

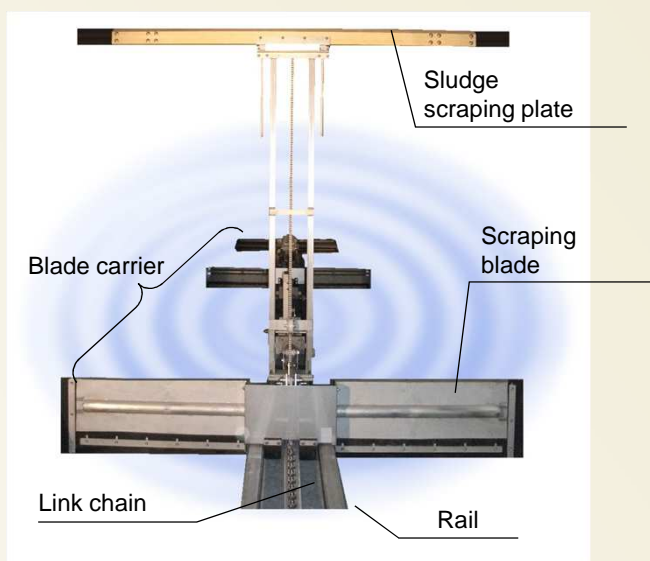
FUJIWARA INDUSTRY CO.,LTD.

Monorail Type Sludge Removal System

- **Highly earthquake-resistant, our device is designed to handle rectangular sedimentation basins, plate settlers and sand basins!**

Features

- Simple in structure with a small number of components, the scraper poses no serious load on the side wall of the sedimentation basin.
- The scraper can collect sludge over a very wide area and prevents generation of corroded sludge as the shape of the scraping blade is designed to match the basin bottom haunch.
- It is designed to run its underslung blade carrier on the basin bottom and is therefore highly earthquake-resistant.
- It features ease of installation and thus ensures quick installation.
- It is easy to maintain because of its use of a smaller number of components and expendable parts.



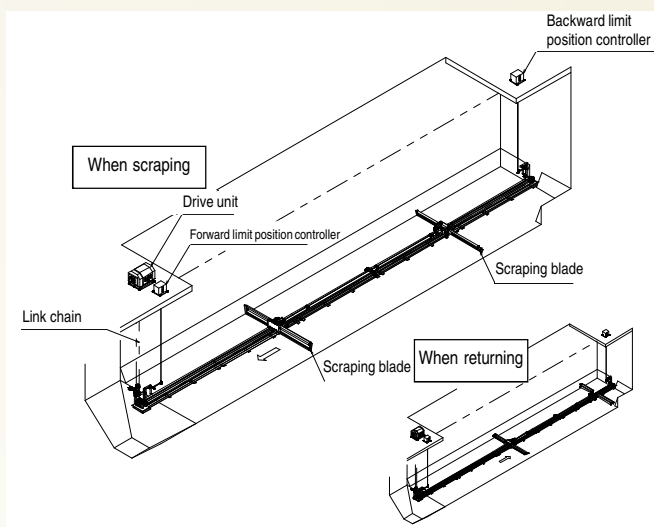
Overview (Technical principles, actions, etc.)

[Structural Overview]

- A blade carrier, equipped with scraping blades, shuttles on a rail installed at the center of the basin bottom as it is towed by the link chain with the forward and backward rotation of the drive unit. As the blade carrier moves toward the pit, the scraping blades are lowered rake the sludge on the bottom. When the blade carrier moves back, the blades are lifted up.
- No special drive unit is necessary; the scraper synchronizes with the sludge scraping plate as it returns.

[Functional Overview]

1. Start of scraping: After a predetermined lapse of time, the drive unit begins forward rotation to lower the scraping blades, causing the blade carrier to move toward the sludge pit while collecting the sludge.
2. Completion of scraping: The blades stop at the forward limit position as the scraper arrived at the sludge pit, and the blade carrier stops at the set position by the control unit.
3. Start of return: After a predetermined lapse of time, the drive unit starts reverse rotation to raise the blades and causes the blade carrier to start moving toward the backward limit position.
4. The scraper performs as it repeats the movements of 1 through 3 above.



Introductory Track Record

[Outside Japan]

- China (2006 to 2007 and 2009)
- Taiwan (2003, 2005 and 2009)

[Inside Japan]

- More than 150 units to sewerage plants (since 1993)
- More than 60 units to water treatment plants (since 2001)



Unit delivered to a water treatment plant

Effects

- Since the scraper uses almost no brackets, it does not allow deposition of sludge, which helps improve water quality.
- Because of its use of a small number of components, the scraper eventually has a fewer spots to inspect.
- Because of its use of a small number of expandable parts, the scraper does not need much maintenance cost.
- As the underslung blade carrier moves on the basin bottom, it is less subject to the impact, and its resultant damage, of vertical and lateral water trembling by a major earthquake or its aftershocks and thus allows easy restoration even in the event of damage.



Link belt made of complex structure

Link belt type (flights and chains that dropped after an earthquake)



Monorail sludge scraper

Inquiries

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