Krüger’s peripherally driven scraper bridge model AM for circular settling tanks is simple and sturdy.

ADVANTAGES

- A high degree of reliability
- Requires a minimum of maintenance
The function of the scraper bridge is to transport settled sludge to the sludge pit located in the centre of the settling tank. From there the sludge is removed for further treatment.

A surface scraper collects the scum which is removed through a scum outlet.

The scraper bridge is used in primary, intermediary and final settling tanks of the circular type.

Design

The following elements form part of the scraper bridge:

- service bridge
- centre bearing
- electric driving unit
- bottom scraper
- surface scraper/scum outlet

Service bridge

The service bridge is a modularised, self-supporting lattice structure.

Centre bearing

The centre bearing is a standard element with the bridge mounting frame, the base plate with bearing and the collector ring supplying the power to the electric driving unit. The centre bearing can be installed on a steel or concrete foundation.

Electric driving unit

The electric driving unit is a standard element consisting of a gearmotor fitted on a bogie.

Bottom scraper

The bottom scraper is an assembly forming a logarithmic spiral. The bottom scraper is attached to the service bridge by a number of compression bars and tension rods and is fitted with wheels and a rubber strip. The bottom scraper collects the sludge on the bottom of the tank and brings it to the centre pit.

Surface scraper/scum outlet

The surface scraper is fixed to the service bridge. The scum outlet is mounted in the settling tank on brackets secured on the tank wall.

Material/surface treatment

The steel elements of the service bridge, centre bearing and electric driving unit are manufactured from quality FE360B steel and are hot dip galvanised according to ISO 1459 and ISO 1461.

The bottom scraper, tension rods and compression bars, surface scraper and scum outlet are made from SS2333 quality stainless steel. The paint system used for the gear unit makes it resistant to the humid environment in which it will be operating.

Standard programme

The scraper bridge is available for tanks with a diameter of between 10 and 39 m in intervals of 1 m and with bottom scraper for tank depths of 3.0, 3.5, 4.0, and 4.5 m at the periphery.

The scraper bridge can be extended beyond the centre and be fitted with a special scraper, so that the area scraped by the bottom scraper can be increased by 40-50% depending on the tank diameter, however, only for diameters of more than 24 m.

### Technical specifications

<table>
<thead>
<tr>
<th>Tank diameter</th>
<th>Electric motor kW</th>
<th>Peripheral speed Primary sludge m/min.</th>
<th>Activated sludge m/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 - 22</td>
<td>0.25</td>
<td>3.6</td>
<td>1.8</td>
</tr>
<tr>
<td>23 - 39</td>
<td>0.37</td>
<td>3.6</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Subject to changes in the technical specifications without prior notification.