



Geotechnical instrumentation for geotechnical, civil & structural monitoring



# Our Story

- £4+ million turnover
- Established in 1992
- Privately-owned
- 35 members of staff
- Sales to more than 68 countries
- Experts in Vibrating Wire
- UK design & manufacture
- Experts in MEMS





**UK Headquarters** 

Geosense stocks an extensive range of instruments and delivers to tight schedules worldwide



# Global





• We have extensive experience in more than 68 countries and operate through carefully selected partners who are supported by our international Technical Support Team





Quality products

Geosense is accredited to ISO 9001:2015 guaranteeing strong customer focus & a quality management system

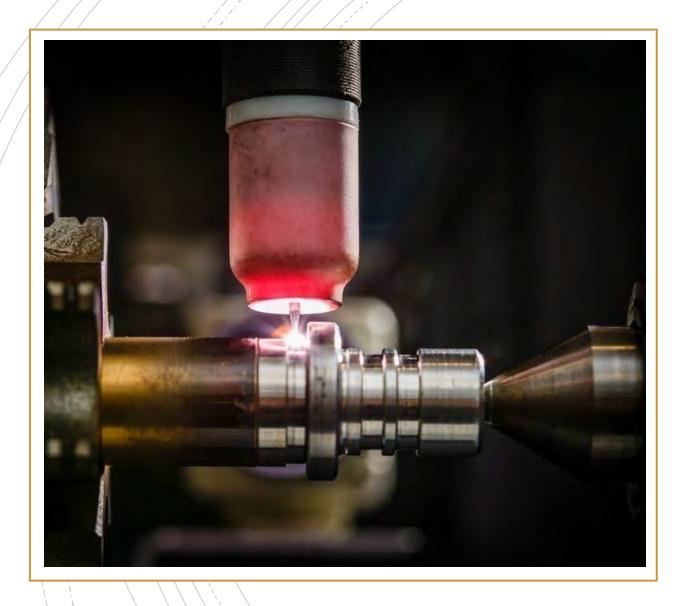


# Skilled Assembly

All sensors & instruments are assembled in-house by highly trained technicians





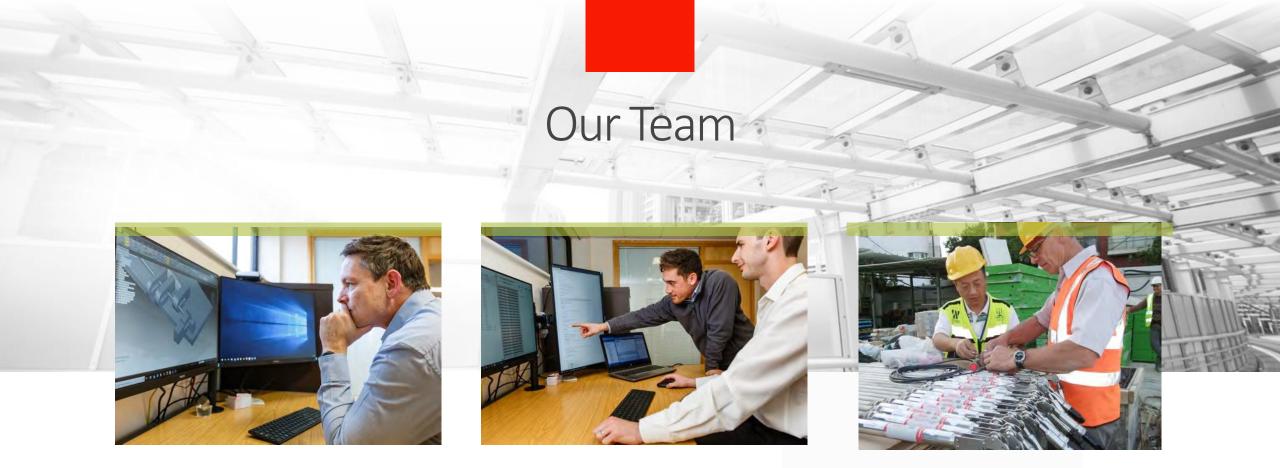


# In-house Capabilities

Micro-tig welding for sensors & machining from raw material to finished product







Our experienced engineers are always on hand to provide full technical support both on and off site





Vibrating wire



Analogue



**MEMS** 



LoRa wireless



Data acquisition



Connectivity

Technologies



# Measurements







Displacement



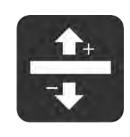
Tilt



Load



Strain



Settlement





Convergence



Temperature





















# Displacement (+)





VW Rod Extensometer





Joint Meter

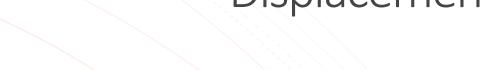
VW Wire

Extensometer



VW Crack Meter









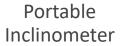




# Tilt























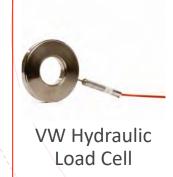
VW Anchor Load Cell

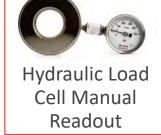


VW Solid Load Cell



Strain Gauge Anchor Load Cell







Load Cell for Tunnel Linings & Struts



















# Settlement

















# Convergence





Digital Tape Extensometer



Concrete Segment Tilt Meter





# Temperature

















Ground Investigation Mining Foundations/Piling Dams Bridges Asset Monitoring Tunnels Infrastructure Ports

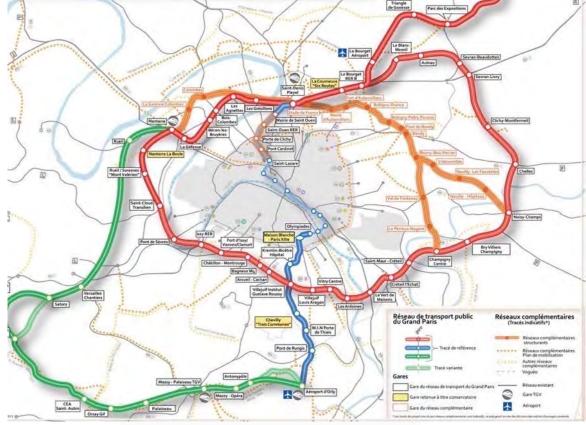


	Melbourne Metro, Australia	Jakarta Metro, Indonesia
	Kuala Lumpur MRT, Malaysia	Crossrail, London, UK
	Tel-Aviv Metro Red Line, Israel	Grand Paris L15, France
	Bucharest Metro, Romania	Doha Metro, Qatar
	City Rail Link, Auckland, New Zealand	













# Project Focus – Melbourne Metro

### Instruments

Borehole Rod Extensometer

Wireless Data Acquisition

In-place Inclinometers

**VW Strain Gauges** 

Tilt Meters

VW Crack Gauges

**VW Piezometers** 













# Asset Monitoring, London, UK

### **Projects**

**Battersea Power Station** 

Google HQ

One Nine Elms

**Shell Centre** 

Wimbledon Lawn Tennis Club















# Project Focus – Battersea, London

### Instruments

Tilt Meters

**Borehole Road Extensometers** 

**VW Piezometers** 

**VW Strain Gauges** 

QJ Inclinometer Casing

In-Place Inclinometers

Wi-SOS 480

















# Historic Buildings

### **Royal Albert Hall, London**

Biaxial MEMS Tilt Beams used to monitor tilt on adjoining walls during excavation

### **London Bridge**

Wireless Tilt Meter used to monitor bridge during Thames Tideway tunnelling

### **Gediminas Tower, Lithuania**

Six biaxial Wi-SOS 480 Wireless Tilt Meters and one Gateway to monitor landslip



West Gate Crossing, Melbourne, Australia

Lower Thames Crossing, London, UK

Mersey Gateway Project, Liverpool, UK

M6 Motorway, Walsall, UK

Percy Road, Bournemouth

Cottington Bridge (new A256) Ramsgate











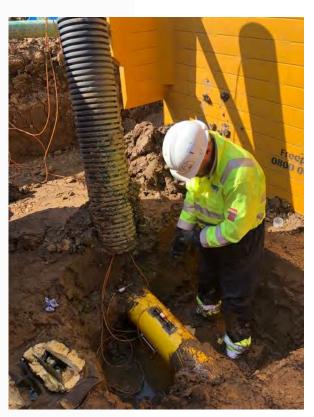


River Humber Gas Pipeline Replacement Project, UK

Slovak Gas Pipeline











Thames Tunnel, London, UK

Bucharest Metro, Romania

Thames Tideway, London, UK

Silvertown Tunnel, London, UK

Crossrail, London, UK

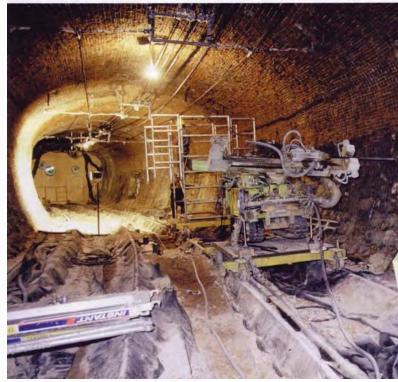
Kuala Lumpur Metro, Malaysia















Karam Abad Dam, Iran

Baish Dam, Kingdom of Saudi Arabia

Tishreen Dam, Syria

Ziezoun Dam, Syria

Chemususu Dam, Kenya

Kashimbila Dam, Nigeria











### Instruments



# Project Focus – Victoria Dam, Sri Lanka











Sarcheshmeh Copper Mine, Iran

Boulby Mine Shaft Re-lining, UK

Takht e Gonbad Tailing Dam, Iran

Vale Teluk Rubiah, Malaysia

Krumovgrad Gold Mine, Bulgaria















Parallel Roads, Business Bay, Dubai

Eden Brows Landslip, Cumbria, UK

Sheik Zahed Centre, Pakistan











# **Ground Investigation**

### **Projects**

Cottington Bridge A256, Ramsgate, UK

River Avon Slope Stability, Bristol, UK

Cliff Stability Alborough, UK











Mersey Gateway, Liverpool, UK

Bosphorus Bridge, Istanbul Turkey











Venjar, Eidsvoll, Akershus Rail Track, Norway

Walsall to Rugeley Electrification Project, UK

Madrid High Speed Railway, Spain

Channel Tunnel Rail Link, UK

Landsdown Road Bridge, Ireland

Hillerød Rail Track, Copenhagen, Denmark

Blisworth Embankment, UK













# **Deep Foundations**



### **Projects**

Royal Albert Hall, London

Whitechapel Station, London

Museum of Human Evolution, Spain

Liverpool Street Station, London

Doha New Airport Station, Qatar

Canary Wharf Station Crossrail, UK







Nordhaven Port, Denmark

Klaipeda Breakwater, Lithuania

Al-Faw Grand Port, Iraq

Isle of Man Ferry Terminal, Merseyside Dock, UK













# Data Acquisition



















# **Data Acquisition Projects**

### **Projects**

Battersea Power Station, London, UK

M6 Junction 10, Walsall, UK

Didachara Dam, Georgia

Dogancay Dam, Georgia

Skhalta Dam, Georgia















# Wireless Data Acquisition Products

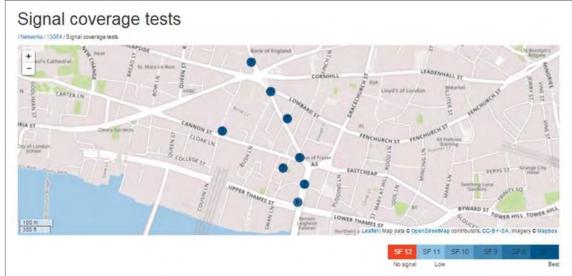








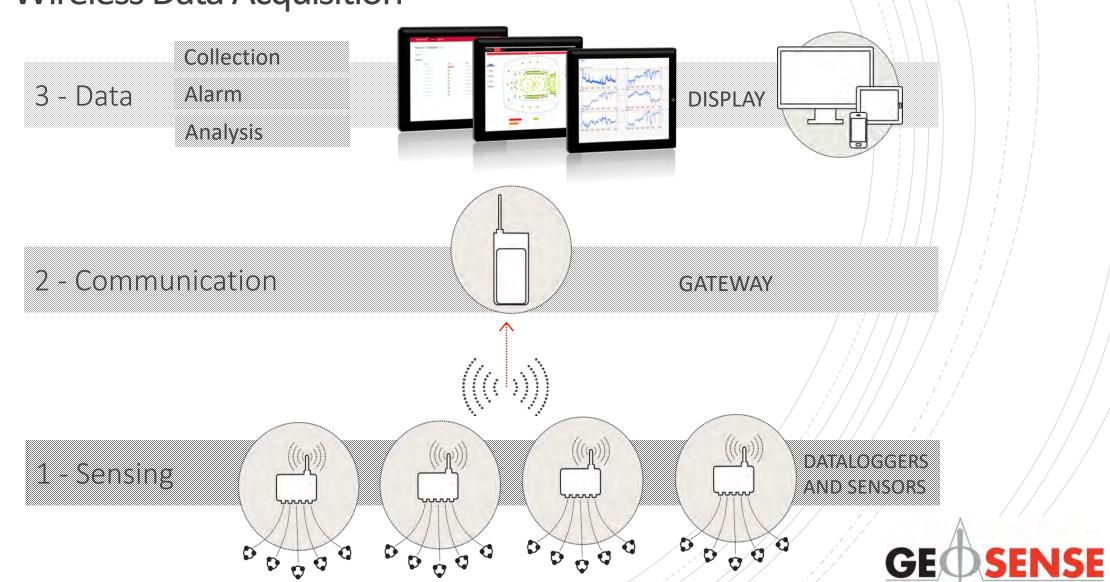








# Wireless Data Acquisition





# Wireless Data Acquisition Projects

### **Projects**

Isle of Man Ferry Terminal, Merseyside Dock, UK

Shell Centre, London, UK

Ziraat Bank, Ankara, Turkey

Battersea Power Station, London, UK

Eccles TBM Launch Pit, UK

M6 Junction 10, Walsall, UK















# **Data Visualisation**

# Wind Direction NW NE W 2221 E SW SE SO Jointmeter 1 CM 1 0 00 mm CM 3 500 mm CM 5 20 mm CM 5 20 mm CM 6 20 mm CM 7 100 mm CM 6 20 mm CM 6 20 mm CM 7 100 mm CM 6 20 mm CM 7 20 mm CM 6 20 mm CM 7 20 mm CM 7 20 mm CM 7 20 mm CM 8 20 mm CM 8





GeoAxiom Vista

sensemetrics

Site Master

Software























**Balfour Beatty** 



UGRO



VINC

### GEOSENSE CLIENTS & PARTNERS INCLUDE MANY INDUSTRY LEADERS

















SOIL ENGINEERING

















Luckily we love our work!

Thank you for your attention.

We hope you found this presentation of interest.



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