



PRODUCT CASE STUDY

LOCATION

DEEPHAMS STW
PRIMARY SETTLEMENT TANKS

CLIENT

THAMES WATER

CONTRACTOR

AMK JV

(ATKINS/MURPHY'S KIERS JOINT VENTURE)



POWER PLASTICS LIMITED
Thirsk, North Yorkshire, YO7 1PZ.
+44 (0)1845 525 503

| www.powerplastics.co.uk

DEEPHAMS STW PRIMARY SETTLEMENT TANKS



PRODUCTS

Structural aluminium trusses with integrated 3kn walkable aluminium decking and man access hatches. PVC Tensile fabric roof coverings.

BRIEF

To design, supply and install 2 No. self-supporting odour control covers each 53m x 95m over 14 No. rectangular primary settlement tanks. To allow access in between tank lanes on integral walkways. Design to allow installation over completed mechanical scrapers without crane provision over full area. Covers to be removable to allow inspection, maintenance and repair within tanks as required. Design to be compliant with Thames Water Asset Standards and capable of withstanding severe H₂S environment resilience.

SOLUTION

An aluminium self-supporting truss design with integrated walkways. PVC tensile sheets within integrated Kadar grooves allowing independent removal from walkway access only. Structure designed to allow sequential assembly at one end of the facility (within the reach of a tower crane) and then “pushing out” down the tank walls on temporary bogies until completion of the structure.

Aluminium decking boards to provide integral walkway performance without the need for additional support.

Aluminium products help achieve H₂S resilience and whole life cost and environmental targets as a fully recyclable material.

DESIGN

Structure to Eurocode 3. Imposed loads to Eurocode 1.
Manufacture to BS:EN1090 and ISO9001.



PRODUCT CASE STUDY

LOCATION

DEEPHAMS STW
PRIMARY SETTLE-
MENT TANKS

CLIENT

THAMES WATER

CONTRACTOR

AMK JV
(ATKINS MURPHY'S KIERS JOINT
VENTURE)



DEEPHAMS STW P RIMARY SETTLEMENT TANKS

OVERVIEW

This project was successfully delivered on time and on budget due to the flexible nature of the design and the self sufficient nature of the “build and move” approach which allowed separation from critical path mechanical and electrical packages which would have delayed the overall project if craneage had been required to the full extent of the tanks



PRODUCT CASE STUDY

LOCATION

DEEPHAMS STW
PRIMARY SETTLE-
MENT TANKS

CLIENT

THAMES WATER

CONTRACTOR

AMK JV
(ATKINS MURPHY'S KIERS JOINT
VENTURE)

DEEPHAMS STW PRIMARY SETTLEMENT TANKS



DUTIES

Production of detailed design solution with fully substantiated and approved structural calculations.
In house SMSTS and SSSTS site supervision roles.
Production of all Safe Systems of Work and RAMS.
CPCS Appointed Person and Lift Supervisor roles.
CSCS, IPAF, PASMA, EUSR, Thames Water Passport, Confined Space and Working at Height trained site personnel.

PROGRAMME

20 weeks design proposals and approvals.
18 weeks procurement and fabrication leads time.
21 + 21 weeks site duration over 2 mobilisations.

VALUE

£2,600,000.00



PRODUCT CASE STUDY

LOCATION

DEEPHAMS STW
PRIMARY SETTLE-
MENT TANKS

CLIENT

THAMES WATER

CONTRACTOR

AMK JV
(ATKINS MURPHY'S KIERS JOINT
VENTURE)



PRODUCT CASE STUDY

LOCATION

DEEPHAMS STW
PRIMARY SETTLEMENT TANKS

CLIENT

THAMES WATER

CONTRACTOR

AMK JV

(ATKINS/MURPHY'S KIERS JOINT VENTURE)



POWER PLASTICS LIMITED
Thirsk, North Yorkshire, YO7 1PZ.
+44 (0)1845 525 503

| www.powerplastics.co.uk