

Case Study

Northmoor and Amersham WTW



Client:
Suez

Specialist Subcontractor:
Colloide

Location:
Northmoor & Amersham,
England

Project:
Lamella Separator Packages

Colloide designed, supplied and commissioned the Northmoor and Amersham Water Treatment Works (WTW), Lamella Separator packages for SUEZ at Affinity Water drinking water sites. The installation on these sites was completed by CSS.

The product includes 2 treatment streams to treat the overall flow of 35m³/hr on both sites, each stream being designed to handle 17.5m³/hr. The tanks included connections for level controllers. Chemicals are dosed upstream of the lamella settler system, mixed in line using in line mixers and flocculated using slow speed mixers which are both parts of this package.

Our product included a full set of stainless-steel lamella separators which are certified to DWI standards. These were mounted within stainless steel tanks with flocculation tanks upstream of the settlers. The sludge is collected under the lamella settlers and concentrated up to 2.5% dry solids.

Project Deliverables

The main components of the system

- 2 no. DWI certified Lamella separator systems.
- 2 No. Flocculation Tanks
- 2 No. Sludge collection tanks including mixers
- 2 No. Inline Static Mixer
- Associated Actuated Valves
- Access Stairs & Structural Steelwork
- A containerised Plant Room consisting of a Sludge pump set
- and Control Panel.
- Form 4 Control Panel and MCC with Siemens PLC and HMI



Environmental Focus

Sustainable Commitment

One of the pressing issues currently faced by the water industry is incorporating sustainability considerations into design practice and reducing the carbon emissions of energy-intensive processes. At Colloide, we focus on continued innovation across all our technologies, in order to help work towards these environmental considerations.

Our use of Lamella Separators in a clarifier is a prime example of this. They greatly increase the clarifier capacity and enable a much greater flow to be treated in the same footprint as conventional clarification. Our design also ensures maximum efficiency in terms of upward flow velocities.

Why choose Colloide?

Colloide Engineering Systems are one of a few Lamella Separator Package (LSP) suppliers that are in the list of Approved Products and Processes for use in Public Water Supply published by the DWI and our systems can be designed in a wide range of sizes and configurations to suit the individual needs of each of our clients. The clarifier can be used as a standalone system, taking the full plant flow, with or without additional equipment such as sand filters, screens, etc.

“I would like to thank your team for the speed they installed the plant, their works were carried out with a high level of professionalism. Your team are a credit to your company.”

– Mike Carr, Glan Agua Farrans JV

Engineering a brighter tomorrow

