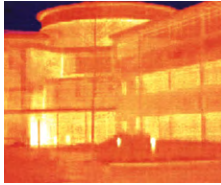
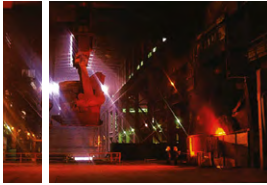




Infrastructure





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Overview



Initivo (formerly VINCI Technology Centre UK Limited) have been in the infrastructure business for decades.

Our highly experienced team of scientists, engineers and technicians provide a broad range of services to assist with every stage of the project cycle.

Sectors served include:

- Airports
- Highways
- Energy
- Water
- Rail





Our offer is based around key areas such as:

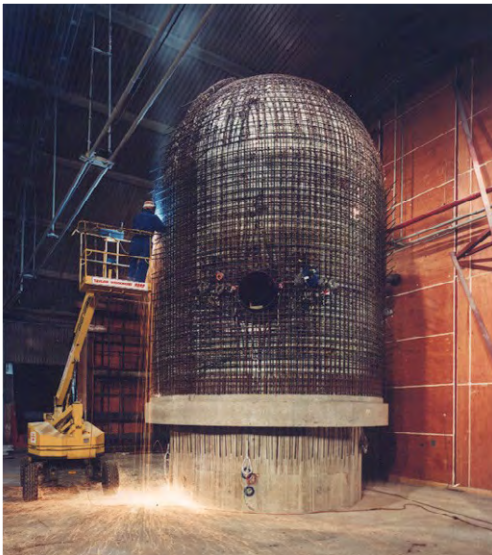
- Trials
- Testing
- Investigation
- Surveying

Services | Construction Trials and Mock-Ups

We construct large and complex mock-ups to meet demanding programme and quality requirements. This helps clients and stake holders see how finished facilities might look and perform. Construction trials greatly benefit final design and delivery and can help de-risk the entire programme.



Pull-down tests to validate engineering calculations



1/10th scale model of a nuclear reactor pressure vessel



Elizabeth Line running trial for constructability and electrical trials

Project Examples

Ref	Sector	Description	Year of construction
Sizewell B	Nuclear	1/10 scale model of pressure vessel	1989
London ring main	Utilities	Design and validation trials	1992
Dungeness	Nuclear	Superheater restraints	1996
Wylfa Nuclear Power station	Nuclear	Superheater restraints	1998
Kings Cross	Rail	Full scale mock up to facilitate line closure trials	2003
Confidential	Nuclear	Building pull-down testing	2005
Wembley Park	Rail	Full scale platform trials	2006
Circle Health	Health	Full scale patient facility mock-up	2010
Elizabeth Line	Rail	Full scale station model	2011
Olympic Velodrome	Public	Weather tightness Testing of façade	2011
Elizabeth Line	Rail	Platform edge screen trials	2013
High Rise	Commercial	High level installation trials	2013
Elizabeth Line	Rail	Durability trials	2018
Thames Tideway	Water	Building/structural condition surveys. Concrete, accelerated durability testing. Large scale river wall impact testing	2016 -2024
HS2	Rail	Building/structural condition surveys. Concrete, accelerated durability testing. Full-scale noise barrier accelerated durability trials	2018 ongoing
Silvertown Tunnel	Public	Concrete, accelerated durability testing	2023-34
Hinkley Point C	Nuclear	Concrete, accelerated durability testing	2020 ongoing



Why build a mock-up?

- Health & Safety trials
- Improve buildability and operations
- Stakeholder involvement
- Testing

Eliminate risk...

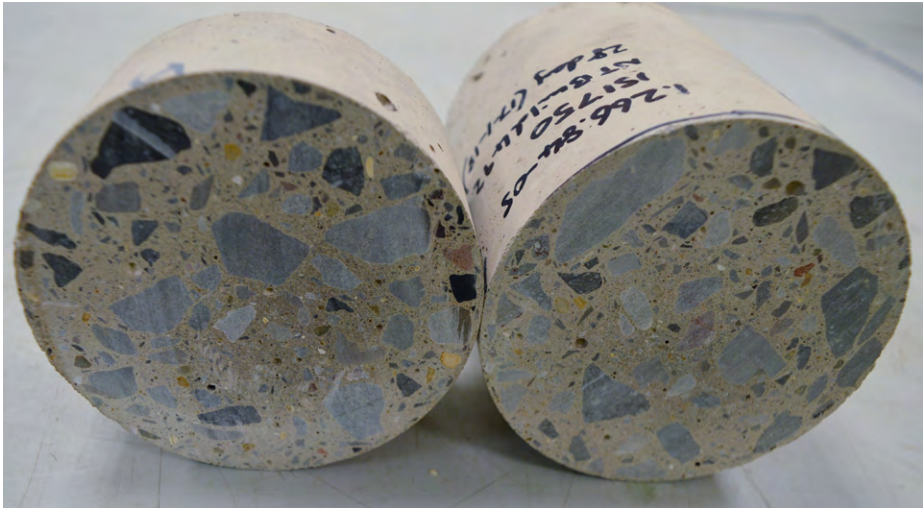


Services | Concrete Mix Design, Testing and Trials



Our experience here dates back to the birth of commercial nuclear power generation when we were involved in the civil design and construction for Calder Hall (now Sellafield).

CONCRETE TESTING



Water

- Penetration
- Permeability
- Sorption

Strength

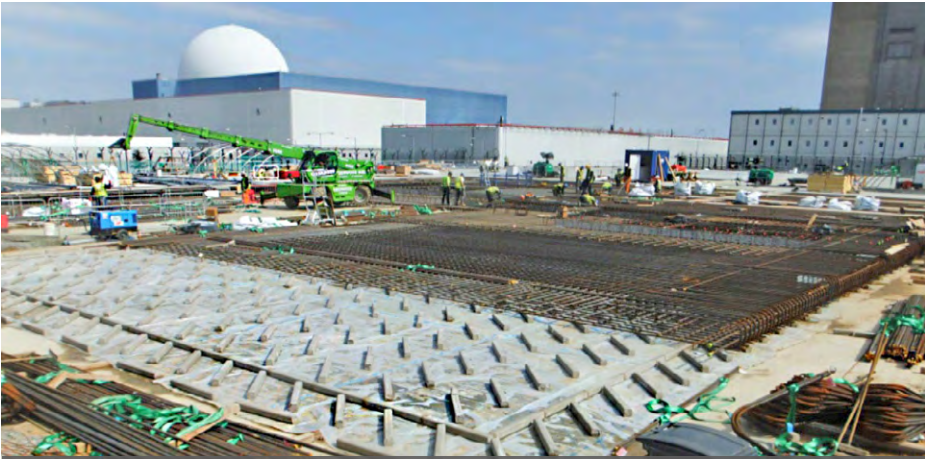
- Bond
- Compressive
- Elasticity
- Flexural
- Tensile



Durability

- Chloride Ion penetration
- Dust analysis
- Bulk Chloride diffusion
- Expansion
- Freeze-thaw

CONSULTANCY



Sizewell B Dry Fuel Store

Complex mix design and design optimisation can be tricky, however this is an area where we have considerable expertise and our team can help:

- Reduce cost
- Reduce risk
- Mix design
- Optimisation
- Supplier QA checks
- On-site QA

All backed up by UKAS accredited testing.

Sectors | Rail

PROJECT EXAMPLE - CROSSRAIL/ELIZABETH LINE

We provided extensive support to this project.



Full-scale architectural station model

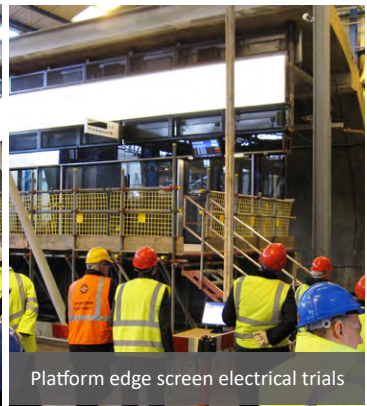


Architectural model:

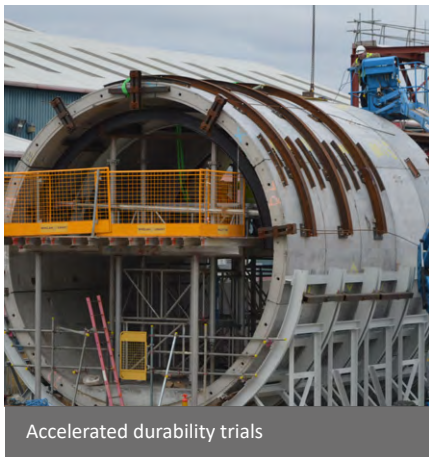
- 20m long
- 6m high
- Secure indoor location
- In-house fabrication
- On-time delivery
- Zero accidents

Other services provided to this project include:

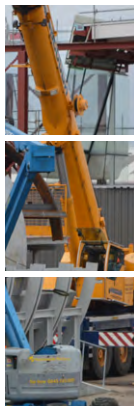
- Pre/post tunnelling condition surveys
- Contaminated land consultancy
- Façade-Acoustic-Structural Testing



Platform edge screen electrical trials



Accelerated durability trials



Durability Trials:

- 10m tunnel constructed above ground
- 1000m of cabling
- Instrumentation
- Simulated 55 years of running
- 7.5 million cycles

Sectors | Water

PROJECT EXAMPLE - THAMES TIDEWAY

Tideway is upgrading London's sewer system to cope with its growing population. The 25km tunnel intercepts, stores and ultimately transfers sewage waste away from the river Thames.

Starting in Acton, West London, the Thames Tideway Tunnel travels through the heart of London at depths of between 30 and 60 metres, using gravity to transfer waste eastwards.



Services provided include:

- Pre-construction condition surveys of thousands of buildings and structures
- Concrete consultancy
- UKAS accredited concrete testing
- Large-scale testing

Sectors | Highways

Services provided to this sector by Initivo include specialist testing, surveying and inspection.



Condition Surveys

- Overhead gantries
- Culverts
- Listed buildings

Testing

- Concrete
- Coatings
- Slip resistance



Condition survey of a 900 year old church for a motorway construction project

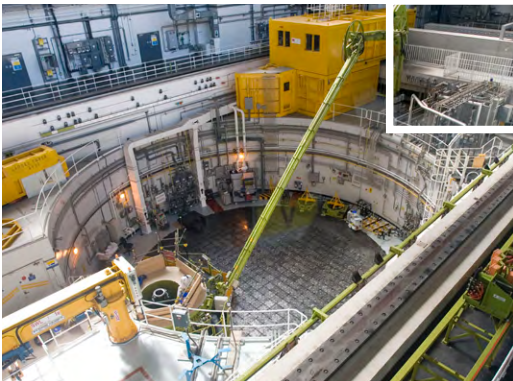
Sectors | Nuclear

Over 60 years in Nuclear sector providing Continuity - Safety - Innovation

Our involvement in the Nuclear sector goes back to the 1950's when Taylor Woodrow worked on Calder Hall, now Sellafield.

New Build

- Large scale mock-ups and trials
- Envelope testing
- Concrete mix design and production trials
- Seismic testing



Generation

- Specialist inspections
- Condition/envelope surveys
- Innovative equipment design and supply
- Full-scale trials

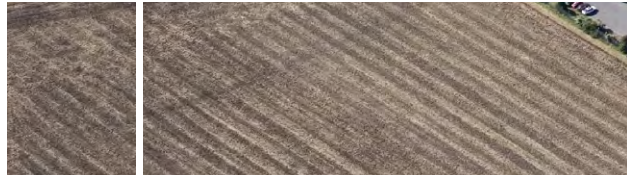
Decommissioning

- Drop testing of flasks
- Concrete investigation and trials
- Condition/envelope surveys
- Optioneering studies



Unique Facilities

- 5.5 hectare campus
- 3,600m² indoor workshop
- Team comprises c.90 engineers, scientists and technicians
- In-house steel working team
- Craneage and plant on-hand



- ISO 9001:2015 Quality Management System
- ISO 14001:2015 Environmental Management System
- BS OHSAS 45001: 2018 Occupational Health and Safety Management System



Initivo Consultancy Limited

Unit 8, Ingwell Hall
Westlakes Science & Technology Park
Moor Row
Cumbria
CA24 3JZ

T: +44 (0)333 5669000

E: info@initivo.co.uk

Initivo Consultancy Limited

Stanbridge Road
Leighton Buzzard
Bedfordshire
LU7 4QH

T: +44 (0)333 5669000

E: info@initivo.co.uk

