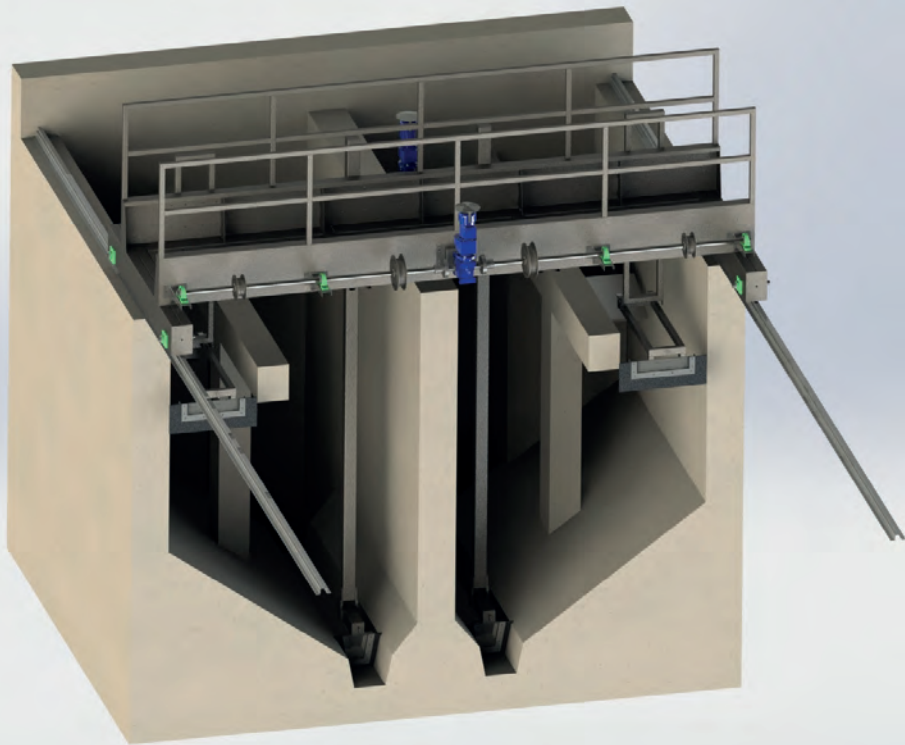




LINEAR CLARIFIER POOL SCRAPERS



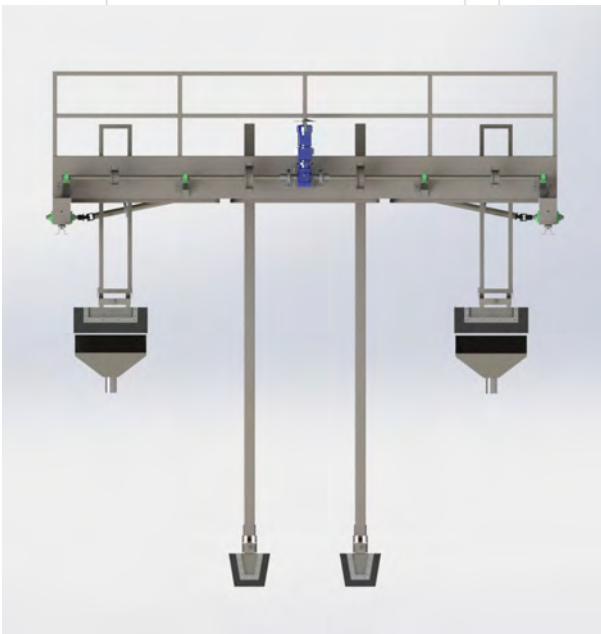
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LINEAR CLARIFIER POOL SCRAPERS

General Description and Intended Use

It is used to scrape the sludge and the foam with the longitudinal moving bridge which moves in both sides in rectangular-section settling pools of the treatment plants. The sludge settled at the bottom may be transmitted to the collection pit where the pumps will suck the sludge with the scraper connected to the bridge or removed by sucking with the pump which is suspended to the bridge and move with the bridge.



Working Principle Of Equipment

When the bridge starts to move, the scraper arms connected to the bridge get down and move with the bridge in longitudinal direction. The up and down movement of the surface scraper arms is controlled with switches. After the surface scraper gets down, the sludge pumps or deep scrapers start to operate and the longitudinal scraper bridge starts to move forward. When the bridge moves to the scraping ramp, the surface scraper in the oil and foam channel collects the dirt, oil, etc. pollutants on the surface of the wastewater and directs them to the scraping ramp. The sludge settled at the bottom is removed from the wastewater by the sludge pump or deep scrapers. When the dirt, oil, etc. collected by the surface scraper reach the scraping ramp, they are removed from the surface of the water and the bridge movement is stopped by the switch. Before the bridge starts to move in the opposite direction, the scraping arms are ascended with the help of the reducer. After the surface scraper is ascended, the longitudinal scraper bridge starts to move backward and returns to its initial position. After the bridge completes one tour and rests a period of time adjusted repeats the same loop and continues to operate.

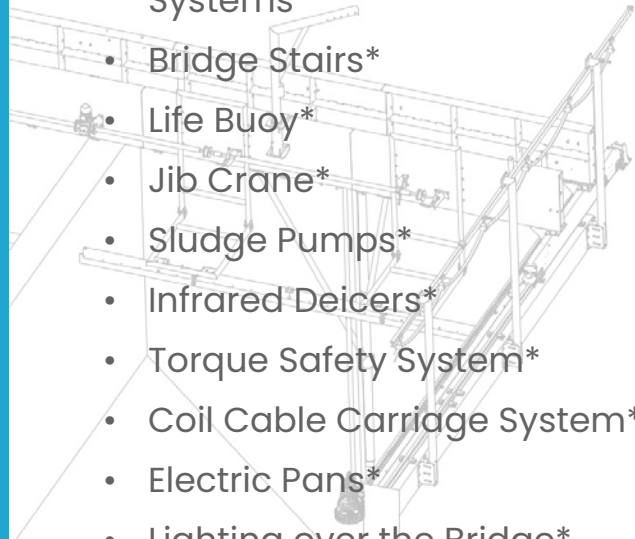
TECHNICAL SPECIFICATIONS

- It is designed depending on the pool size.
- While the surface scrapers remove the pollutants such as oil, foam, solid material etc., the sludge at the bottom is removed by the sludge pump or deep scrapers.
- All design loads and allowed deflections are calculated and manufactured according to the pool size.
- As a result of resistance calculations, the bridge frame is manufactured as pipe type on full metal sheet side wall, semi metal sheet side wall with guardrail or the type on the supporting beam with guardrail.
- The bridge guardrails also provide additional safety in terms of occupational health and safety.
- In drive systems, a spinning warning system is used against cold weather and icing conditions.
- The whole scraper bridge is designed by considering the cabling system and cable routes on it.

Accessories

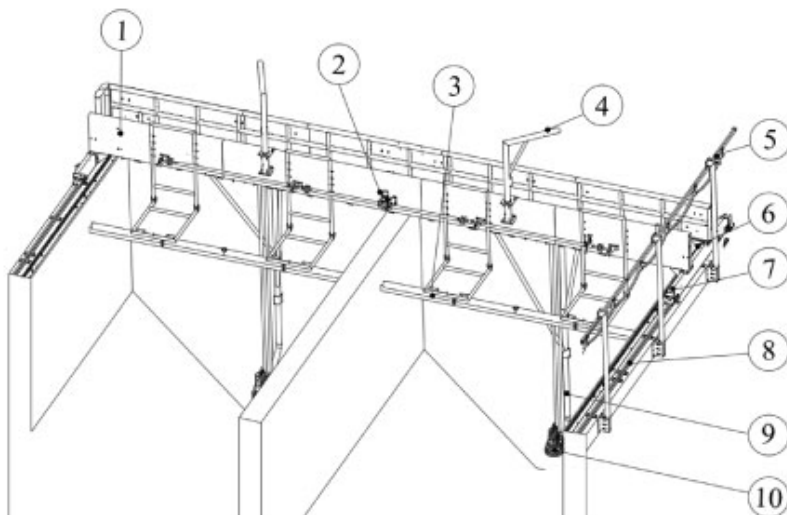
- Reducer Stands
- Bridge Stoppers
- Scraper Rope
- Spinning Switch
- Control Mechanism*
- Foam Channel Cleaning Systems*
- Bridge Stairs*
- Life Buoy*
- Jib Crane*
- Sludge Pumps*
- Infrared Deicers*
- Torque Safety System*
- Coil Cable Carriage System*
- Electric Pans*
- Lighting over the Bridge*
- Emergency Button*
- Local Power and Control Panel*
- Cabling Systems*

* Optional accessories are defined.





No	Part Name
1	Frame
2	Motor / Reducer
3	Surface Scraper
4	Jib Crane
5	Cable Carriage Rail
6	Walkway Grids
7	Bridge Wheel
8	Bridge Wheel Rail
9	Sludge Pump Pressing Line
10	Sludge Pump



Material Details

- Frame: They can be manufactured as S235JR (St52) + Hot Dipping Galvanized Coating, S235JR + Epoxy Paint, DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316).
- Underwater Material: They can be manufactured as DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316).
- Wheel: It is manufactured as 1050 Tool Steel + Electro Galvanized.
- Rail: It is manufactured as S-Series Rail Steel + Hot Dipping Galvanized coating.
- Walkway Grids: They can be manufactured as S235JR Hot Dipping Galvanized Coating, DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316) or CTP.

"Different materials can be preferred in accordance with the request of the customer."



Advantages

- Fully Automatic Operation,
- Possibility to Control and Follow the System Operation Over SCADA,
- Resistant Heavy-Duty Design,
- Design According to Single or Double Pool,
- Long-Life Use,
- Design Suitable for Outdoor Operation,
- Easy Maintenance Possibility,
- Designing Surface Scrapers and Deep Scrapers According to the Sector,
- Sludge Pump or Scraper Pallet Selection Option,
- Single Reducer Use with Shaft Instead of Double Reducer.



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