

PILING





Experts in delivering extensive piling and geotechnical solutions across the UK

- Full end to end capability; from ground investigation, design and value engineering through to all types of geotechnical solutions
- UK's largest fleet of over 30 open site piling rigs;
 covering a range of engineering techniques to suit various project requirements
- Provider of geotechnical solutions for over 36 years;
 Since 1984 we have been setting strong foundations across many markets in the construction industry.
 We have worked with all the leading main contractors, engineers, developers and occupiers to deliver successful projects.

High volume Continuous Flight Auger (CFA) piling Large Diameter Piling (LDP) and Cased CFA (CSP) for major structures Sectional Flight Auger (SFA)

Driven precast concrete and steel tube

Expertise in design and contract management

Ground investigation and pile testing



Cased CFA piling at Grantley Hall hotel and leisure

Recent Case Studies

Driven - Precast Concrete (PCC)

Beam Park (Phase One)
 Client: Countryside Homes
 Installing precast concrete (PCC) driven and CFA piles
 for a new housing development in the East of London.
 Rigs: Soilmec SF50 and Juntann PMX22

Driven - Steel Tube

Keadby Power Station - Wind farm substation
 Client: Amey

Installing various top-driven steel tube piles to provide foundations for the new substation that supports the offshore wind farm

Rigs: Junttan PM20

Infrastructure and Utilities

Keadby Power Station (Phase Two)

Client: Siemens AG

Installing foundations utillsing CFA and driven steel tube for the main combined-cycle gas turbine (CCGT) power station facility including substantial cooling tower

Rigs: Llamada-P140TT

Southern Link Road, Worcester

Client: Alun Griffiths

Large rotary piling for new link road on the A4440 Worcester Southern Link Road improvement scheme

Rigs: Soilmec SR-75



Large diameter piling for A4440

6

in-house designers providing value engineering 200

plus piling projects on average per year

75

highly trained site supervisors and managers 8

dedicated graduates and apprentices

Recent Case Studies

Infrastructure and Utilities

• Wichelstowe Southern Access Underpass, M4 Swindon

Client: Alun Griffiths

Installing our largest rotary bored piles to date at a diameter of 1220mm to support the new underpass

structure.

Rigs: Soilmec SR-75

Residential

Millbrook

Client: Bennett Construction Ltd CFA piling for the development of apartments and dwellings on former army barracks site in London **Rigs:** Lamada P105TT

Commercial

Aspire Bristol

Client: BAM Construction

Undertaking the coring works to the foundation slab of a large, highly congested city centre site in Bristol.

Rigs: Soilmec SR95 and SR75

Industrial

Mansfield Summit Park

Client: Bowmer & Kirkland

We installed 2000No. CFA piles to provide foundation support for a 1,000,000 sq. ft. warehouse development

Rigs: Llamada 135 and Soilmec SR-75

Warth Park

Client: Winvic Construction Ltd

Creating a retaining wall for large industrial development

utilising CFA piling

Rigs: Soilmec SF-50 & Llamada 135

Mixed Use

Swansea Central Regeneration

Client: Buckingham Group

Installation of CFA piles to provide foundations for new multi-level car park and new 3,500 seater arena within

Swansea city centre

Rigs: Llamada 130 & 135 and Soilmec SR-75

Goodluck Hope Riverside Development

• Client: Ballymore group

As well as creating 804 new homes, the CFA piling undertaken after we had completed unexploded ordinance survey work (UXO) provided the foundations for the development 2,235 sq m of commercial space



Solimec SR-75 providing foundations for large warehouse development in Mansfield



Installing our largest rotary bored piles at 1220mm at Wichelstowe for M4 underpass



Coring works in Bristol for BAM Construction.



CFA piling with the powerful Llamada P160TT

Recent Case Studies

Deep Basements

Corsham Street - 5-star boutique hotel London
 Client: RGB Group

Installation of large diameter rotary piles to create secant retaining wall for a deep basement consisting of four floors **Rigs:** Soilmec SR-95

• St Albans Basement - Leisure development

Client: Morgan Sindall

Installation of retaining wall for a small basement scheme in St Albans, London utilising 400mm diameter piles

Rigs: Llamada P105TT

Public Sector

A63 Hull – Princess Quay overbridge

Client: Interserve

Rotary bored piling using support fluid

Rigs: Soilmec SR-95

• Taunton Railway Station

Client: John Sisk & Son Ltd

CFA bored piling for the foundations for new multi-story car park at Taunton railway station

Rigs: Soilmec SF50 and Lamanda P140TT

Sugar House Primary School (New Build)

Client: MID Group

CFA piling for a new primary school at the heart of the Sugar House Island Urban Regeneration project, in East

Stratford, London

Rigs: Soilmec SF50 and Llamada P140TT



Retaining wall installation in St Albans, London for basement scheme



Large diameter rotary piling for A63 improvement scheme

Piling solutions:

- Continuous flight auger (CFA)
- Sectional flight auger (SFA)
- Large diameter piling (LDP)
- Cased CFA (or CSP)
- Secant and contiguous piled retaining walls
- Modular precast bases and foundation beam
- Capping beams and slab
- Pile Testing
- Ground investigation
- Soil nailing and ground anchors
- Sheet piling
- Drilling & grouting
- Vibro and rigid inclusions ground improvement
- Driven steel tube
- Driven section



SR-95 piling in a tight space for deep basement at Corsham Street. London

Capabilities and services:

Llamada P105 up to P160



Weight 38 to 104 tonnes

Length Up to 12.5m

Width Up to 4.75m

Height Max (height)
39.0m

CFA

Techniques

PILE CAPABILITY
Depth and Diameter:
33m depth at 1200mm

33m depth at 1200mm diameter 35m depth at 1050mm diameter

Capability to install 1050mm diameter CFA piles up to 35m providing significant programme and cost benefits over Bored Cast in Place piles.

Soilmec SR-30 up to SR-95



Weight 91 tonnes
Length 11.0m
Width 4.7m
Mast (height) 26.0m
Techniques BCIP and CFA

PILE CAPABILITY
Depth:
CFA - up to 30m
Rotary - up to 74m
Diameter:
CFA - up to 1200mm
Rotary - up to 2100mm

Although the Soilmec SR-95 is a multipurpose rig, it is best suited to BCIP piles and can install temporary casings up to 35m deep. Selection of a BCIP technique simplifies installation of deep reinforcement cages (over 21m) as concrete placement takes place after the installation of the cage

Junttan PMX22



Weight 38 to 104 tonnes

Length Up to 12.5m

Width Up to 4.75m

Height Max (height)
39.0m

Techniques CFA

PILE CAPABILITY

 $\label{eq:max_problem} \begin{tabular}{ll} Max Pitch Pile length - 15.0m \\ Min Pitch Pile Length - 4.0m (VE minimum stock Length) \\ \end{tabular}$

Max pile size – 400mm sq PCC and 610mm diameter TDT $\,$

Min Pile size - 190mm sq PCC & 140mm diameter TDT

Hammer – HHK with a 4T, 5T & 6T option (new hammer)



Plant and engineering workshop

In order to provide rapid support to our extensive fleet of piling rigs we have a dedicated and responsive team of plant fitters and engineers. Ready to respond to breakdowns to help maximise utilisation on sites and reduce standing time, we are equipped to ensure continuity in work programmes.

Services we provide:

- · Welding and fabrication
- Plant repair and modifications
- Servicing and maintenance

In-house design services

Our talented in-house team carry out bespoke designs for piling solutions, giving clients a single point of contact who will work with the contract manager to oversee the project. Designers are involved early to give a full life appreciation of developments and understanding of key drivers. Early involvement can give an opportunity for value engineered schemes making for more thorough cost effective results.

Precast production facility

Based on site at our head office in the East Midlands, our precast production facility provides the supply of just-in-time Smartfoot modular ground beams and bespoke concrete piles. Working 24/7 the factory holds enough stock of piles for jobs to be completed swiftly, maintaining optimum levels to provide an efficient service to our piling teams.











Ground investigation

STRATA Geotechnics provide an extensive portfolio of ground investigation and testing solutions.

- · Comprehensive range of in-house rigs
- · Directly employed drilling and testing teams
- Innovative specialist plant, especially for restricted access requirements

DRILLING & SAMPLING

- Cable percussion
- Rotary open hole/coring
- · Window sampling

REPORTING & MONITORING

- Gas monitoring
- · Noise and vibration monitoring
- Laboratory testing
- · Factual and interpretative reporting

PILE TESTING

- Integrity testing
- Dynamic testing
- Static load testing



Load testing for pile bearings by STRATA Geotechnics



Cable Percussion sampling for the re-development of a UK holiday park.

Dedicated FORS accredited transport fleet serving our UK wide projects

Rigs are delivered and collected via our dedicated plant and logistic fleet based at our main facility in Kirkby in Ashfield. Specially designed beavertail rigid wagons mean we can access the most restricted piling areas.



Contact Us

Please contact one of our piling team.

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