

SCUMSCRAPE ESS

SURFACE SCRAPING SYSTEM

PRODUCER

NEOWATER technologies



MAIN CHARACTERISTICS AND APPLICATIONS:

- robust construction: features few moving parts for reliability
- low maintenance costs
- no disturbing of the flow conditions
- flexible design: easily adaptable to existing reservoirs
- easy maintenance
- versatile scum movement: capable of moving scum to either side as needed

OPERATING PRINCIPLE

The ESS surface scraper is engineered to efficiently remove scum without entraining excess water, making it ideal for various applications including municipal wastewater treatment and industrial processes. This scraper is compatible with both flotation tanks and sedimentation system reservoirs. It features an easy-to-install, reliable design with minimal moving parts. The scraper blade can clear scum from either the entire surface or specific parts of the tank, directing it towards a rotating pipe or fixed channel for collection. A distinctive attribute of the ESS is its step-by-step movement, where the push rod oscillates back and forth, and a special mechanical device toggles the scraper blade between the working and upper positions.

The scraper blade of the ESS surface scraper is mounted on a sledge that incrementally advances via a push rod. At each endpoint of the stroke, the direction of the sledge's movement reverses. This design allows for the deployment of multiple scraper skids within the same tank, which is useful for removing large amounts of sludge. As it moves backward, the scraper blade retracts upwards, avoiding contact with the foam until it shifts back into the working position. The ESS scraper effectively pairs with the ERP rotating pipe, which automatically tilts down as the scraper blade approaches. The scraper blade alone makes contact with the water's surface. After moving the scum into the collecting pipe, the blade angles itself for the return journey, allowing for the use of multiple blades in a single tank for efficient scum removal.



Combination of the bottom scraper EBS, surface scraper ESS and rotating scum pipe ERP