

Geotechnical Services



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Laboratories and Analytical Services



Environmental Safety Compliance



Materials Testing



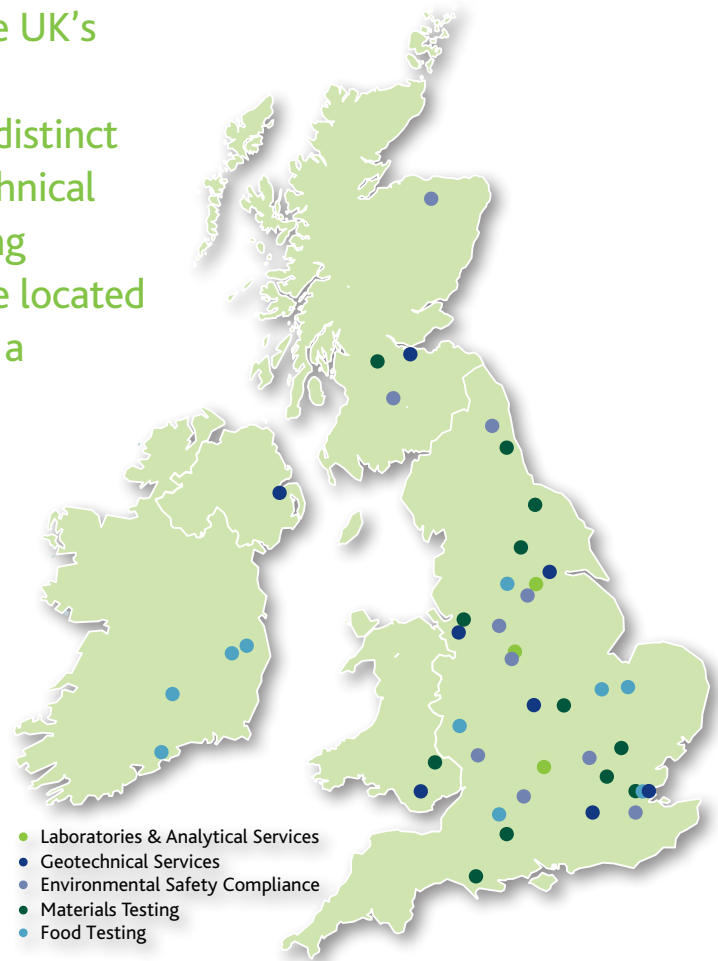
Food Testing

Environmental Scientifics Group (ESG) is the UK's leading provider of testing, inspection and compliance services. Operating across five distinct divisions we offer an unrivalled range of technical expertise and accredited services. Our strong network of UKAS accredited laboratories are located across the UK and Ireland and supported by a centralised head office.

With a history dating back more than 100 years, ESG prides itself on its innovative nature, customer focus and drive to continually improve. Our aim is to grow our capability and provide the most comprehensive range of environmental testing, inspection and consultancy services. Today, the business has more than 1,600 employees and serves over 7,000 customers.

Accredited Services

Quality is built-in to all our processes. We have a comprehensive range of accreditations covering all environmental compliance, quality and food safety issues and are particularly proud of our UKAS certificate numbered 0001.



Geotechnical Services

- Site Investigation
- Geotechnical Laboratory Testing
- Geotechnical and Environmental Consultancy
- Geophysical, Hydrographic and Topographic Surveys
- Structural Consultancy

Laboratories and Analytical Services

- Environmental Chemistry
- Oils, Fuels & Grease Analysis
- Speciality Chemistry
- Nuclear
- Paints & Coatings Consultancy
- Forensic Services

Environmental Safety Compliance

- Asbestos
- Stack Emissions
- Health and Safety
- Environmental Monitoring
- Occupational Hygiene
- Water Safety and Hygiene Services

Materials Testing

- Construction Materials Testing
- Demolition & Recycled Materials
- Energy Testing
- Foundation Testing
- Specialist Testing (e.g. metallurgy)
- Structural Investigations
- Pavement Assessments
- On-site Laboratories

Food & Drink Analysis

- Food & Drink Analysis
 - Microbiological
 - Nutritional
 - Vitamins/additives
 - Contaminants
- Dairy Testing
- Water Testing
- Pharmaceutical Testing

At ESG, we continually strive to improve everything we do. Our combined expertise enables us to deliver bespoke tailored solutions that meet each client's individual objectives whilst ensuring that quality and integrity is built-in as standard.



Geotechnical Services

Introduction

Environmental Scientifics Group (ESG) is a leading geotechnical services provider and the UK's number one choice for site investigation. Operating across both the public and private sector, we provide a diverse range of services for land-based and overwater projects.

Our extensive experience in the UK, European and international markets, covers a wide range of industries, such as: transport, water, energy (incorporating nuclear and renewables), civil engineering, brownfield regeneration, offshore development, commercial and residential properties. The experience we have gained supporting end-clients, main contractors, consulting engineers, planners, site operators, developers and environmental professionals, allows us to share this wealth of knowledge and expertise for all sizes and types of projects.

We provide a complete, integrated package of services, covering the whole project lifecycle from the pre-build phase through to site investigation, design, construction and the built stages. Using in-house equipment and resources, coupled with contracting, technical and consulting skills, we accurately investigate, test and advise on ground, geological and structural conditions. This includes the risks they pose and identifying potential environmental impacts. Our reports then deliver the information required to create cost effective, safe solutions to the engineering challenges our clients face today.

Our services include:

- Site investigation
- Geotechnical laboratory testing
- Geotechnical and environmental consultancy
- Structural engineering and building surveying
- Geophysical, hydrographic and topographic surveys

Site Investigation



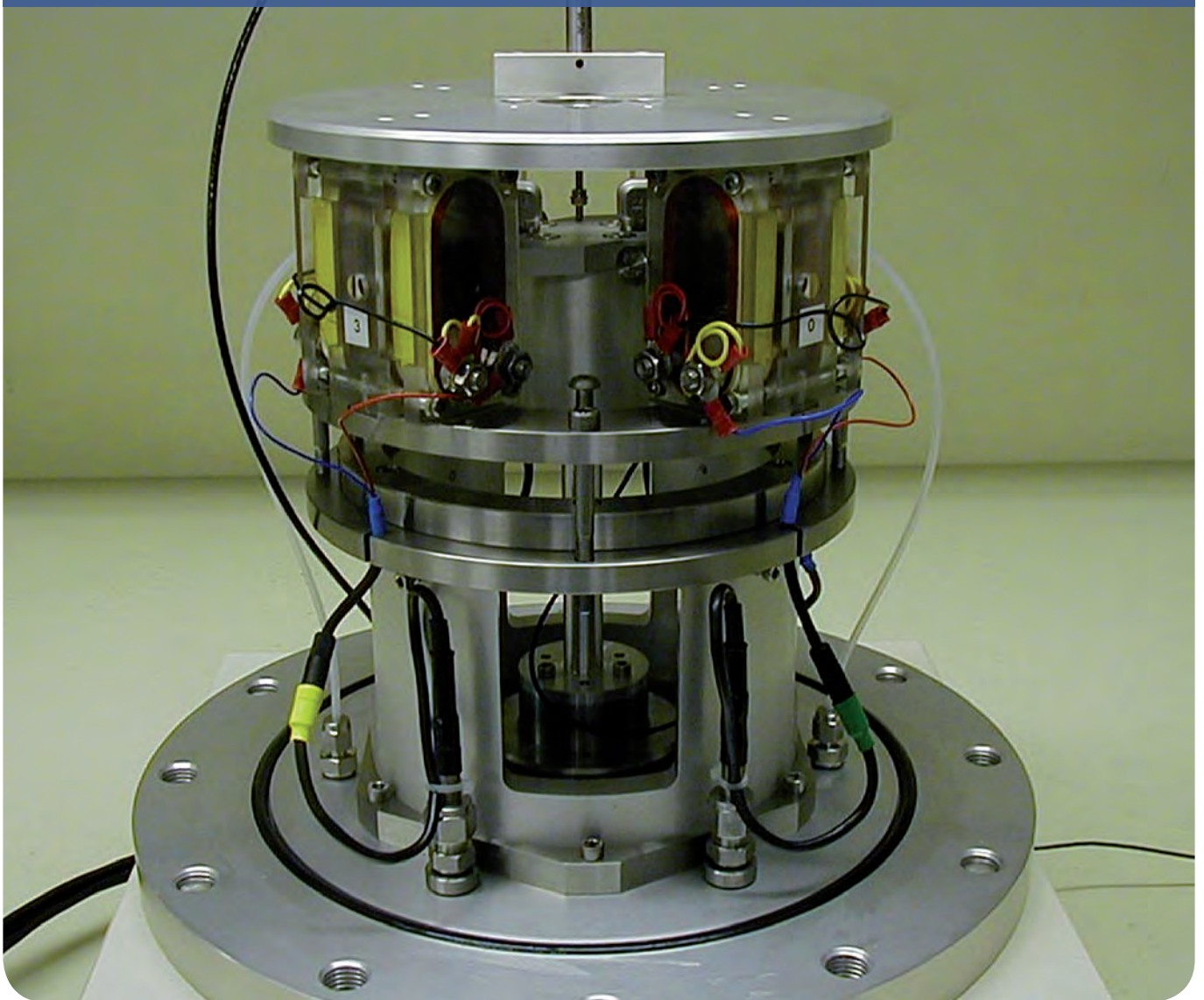
The effects of ground behaviour on the built and natural environment can be far reaching. We provide the comprehensive geotechnical and geoenvironmental information needed to alleviate design uncertainty and risk.

Our depth of professional expertise is backed by UKAS accredited laboratories and proven technical support based on nearly 70 years' experience. Pioneers of geotechnical site investigation; we offer clients the twin benefits of knowledge and reliability. Knowledge of good ground data leads to confidence in design and construction efficiency and effectiveness. Reliable access to the right information at the right time, leads to reduced commercial risk. The depth, knowledge and consistent reliability we offer, are two of the reasons why we are at the forefront of the site investigation industry.

Our services include:

- Preliminary desk studies/walkover surveys to identify the likely ground conditions early
- Effective pre-planning and technical advice on methodology and scoping
- Accurate, flexible and site specific programming
- Project management and engineering supervision
- Geophysical surveying
- Comprehensive drilling resources
- In situ monitoring of groundwater, ground movement, settlement, gas and contamination
- In situ testing including all types of pressuremeter, vane and Californian Bearing Ratio (CBR)
- Standard penetration and specialist cone penetration testing
- Laboratory testing (geotechnical/advanced geotechnical/contamination)
- Digital data collection, analysis and reporting

Geotechnical Laboratory Testing



Timeliness, accuracy and control are qualities found throughout our geotechnical laboratories. We possess the most extensive facilities in the UK, together with the largest commercial effective stress-testing laboratory in Europe and a state-of-the-art advanced testing suite.

We are fully committed to quality encompassing ISO and UKAS standards which guarantee our teams are competency trained and our measurement equipment is calibrated to national standards. We can also provide fully documented chains of custody and controlled storage of test samples, supported by validated, independently assured data and temperature-controlled environments.

Our services include:

- A full range of routine geotechnical testing for engineering properties (including soil and rock classification, strength, compaction, consolidation and permeability)
- Chalk testing and analysis
- Advanced Shear Modulus and Cyclic Simple Shear testing (for projects affected by earthquakes, ground movement, vibration and resonance)
- Steady state thermal conductivity testing (measuring specific heat generated or stored in the ground by mass materials)
- Digital data collection, analysis and reporting

Geotechnical and Environmental Consultancy



Land development and use is affected by its natural geological conditions and industrial past. Our specialist knowledge and wealth of experience means we can provide detailed geoenvironmental consulting solutions that take both into account. This ensures economic viability, safety, legal compliance and sustainability for projects.

In the UK and overseas, we provide practical land use solutions for brownfield reclamation and remediation, contaminated land, geotechnical engineering, waste and environmental management. Our services range from complete process management, to specialist consultancy, site based assessment and data management services, which incorporate an in-depth knowledge of both UK and European legislation. This means we can help to optimise land use, construction costs and long term building/site performance.

Our services include:

- Planning, permitting and Environmental Impact Assessments (EIA)
- Geotechnics and engineering geology services and interpretive work
- Complete soil and landscape science capability
- Due diligence assessments to estimate environmental liabilities and on-site risk
- Monitoring of soil dynamics and seismic hazard (both intensive short-term and detailed, long-term assessments)
- Remediation and regeneration of contaminated land and groundwater (from desk study to risk assessment and design)
- On-site chemical analysis of materials
- De-risking of waste management and landfill projects

Structural Engineering and Building Surveying



Our services include:

- Defect investigations and insurance claims management
- Intrusive surveys and sampling of materials
- Contract administration on behalf of our clients, including party wall surveying
- Condition surveys
- Pre-acquisition surveys of property portfolios
- The identification of structural loads when a building changes its use or undergoes alterations

Our proven engineering expertise encompasses the majority of structural materials and forms encountered today. We specialise in condition surveys, defect investigations and the design of remedial solutions and alterations.

We integrate consultancy expertise and structural investigation field teams, to provide a complete solution that is underpinned by efficient and effective project management.

Geophysical, Hydrographic and Topographic Surveys



Our services include:

- Marine geophysical surveys
- Land geophysical surveys using a range of surface and down hole techniques
- High resolution mapping of nearshore areas, estuaries, rivers and lakes
- Land surveys utilising the latest Global Positioning Systems and robotic total stations providing 3D topographic surveys

We provide a comprehensive range of geophysical, hydrographic, oceanographic, and topographic surveys for civil engineering, geotechnical and environmental investigations. Our surveys are tailor-made to the individual engineering requirements and environmental conditions.

Our highly skilled field operations are backed by excellent analytical and technical support services. They provide first-class data collection, interpretation (including third party acquired data), consultancy and reporting in remote sensing techniques. Applications include: near shore investigations, port engineering projects, offshore wind farm and site construction surveys, identifying buried hazards, quay wall investigations and structure elevation surveys, pipeline and cable route studies.



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