
**KEMSLEY MILL ENERGY FROM WASTE PLANT
SITTINGBOURNE, KENT**



The Kemsley Mill Energy from Waste plant is situated at Ridham Dock Road near Sittingbourne in Kent.

The project represents a further success in providing piled foundations for these projects throughout the UK.

The advance trial piling programme required the installation and load testing of the following preliminary piles...

- A 600mm diameter pile load tested to a maximum load of 4,712 kN.
- A 750mm diameter pile load tested to a maximum load of 8,950 kN.

Following the satisfactory load testing of these piles, which validated our design, the following piles were installed...

- 184no 750mm diameter Continuous Flight Auger piles to depths of 22.25m below ground level forming contiguous retaining walls around the bunker area. The piles were reinforced with 6B32 main bars in single lengths of 13.875m.

The reinforcement cages for these piles were fitted with single B32 anchor bars and couplers at intervals down the inside face of the piles for connection to the basement lining walls. The cages were also fitted with clusters of 8no B32 anchor bars and couplers to allow connection to the bunker basement slab.

CLIENT

Wheelabrator Technologies

CONSULTING ENGINEERS

Arup

MAIN CONTRACTOR

Clugston Construction

ROLE

P J Edwards & Co (UK) Ltd acted as Piling Contractor

SPECIFICATION

Specification for Highway Works

PILING RIG

2no Llamada P1500TT Piling Rigs

CONTRACT PERIOD

September 2016 – July 2017

CONTRACT VALUE

£2.69M

CASE STUDY



- 933no Continuous Flight Auger piles in diameters of 450mm, 600mm and 750mm with depths of up to 27.4m below ground level. Dynamic load tests were carried out on some of the piles to further validate the design as the work progressed. The piles were installed as vertical bearing piles to all the associated structures to the plant and tower crane bases. The piles penetrated a succession of made ground materials over soft organic clays over firm clays and were founded into very dense fine silty sand.

The above illustration shows piling resuming inside the excavated bunker area. The partially built Energy from Waste plant in the background shows the staged completion of the sections of this project. Return visits to site were necessary to match the phased release of design information. Our ability to manage a varying piling programme has led us to become a regular piling contractor for such projects. This project is just one of numerous Energy from Waste contracts won by ourselves in recent times.



Details showing anchor bars and couplers to permit connections to basement lining walls and basement slab.