A wide range of high quality foil and encapsulated strain gauges which are used in many applications across OEM and Test & Measurement markets.

Strain gauges for transducers and stress analysis
- Fully wired and encapsulated options for quick installation
- High temperature strain gauges to 1,325°C
- Standard and custom range of weldable gauges available
- Installation service
- Wide range of accessories

Foil Strain Gauges
A range of transducer and stress analysis gauges in many sizes, to suit many different applications. Patterns include linear, shear, rosette, diaphragm and full bridge designs.
- Karma and constantan foil
- 120, 350 and 1000 ohm
- Temperature ranges to 300°C
- Self temperature compensation
- Creep compensation available
- Encapsulation and lead options

Encapsulated/Potted
A range of strain gauges suited to stress analysis applications. These are polyurethane encapsulated gauges with a range of lead-out options. Waterproof options.
- Fully wired designs for ease of installation
- Installation in a few minutes using cyanoacrylate or epoxy adhesives
- Custom gauge assemblies available, all gauge types
- The encapsulation offers mechanical, chemical and moisture protection
- Gauges may be used without further protection

Weldable
Strain gauges mounted by micro spot welds for rapid installation.
They are available in a wide range of configurations, gauge types and temperature ranges.
- Simple installation where adhesives are not advisable
- Integral cable and environmental sealing options
- ¼, ½ or full-bridge or full-bridge configuration
- Pre-curved shim option
- Cryogenic to 120°C
High Elongation Strain Gauges
Strain gauges with special construction to measure very high strain limits and post-yield stress analysis.
- Strain limit to 20%
- -30 to +150˚C
- 120 and 350 ohm
- 5 and 6mm gauge lengths

Residual Stress Strain Gauges
To determine residual stress in materials using the hole drilling method.
- 0, 45, 90 degree pattern
- 0, 120, 240 degree patterns
- 120 ohm
- Lead wire options

PCB Stress Measurement Strain Gauges
Very small rosette and stacked-rosette gauges for determining the stress induced in printed circuit boards during processing.
- Grid lengths 0.5 to 2.0mm
- 120 and 350 ohm
- Temperature ranges to 250˚C
- Integrated leadwires

High Temperature Strain Gauges
Our high temperature strain gauges come in a variety of configurations and mounting methods and cover the temp range 200°C to 1,325°C for static and dynamic measurements.

Bondable
- Ceramic adhesive or Rokide flame-spray mounting
- Karma, Nichrome V, Moleculoy and Platinum Tungsten gauge alloys available
- Self temperature compensation with K alloy
- Grid lengths from 1.5mm to 6.0mm
- Non-magnetic material
- High fatigue life

Weldable
- Stainless or inconel shim
- Straight forward installation
- Cable options - MI and fibreglass insulated
- 1/4, 1/2 or full bridge
- Custom designs
- To 1,000˚C
Installation
Our engineers have many year’s experience in the strain gauge installation area, ensuring that your project is completed successfully. We also offer facilities for flame spraying ceramic Rod (Rokide) ceramic powder and metal powder for installation of strain gauges, thermocouples and insulation coatings.

Accessories
We offer a wide range of accessories for the successful installation of strain gauges. These include cleaning materials, adhesives, coatings, wire, cable etc.

Stocked Strain Gauges
Regularly used strain gauge patterns held in UK stock for 24-48 hour delivery. The gauge selection available covers linear, shear, double shear, tee-rosette and full bridge designs. A choice of several gauge lengths is available and a variety of wire high temperature gauges are also stocked. Download our available strain gauges from our web site at www.strainsense.co.uk and click on our resources section.

Full Strain Gauges Catalogue
Our Full Strain Gauge Catalogue is available for download from our web site www.strainsense.co.uk and click on our resources section or call to discuss your application with one of our Technical Sales Engineers on 01908 305 960.
Strain Sense Ltd  Unit C  Old Stratford Business Park  Milton Keynes  MK19 6FG  T: +44 (0)1908 305960  E: sales@strainsense.co.uk  www.strainsense.co.uk

Strain Gauge Overview

Instrumentation
We have signal conditioning, data acquisition and installation test instrumentation for strain gauges and their installation.

• Strain gauge tester and indicator
• Amplifiers and signal conditioning
• Wireless amplifiers
• Data acquisition systems (See our Data Acquisition Systems Overview)

Data Acquisition Systems
We offer a comprehensive range of test and development hardware and software to suit all requirements and budgets. Our Team have worked in the highest echelons of professional motorsport and can offer you expert guidance when selecting a system to meet your requirements.

Interfacing to suit all sensor types:
• Voltage/Current/Potentiometer/RTD/Thermocouple/Bridge/IEPE
• Digital/Counters
• CAN/Flexray
• Audio/Hi-speed and Hi-resolution video
• High-precision GPS
• Custom interfacing available

Key attributes:
• Up-to 2000 channels
• Sampling rates up-to 2MS/s
• Resolution up-to 24bit
• Angle domain systems for Engine dynos
• Comprehensive systems for vehicle dynamics
• Power monitoring and analysis for EV’s and hybrids
• Variety of hardware configurations to suit your application
• Data acquisition, analysis and processing software
• Comprehensive technical support
• Maintenance and calibration services
• Project Engineering support and customisation services available