Instrumental to your success since 1993

The independent leader in monitoring and testing technologies for structural and mechanical applications

C C O L A D E M E A S U R E M E N T

www.AccoladeMeasurement.com

Automated Monitoring

Installed measurement systems for remote data collection, automated analysis and active responses

We have extensive experience of building, installing and integrating many sensor types, robotic total stations, satellite positioning systems, data acquisition units and communication systems. We are leading the industry in the use of artificial intelligence to manage data and detect defects.



Load Testing

Performance measurement, validation and certification, through short duration tests

Our broad range of equipment for testing is ready for swift mobilisation and our processes are prepared for accurate testing and instant certification.

We can measure responses and load capacity of any components from single bolts to entire bridges. We work closely with asset managers to determine the best means of assessing capacity and planning safe operations.

Structural Health Monitoring

Observation of bridge and building responses

Instrumentation and measurement are the core of our business. We collaborate to plan, design, implement, operate and maintain monitoring solutions. Taking raw data, we add value by combining automation processes and manual reviews for practical engineering information.

Applications include investigations for structural behaviour, research projects and product reliability tests.

Remote Condition Monitoring

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Measurement and control systems for live asset management

Accolade specialises in critical defect detection for bridges and structures.

Visual inspections and repeated tests only reveal snapshots to condition, but remote condition monitoring provides continuous automated checks of critical measurements.

Alerts and responses can be pre-determined with our civil and structural engineers, to provide proportionate active reactions for asset management.

Dynamic Load Measurement

Detection of force effects in individual components

Our measurements for strain are combined and analysed to see the influence on mechanical parts or extending to see the effects in the whole structure.

We have expertise in instrumentation for:

• Strain

AUTOMATED MONITORING

- Stress and force effects
- Vibration and displacements
- Velocity and accelerations
- Fatigue and cumulative damage detection





Data Science

Leveraging artificial intelligence for anomaly detection

Hidden defects can be lurking in your data sets and not evident by graphical review. By pattern recognition, our statistical models can compare the influencing factors and predict what normal behaviour should be, thereby spotting deviations as early as possible.

Get actionable insights from your data with our AI solutions for:

- Predictive vision
- Defect identification
- Proactive management
- Enhanced safety
- Maximized lifespan

Deck Load Capacity

Bridges and building floors can be tested to demonstrate performance

Load paths and hidden capacity can be difficult to predict and model, but physical testing measures the real performance.

- Supplementary (or diagnostic) load tests are ideal for comparing to a structural computer model, whereby parameters can be calibrated and improved
- Proof load tests can be applied for giving direct evidence of capacity to a maximum load criteria

Accolade can determine, specify, conduct, monitor and report for all types of floor load tests. Results can often provide assurance of increased safe capacity of the asset and verify what modelling cannot. Bridge Load Testing Live Display - Westbound 7.55M D Draws (positional) UNE 3LOOKING WEST A 0 40

Barrier Testing

Certification for sports stadia, shopping centres, car parks and balconies

Accolade can provide load testing for all types of barriers in accordance with guidance and regulations including:

- The Home Office Guide to Sports Grounds (The Green Guide)
- BS 6180 Barriers in and About Buildings

We have versatile equipment, procedures and expertise ready to deliver.

Our engineers can conduct risk assessment, testing, repair and replacements. We can also rapidly repair failed or damaged barriers. We help to ensure the safety of all personnel and public with minimal disruption.



Lifting Beams

Runway beams and lifting systems require testing for certification

We test beams of all forms and sizes for safe working load capacity in accordance with *BS 2853 Specification for the testing of steel overhead runway beams for hoist blocks.*

Accolade can test and mark lifting eyes and runways beams, with the safe working load along with accompanying certification for all equipment which pass tests. Any component which doesn't pass is marked and we assist with safe practices for quarantine and rectifications.

Fixings

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Cast-in and post-installed fixings require testing for proof of safe capacity

Accolade specialises in pull out and pull-off testing. We ensure your fixings and finishes are intact, safe and fit for the load intended, which helps guarantee safety on site.

We provide preliminary and proof load testing for:

- BS 8539 for post-installed fixings in concrete or masonry
- Concrete Fixings Association (CFA) Guidance Notes
- BS 8204 Parts 1 to 6 for screeds, bases and in-situ floorings

