



Bridge Scraper

Brochure



Colloide

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Bridge Scraper Systems Designed by experts



Why choose Our Systems

Bridge Scraper Systems delivered by Colloide Engineering Systems are produced with expert knowledge and design skills to meet your bespoke requirements.

Colloide designs circular and rectangular scraping systems (plastic and steel) for settlement and flotation tanks.

These tanks are designed to separate solids from liquid by either settlement or flotation techniques.

Applications include:

- Primary settlement tanks, final settlement tanks, rectangular settlement tanks and rectangular dissolved air flotation tanks for wastewater treatment.
- Rectangular dissolved air flotation tanks for drinking water application.



Settlement Tank Circular Design



Important Technical Details

The scraping mechanism consists of a rotating bridge structure powered via a periphery drive unit. The bridge supports a frame below it onto which is fixed sludge scraping blades at floor level and a scum blade at Top Water Level.

The sludge scraping blades divert the sludge to a hopper while a side wall scraper can also be fitted to ensure the base of the internal wall is scraped.

The scum blade diverts the scum to the outer wall of the tank where it is collected into a scum box once every revolution of the bridge.



Settlement Tank Rectangular Design



Important Technical Details

The mechanism used for scraping these tanks is based on a chain and flight principle consisting of two chains which move the scraping booms up and down the tanks.

When scraping at Top Water Level, the booms push the scum to the scum outlet end of the tank, where it is collected by a rotating sludge pipe or, alternatively, a collection channel with an adjustable weir.

This scum then flows to a local pumping station for onward pumping. When scraping at the tank floor level, the booms push the settled solids to the thickened sludge outlet end of the tank.

It is normal practice to desludge at this end via actuated valves and pump away using progressive cavity pumps.



Off-Site Design and Build to On-Site Installation



Our off-site design and build is a cost-effective solution through our ability to assemble and test equipment in a controlled environment minimising foreseeable problems onsite, costs and time.



Cost Effective Water Treatment Solutions



Our Experience

Our experience is accumulated over a 20 year period. During this time, we have gained extensive experience in Design, Manufacture, Installation and Commissioning of Bridge Scraper Systems.



Our Capabilities Meet Your Needs

We understand each WWTW is unique with bespoke requirements. That is why for 20 years our capabilities have expanded to enable the delivery of a wide range of options.

Capabilities

Supply chain

We have sourced suppliers and developed a reliable relationship, with suppliers based across the UK and Ireland. Our supply chain is accredited to high Quality, Health and Safety and Environmental standards.

We have the capability to deliver your requirements anywhere across the UK, Ireland, Scotland, and Wales.

Location

Availability

We have the capacity to engineer equipment on a short lead time, due to our ability to design and build off-site.

Our standardised design can be adapted to meet bespoke requirements for drinking water and wastewater sites.

Flexibility & adaptability

Our range of Bridge Scraper Options

We have a broad range of bridge sizes that are compatible with your requirements.

Our bridges are factory tested prior to delivery to site ensuring there are minimal delays for the onsite testing and commissioning stage.

Contact our sales team for further info on all tank specifications.



Our Product Range



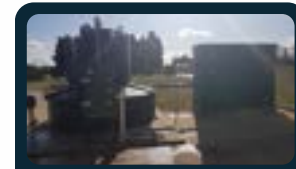
Activated Sludge Treatment



Anaerobic Digestion



Biomass Heating and Heat Pumps



Chemical Dosing



Bridge Scraper Systems



Clarifier Systems



Control Systems



DAF



Deep Bed Sand Filters



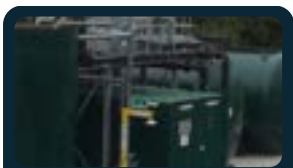
District Heating & Energy Centres



Dynamic Sand Filters



MBBR



MBR



Membrane Filtration



Multi Cell Media Filtration



Pressure Filters



Pumping Stations



SBR



Tekleen Filters



Rapid Gravity Filters



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