Rotating Settlement Tank Scrapers

Half Bridge • Three-Quarter • Full-Bridge
The Ham Baker Group offers a range of modularised scraper bridge solutions which enable us to deliver in the shortest possible lead times.

Ham Baker Group's rotating half-bridge, three-quarter bridge and full-bridge scrapers are built to a standardised modular design. Comprising quality components and attributes such as:

- Design to WIMES standards for primary (PST), final (FST) humus and storm tank processes.
- A range of optional and adaptable features to accommodate particular specification requirements.
- Drive unit speed and power to suit the required application.
- Stainless steel submerged components as standard.
- Optimum bridge and scraper construction for typical load conditions and tank parameters.
- Installation by our in-group experienced and certified mechanical and electrical installation teams.
- All structures CE marked in accordance with EN1090

Peripheral drive with loss of motion detection and either mechanical torque overload protection or real-time torque feedback for process optimisation.

Permanent or removable anti-slip flooring on bridge deck.

Automatic greasing systems for slew-ring bearing.

Fully adjustable scraper blade system complete with reversible scraper blades for improved longevity.

All electrical wiring and components included as standard.
The Ham Baker group of companies which include the historic Adams Hydraulics and A&J Water brands have together delivered hundreds of scraper bridges to the UK and international markets.

With each of our products and services we are proud to offer:

- The extensive expertise and experience of our specialised team combined with our active research and development work ensures the optimum solution for every customer on every project.
- Fast lead times thanks to our standardised modular designs, focused UK-based supply chain, and quick responding site services team.
- Adaptable features and accessories to suit the budget and requirements of every project.
- A complete solution including concept design support, design, manufacture, factory testing, delivery, installation, commissioning and maintenance and aftermarket care.
- Design, supply and installation of all electrical components as standard.
- Design, supply and installation of GRP ancillary components as required.
- High quality engineering and UK-manufactured components.
We can offer services to help define the functional requirements for new equipment, such as our sludge loading data analysis service for existing assets*.

Though any tank size or specification can theoretically be accommodated, the below illustrates some typical parameters of our settlement tank scraper bridges.

<table>
<thead>
<tr>
<th></th>
<th>Typical Tank Dimensions Ø (m)</th>
<th>Typical Tank Side Wall Depth d (m)</th>
<th>Typical Floor Slope Θ (°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half Bridge</td>
<td>5m 15m 25m 35m 45m</td>
<td>2.0 - 3.5m</td>
<td>7 - 15</td>
</tr>
<tr>
<td>Three Quarter Bridge</td>
<td></td>
<td>3.0 - 3.5m</td>
<td>7.5</td>
</tr>
<tr>
<td>Full Bridge</td>
<td></td>
<td>2.5 - 5.0m</td>
<td>7.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Typical Peripheral Speed (m/min)</th>
<th>Typical Walkway Width and Loading</th>
<th>Typical Sludge Loading on Scraper Blades (kN/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PST &amp; Storm Tanks</td>
<td>1.5 - 2.1</td>
<td>0.6 - 1.0m 2-5KN/m²</td>
<td>60 - 200</td>
</tr>
<tr>
<td>FST &amp; Humus Tanks</td>
<td>1.0 - 1.2</td>
<td>0.6 - 1.0m 2-5KN/m²</td>
<td>60</td>
</tr>
</tbody>
</table>

*Subject to verification of feasibility on a case-by-case basis
We can offer all manner of adaptations, optimisations and accessories to suit particular site process, maintenance or safety requirements.

A variety of optional features are available such as:

- Bespoke access ladders, walkways, stairs and hand-railing to British standards.
- A range of scum removal and scum concentration equipment.
- All manner of flow-controlling baffles for optimum settling conditions including Diffuser Drums, Stamford baffles, McKinney baffles and Energy Dissipating Inlet baffles (EDIs) complete with hydraulic design and modelling services if required.
- Fitments for sludge blanket detection equipment, torque monitoring equipment, lifting davits, drive carriage obstruction detectors and other instrumentation or components as required.
- Drive traction improvement options including: Anti-slip running surfaces, heat lamps for winter operation and loss-of-motion detector on idle wheel.
- Tanks and their functional components in GRP or steel including scum boards, launders, weirs and covers.
- Winch-lifting weir and launder cleaning brush systems.
- Adaptation to suit a broad range of tank types, sizes and structural forms.
Process Equipment Division

A & J WATER TREATMENT
www.ajwater.co.uk

THREE STAR ENVIRONMENTAL
www.3star.co.uk

ADAMS HYDRAULICS
www.adamshydraulics.co.uk

COES GRP
www.coesgplimited.co.uk

Ham Baker Group is a trading name of F. J. Holdings Ltd
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