ming blade manually from the panel. The bridge movement is controlled by limit switches. The forward limit switch signals the movement control unit to reverse direction and, at the same time, the scraping blade lifts up from the bottom while the surface scum/foam blade moves down and conveys the scum/foam to the skimmer. The return limit switch restores the previous condition.
The bridge shall be a lattice construction made of min. St 37 carbon steel and hot dip galvanized after fabrication. Droplegs, bottom and surface blades in stainless steel EN 1.4404 (AISI 316L). The scraper is connected to the bridge by means of steel tubes with adjustable joints. The bottom scraper shall be provided with a sufficient number of wheels and fit perfectly to the bottom of the tank. The rims, shaft and wheel bearings of carrying wheels are completely made of stainless steel. Outer surface of carrying wheels shall be made of elastic solid rubber. Sweeping arms built in tubular profiles and stainless steel of EN 1.4404 (AISI 316L) quality, with its corresponding reinforcements, bumps and other components for its accurate operation. Walkway installed over the bridge, allows the access to any point of it. It will be built in hot dip galvanized framework. Handrail placed around the bridge as protection, built in tubular min. St37 carbon steel profiles and hot dip galvanized after fabrication. It will be open at the end corresponding to the bridge, complemented with one or more steps according to the distance between the walkway and the floor. Walkway, handrail and toeplate made of hot dip galvanized steel. Replaceable scraper plates made of neoprene rubber or higher quality. The bridge shall consist of access ladder made of min St37 carbon steel and hot dip galvanized for emergency cases. The width of the bridge shall not be less than 800 mm. The height of the handrails shall be minimum 1000 mm.

The bridge shall be designed to carry a uniform load of 1.5 kN/m^2 in addition to dead weight and operational loads. The Contractor shall design the bridge for the actual point-load adequate for the equipment to be unloaded, however, no less than 3.0 kN in the middle of the span.

The maximum allowable deflection at the above design loads is 1/500 (Acc. To DIN-EN 19569) of the span. Limitations of the load bearing capacity of bridge shall be indicated on a distinct sign mounted at the entrance to the bridge.

The power supply to the bridge shall be provided through a flat cable running in a guide rail along one side of the sedimentation tank wall.

The bridge shall be mounted on end carriages (bogies) at both sides which have two guiding wheels or wheels driven on rails. The material of rail shall be min. GG 60 cast iron and the material of wheels running on the rail shall be St-37 carbon steel. The wheels running on the concrete wall are made of cast iron furnished with rubber or polyurethane.

One wheel at each end shall be connected to a drive unit via traversing drive shafts. Furthermore, the bridge shall be provided with four fixed guide wheels running on the inside of the walls. The guide wheels shall ensure that the bridge runs evenly.

The scraper shall be provided with the necessary gear box, drivers, motors and supporting bridge structures.
Scraper rate shall be between 1 m/min and 3 m/min.

Components	**Materials**
Bridge, walkway, handrail	Min. St 37 carbon steel and hot dip galvanized
Bogie	AISI 316L
Surface Scraper	AISI 316L
Bottom Scraper	AISI 316L
Ladder	Min. St 37 carbon steel and hot dip galvanized