strain-gage based sensors, specializing in custom OEM applications for aircraft applications including sensors for flight controls, braking, steering, and fuel systems.



- Dynamic/Piezo-electric sensors: acceleration, force, & pressure
- Health Monitoring Systems (HUMS) accelerometers
- Calibration Services for dynamic sensors from all manufacturers



High-performance OEM pressure sensors, transducers, and transmitters, which are hermetically sealed and compatible with harsh media.



- Custom OEM Pressure Solutions
- Pressure sensors: MEMs, MEMS isolated, Bonded Foil, & Capacitive
- Pressure gauges: Digital & analog dial; diaphragm & bourdon tube
- Pressure & vacuum switches



Contract Manufacturing



Custom manufacturer of wire harnesses, interconnects, cable & wire assemblies including over-molding.

Temperature



Thermocouples: general purpose, hand-held, RTD, and industrial probes. In addition to our standard products, we can also custom design and build probes to your specifications.



- Temperature transmitters: 4-20mA, HART, & wireless
- signal conditioners, digital indicators, & closed-loop controllers for temperature applications



- OEM electric heaters : cartridge, band, mica band, ceramic band, polyimide, silicon rubber, pump line, cable, hot runner, nozzle, strip, finned strip, & cast aluminum
- SSR & SCR power relays and PID temperature controls



Strain/Stress



- Strain gage & sensor installation services
- Field & lab services for strain measurement & data acquisition
- Contract services for sensor design
- OEM transducer manufacturing



State-of-the-art, non-intrusive Digital Image Correlation (DIC) optical tool for shape, strain and deformation analysis of solid, granular and liquid subjects.



Fiber-optic based strain & temperature measurement specializing in aerospace, automotive, defense, and composites industries.



Signal Conditioning



- Wireless telemetry
- Strain gage amplifiers & signal conditioners
- Indicators & digital display electronics



Test



Testing, instrumentation, & measurement solutions. Field test services sensor application & instrumentation. Designing & configuring data acquisition systems, recording/reducing data, & writing test reports.



Environmental test chambers including: temperature, humidity, thermal shock, & altitude chambers.



Tilt



Precision inclinometers & tilt sensors for the measurement of horizontal & vertical angular inclination for OEM & end-user applications in the aero, defense, industrial, & test markets

