



Nuclear

SOCOTEC can boast over 25 years' of experience in the nuclear sector in the fields of valuation, validation, verification and certification.

As a strategic third party and independent provider to the European Nuclear Sector, SOCOTEC Power Services offer testing services that include:

- Client and project ownership support
- Quality assurance and quality control
- Financial management and costs control
- Equipment inspections
- System and process control
- Numerical modelling
- Training for providers
- Risk analysis

Client and project ownership support

SOCOTEC can support clients with project assistance, through coordinating works and supervising procedures, as well as environmental and occupational monitoring of buildings and facilities. As part of the client support offering, SOCOTEC can perform inter-building interference assessment and help to implement preventative maintenance programmes, visual inspections and defect reporting. With a wealth of civil engineering expertise, SOCOTEC can develop and update procedures by offering support to customers' technical divisions.

Quality assurance and quality control

With technical assistance in welding and metallurgy, SOCOTEC can help to ensure longevity and compliance of equipment usage. Through document control, risk assessment and external audits, the client can be assured quality processes and procedures are being followed.

SOCOTEC works in compliance with ISO 9001 and ISO 17020. Our skilled team provides UKAS-accredited radiochemical analytical support for monitoring and decommissioning projects for the nuclear sector.

Bioassay work at the laboratory is approved under the Ionising Radiation Regulations of the Health & Safety Executive.

System and process control

With inspection of plant and work sites, SOCOTEC offers supervision for mechanical and electrical installations plus system and process control.

SOCOTEC's engineering team has the required expertise to inspect and evaluate the effectiveness of systems and equipment, including:

- Pressure equipment (DESP, ESPN, CODAP)
- Vendor inspection (off-site inspection and certification prior to delivery) based on surveillance programmes
- Air conditioning equipment in changing operational environments
- Mechanical, electrical, piping elements, welded elements, operation controls

Financial management and costs control

SOCOTEC can support the nuclear sector with the preparation of bills of quality and cost control.

Numerical modelling

SOCOTEC can support with calculation, modelling and simulation for:

- › Critical accident simulations (i.e. for IRSN)
- › Advanced modelling of installations (i.e. for CEA - programming and validation)
- › Equipment and structures in base nuclear installations (INB)
- › Thermodynamic modelling of steam generators
- › Mechanical and fast dynamic studies on test benches (pressure devices, rotating parts on benches)
- › Hydrogeology with fractured geological repositories
- › Explosion-risk study for technical cavities (i.e. MAVL)
- › Seismic stress evaluation
- › Scale physical testing

SOCOTEC can offer support with linear and non-linear mechanics, fast dynamics, buckling effects, thermics, diphasic flows, aerodynamics. Providing assistance on research and development, SOCOTEC's extensive experience allows a reactive and customer focussed service.

FOR MORE INFORMATION

For more information about SOCOTEC's services to the nuclear sector, please contact salesuk@socotec.com or call 0845 603 2112.

CONSTRUCTION

- › Concrete testing
- › Construction materials testing
- › Pavement Assessments
- › Pile & foundation testing
- › Metallurgical mechanical testing
- › Paints/coating testing
- › Soil & structure monitoring

EARTHWORKS

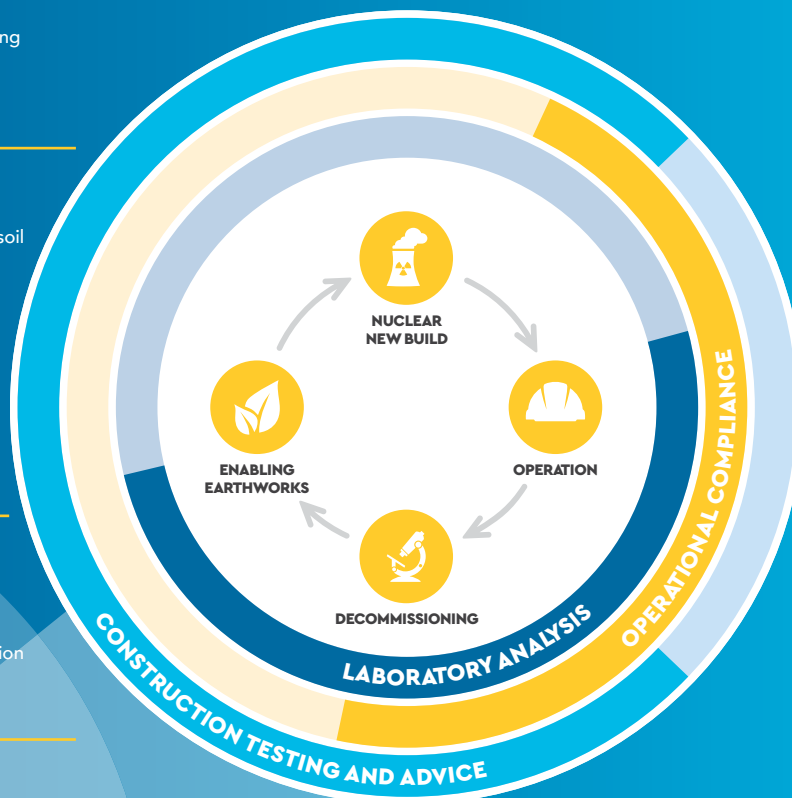
- › Insitu testing
- › Asbestos in soil
- › Soil/aggregate testing
- › Chemical analysis of water & soil
- › Waste classification
- › Materials management planning
- › Remediation planning & verification
- › Air / noise / vibration / water monitoring
- › Bespoke data management
- › Bespoke site laboratories

SITE INVESTIGATION

- › Borehole drilling
- › Geotechnical investigation
- › Geo-environmental testing
- › Land surveys
- › Geophysical surveys
- › Contaminated land investigation

DESIGN DEVELOPMENT & CUSTOMER SUPPORT

- › Numerical modelling
- › Risk analysis
- › Equipment inspections
- › System & process control
- › Quality assurance & quality control
- › Financial management & costs control
- › Training for providers



COMMISSIONING

- › Air quality monitoring
- › Waste classification
- › System calibration
- › Failure investigation
- › Dust analysis
- › Oil testing

OPERATIONAL SUPPORT

- › Air Environmental permit compliance
- › Effluent monitoring
- › Stack emissions monitoring
- › Asset inspection
- › Occupational health
- › Environmental incident response
- › Ongoing groundwater and surface water monitoring
- › Asbestos re-inspections

DECOMMISSIONING

- › Radiological analysis
- › Demolition waste characterisation
- › Asbestos surveys & testing
- › WRAP protocol testing
- › Remediation design & verification
- › Environmental monitoring