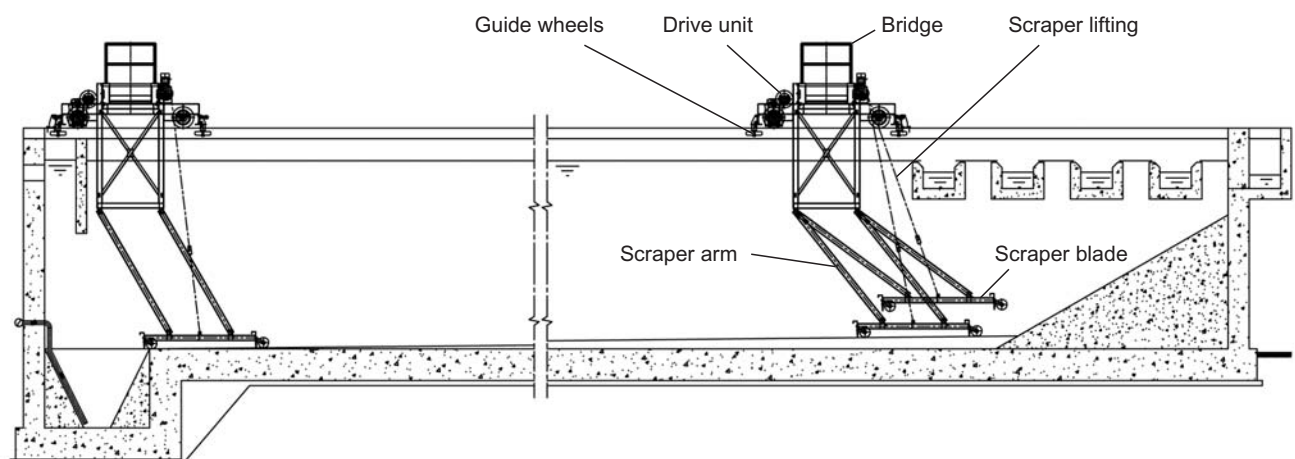


RECIPROCATING BRIDGE SCRAPER

Settling process, which is one of the most commonly used unit operation, sometimes is accomplished in rectangular shaped tanks. In such cases, sludge settled to the bottom must be conveyed to the sludge hopper located at the inlet part of the tank. Scraper used for this purpose is formed by a reciprocating bridge with scraper arm and blade that can be lowered and raised in order to provide scraping in one direction.

Bridge runs as bottom scraper is raised when moving towards to outlet side of the tank. During the movement towards sludge hopper, scraper arm is lowered and sludge is pushed to the hopper. Operation mode of the scraper can be programmed according to sludge quantity and type.



Reciprocating bridge scraper consists of following main parts;

Bridge

It is constructed by welding of standard or folded type profiles. Walkway is made of galvanised grating as common application. Hand railing of the bridge is made of standard pipes and bolted to the bridge.

Drive unit

It is formed by a geared motor located at the middle of the moving bridge and two drive wheels set located at both ends, each having one duty and one idle wheel. Centrally located drive unit carry the movement to the drive wheels by means of a horizontal shaft. For long bridges, number of drive units is two at both ends. Sometimes steel wheel and rail combination is used instead of rubber wheels.

Guide wheels

There are 4 number of wheels located inside the tank to assure smooth movement of the bridge. With the help of these wheels, bridge is guided to travel on top of tank walls. Guide wheels are not used for bridges which run on rail.

Scraper

Bottom scraper are fixed to the bridge and made of standard profiles and pipes. Universal joint used in connecting scraper to the bridge gives the flexibility when scraper blade meets an obstacle.

Scraper blade

Rubber scraper is located at the edge of scraper. Rubber edge is replaceable when it is worn out, due to bolted construction.

Scraper lifting

Scraper which is equipped by motor gearbox and cable drum is capable to raise and lower the scraper blade according to the bridge moving direction.

Scum removal system (optional)

If required, a scum removal system made of welded standard profiles and sheets are provided to collect scum and discharge it to the scum through.

Optional accessories:

- Local control panel
- Overflow weir system

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RECIPROCATING BRIDGE SCRAPER



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