

SUSTAINED EQUIPMENT SOLUTIONS

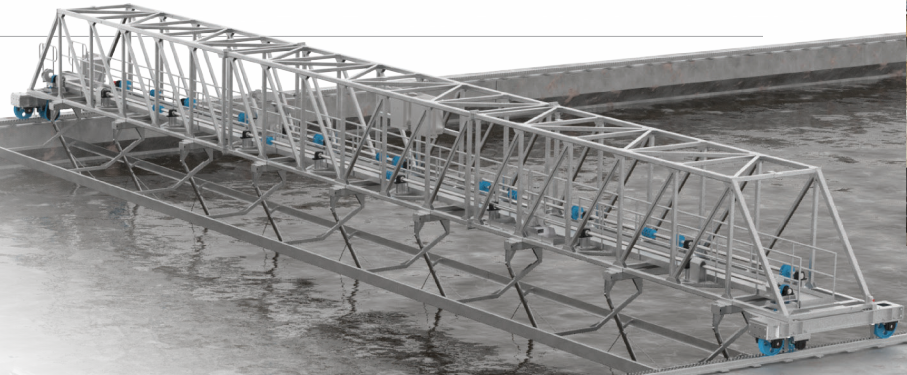
TRAVELING BRIDGE CLARIFIER

LONGEST LIFE, LOWER MAINTENANCE, LESS DOWNTIME



Bringing water to life®

TRAVELING BRIDGE CLARIFIER



Ovivo's Traveling Bridge clarifier mechanism is utilized in rectangular clarifier basins to convey or pump solids and scum in wastewater and potable water plants. The Traveling Bridge is the only rectangular clarifier mechanism that operates above the tank allowing most, or all maintenance to be performed without entering or dewatering the basin.

HOW IT WORKS

Rectangular clarifiers perform the same functions as common circular clarifiers but often provide better oil, grease and scum capture. The traveling bridge uses two end trucks mounted to a bridge that spans the tank. A bridge mounted drive system provides traction to wheels that drive the bridge back and forth over the basin.

The bridge — measuring from 12 m (40 feet) to 30 m (100 feet) or more — moves back and forth along the length of the basin on steel rails. The undercarriage mechanism suspended from the bridge collects, conveys, or removes settled sludge through the bottom scraper or suction pipes. The settled sludges are typically conveyed to hoppers or pumped into an adjacent channel. Scum and floating matter are then collected or conveyed by a surface scraper where it can be removed from the basin.



The Traveling Bridge Clarifier is designed for improved maintenance with lower operating costs over the life of the system as compared to traveling bridges of the past.



FEATURES AND BENEFITS

Ovivo's Traveling Bridge Clarifier features and benefits include:

- Customizable designs for retrofitting or repurposing existing basins, whether sloped, V-shaped, stepped, or flat
- Scraper plow blades, bi-directional scraping or hydraulic suction sludge removal mechanisms are available
- Above-tank installation for ease of maintenance without the need to dewater, clean, or enter basin can be provided for many basins
- Advanced designs and protection that avoids end truck misalignment, derailing, or crabbing issues
- Capable of handling heavy sludges up to 7 percent
- Optimized components including split bearings and high-grade materials for low maintenance and easier serviceability
- Convenient relay or PLC-based controls can be provided for compatibility with SCADA via hard-wired or radio-controlled monitoring
- Optional climate-controlled weather enclosure for maintenance and monitoring in harsh weather environments

TECHNICAL INFORMATION

- Traveling Bridge Clarifiers are customizable for various tank configurations and environments.
- Bridges manufactured in carbon steel, 304SS, 316SS, or aluminum using either simple beams or trusses
- Undercarriages can be provided in hot dipped in galvanized steel, 304SS, or 316SS for various levels of corrosion resistance

SCRAPER TYPES: Single or multiple rake blades with squeegees are suspended from the bridge that convey settled or floating solids towards a collection point at one end of the basin.

HYDRAULIC SUCTION: Designed to positively remove settled sludges from the clarifier via suction tubes connected to a pump or siphon, delivering it to a sludge trough that runs parallel to the length of the basin. This type is typically used in secondary clarifier or potable water settling basins.

BI-DIRECTIONAL PIVOTING SCRAPER: A pivoting scraper, or "teeter-totter" style, can convey solids in both directions and deposit them in sludge hoppers located at various points along the basin floor. This type is typically used where there are multiple hoppers or where hoppers are not located at the end of a basin.

- Various traction drive configurations include four-wheel hydraulic drive packs or cog wheel designs with conventional line-shafts or Ovivo's unique Dual-Synchronous drive assemblies.
- Electrification of each bridge can be provided by conductor bar, festoon, cable reel, or e-chain system for various applications and environments
- May be provided with fabricated open-channel effluent troughs with weirs and scum baffles
- Compatible with Ovivo's Submerged Effluent Launder (SEL) system
- Bridges factory tested and assembled before delivery

Ovivo continues to refine its Traveling Bridge Clarifiers with the newest technologies using manufacturing standards of the 21st century to optimize safety, reliability, and serviceability. Traveling Bridge Clarifier mechanisms have typical life-spans exceeding 40 years providing years of reliability and serviceability to owners.

OUR TEAM | can further lower your costs by retrofitting existing mechanisms from virtually any manufacturer, either partial or total, extending the life of existing equipment.

GET THE LATEST TECHNOLOGY

Our full-time team is ready to support, design, and retrofit virtually any Traveling Bridge, whether ours or from other OEMs.

Contact us for more information about Ovivo's Traveling Bridge Clarifier

ovivowater.com

**Contact us for more information about the
TRAVELING BRIDGE CLARIFIER**

RELATED PRODUCTS

Enviroquip® Plow Clarifier
Enviroquip® Rapid Sludge Removal Clarifier
Submerged Effluent Launder
Slotted Skimmer Pipe Scum Collection



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