## **CLARIFYNG SCRAPER BRIDGES**

### DECANTING BRIDGE - LONGITUDINAL ENCLOSURE Type: MR46

This equipment is designed for mechanical separation of solids and suspended particles, which are decanted due to their nature or with the help of a flocculant reagent, in the primary and secondary decanting processes of water treatment plants. Sludge is extracted with a slightly inclined slab and a scraper that conducts it to the final collection basin.

#### **Descriptions and Features:**

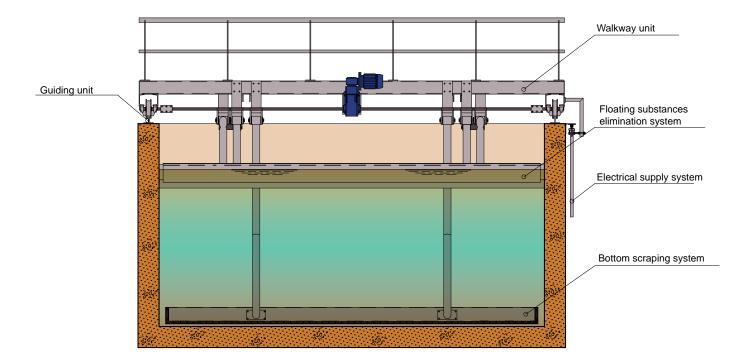
- Walkway unit. Built with steel plate, drawer type and with stainless steel railway on both sides. Galvanised metal or GFRP lattice work for personnel access. Connected motorised unit on both sides of the walkway.
- **Motor drive.** Consisting of a geared motor that operates the primary axle. Power wheels mounted on its ends. These wheels, like the drive wheels, are completely metallic so they can move through rails.
- **Guiding unit.** Through rails anchored to the top slab, on both sides of the side walls and along the longitudinal direction of the enclosure.
- **Bottom scraping system.** Scraper built in steel plate, with an adjustable elastomer built on it for a perfect adaptation to the curb of the enclosure. Motorised hoisting operation.
- Floating substances elimination system. Consisting of two scrapers that sweep the fat area, moving the fats towards one of the ends of the enclosure where they are poured into a hopper. The layout of the scrapers eliminate the possibility of dead areas. The entire unit hangs from the walkway. The operation is mechanical but, depending on the side of the scrapers, it can work via electric traction.
- **Electrical supply system.** To be installed along the enclosure and on one external side. Provides electrical supply to the manoeuvring cabinet, based on a foldable cable attached to carts that move along a metallic guide.
- **Control equipment** (optional). A switchboard controls the entire automatic operation of the equipment, with inductive end stops that control the forward and backward movement of the unit. It also operates the bottom scraping system according to the bridge movement direction.

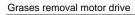


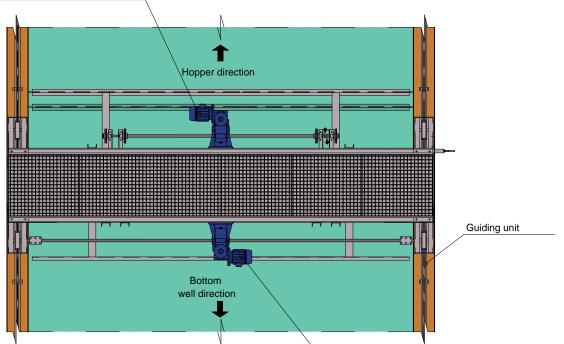












Main movement motor drive





This equipment is designed for mechanical separation of solids and suspended particles, which are decanted due to their nature or with the help of a flocculant reagent, in the primary and secondary decanting processes of water treatment plants. Sludge is extracted with a slightly inclined slab and a spiral scraper (peripheral driven sludge scraper) that conducts it to the central basin.

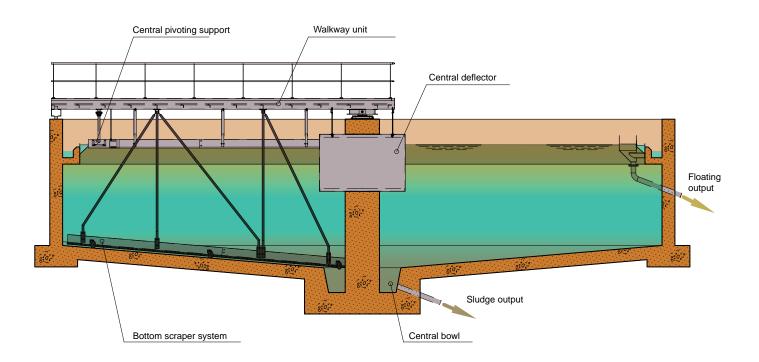
#### Descriptions and Features:

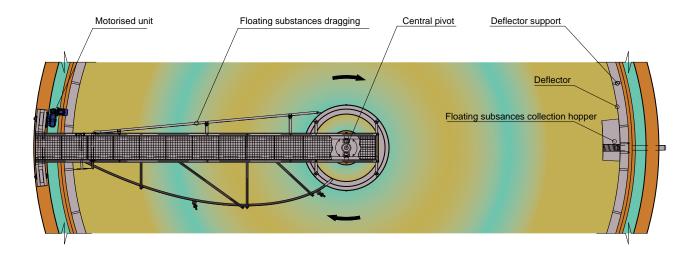
DAGA

- **Walkway unit.** One end rests on the central pivot and the other one is connected to the motorised unit. Built with steel plate, drawer type and with stainless steel railway on both sides. Galvanised metal or GFRP lattice work for personnel access.
- **Motorised unit.** Located on one end of the walkway and consisting of a geared motor and two wheels, one powered, one guided with red-band wheels and supported by ball bearings.
- Bottom scraper. Consisting of the scraper and its hanging system. The scraper is a continuous spiral, built in steel plate and an adjustable elastomer profile that carries out the scraping. It moves on a wheel set. The entire system hangs from the walkway, from stabilising and tightening pipes. Storage and extraction occur in the central basin, located on the curb of the decanter.
- Floating substances dragging system. Consisting of the surface sweeping scraper, with a special design to move the floating substances to the outer end, where a pivoting arm introduces them inside the collection hopper.
- Floating substances collection hopper. Installed on the outer end of the enclosure and directly anchored to the foundation work. It can be manufactured in two versions, overwater (standardised) or underwater.
- **Central pivoting support.** This articulated unit allows circular movement of the walkway. The unit rests on one end of the walkway and, thanks to a large diameter bearing, supports any stress resulting from irregularities of the terrain. It has an integrated contact ring collector for the electrical supply of the motor.
- **Central deflector.** Welded in steel plate. Its purpose is to slow down water inflow to the decanter, resulting in even distribution throughout the entire enclosure.

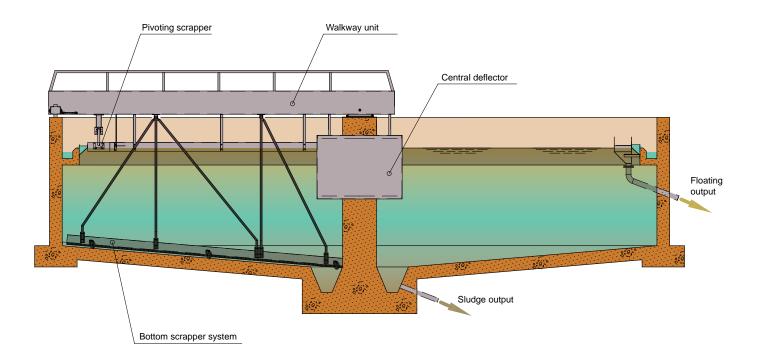


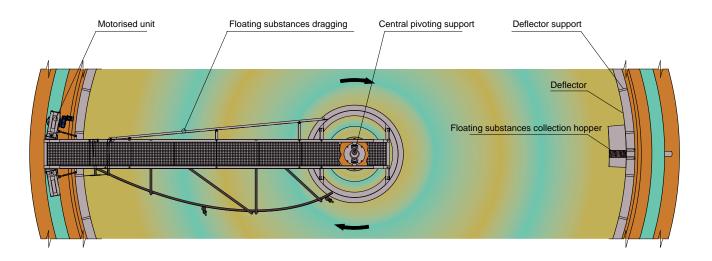
72







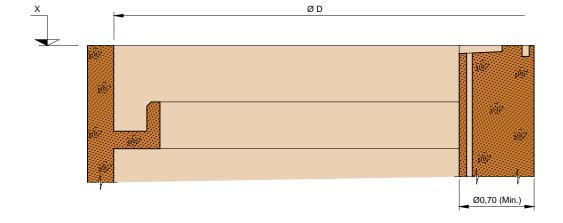




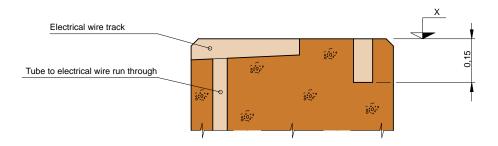


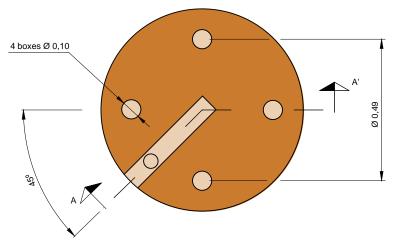






SECTION " A-A' "





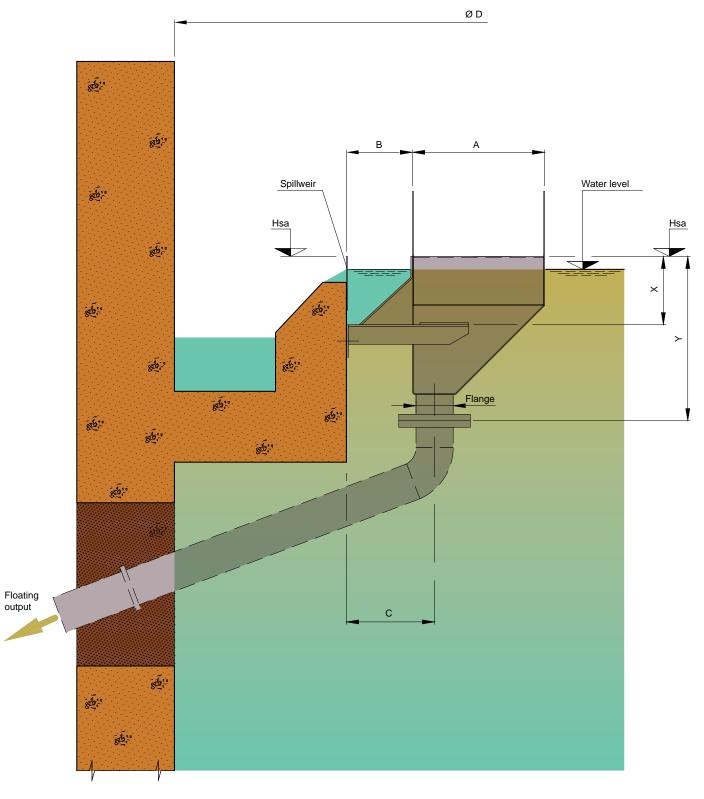
75

Dimensions in meters









Settling Ø D	A	В	С	х	Y	Flange
	0,40	0,20	0,27	0,21	0,50	Ø 4"
	0,80	0,20	0,30	0,21	0,59	Ø 6"

Dimensions in meters

















# **CLARIFYNG SCRAPER BRIDGES**

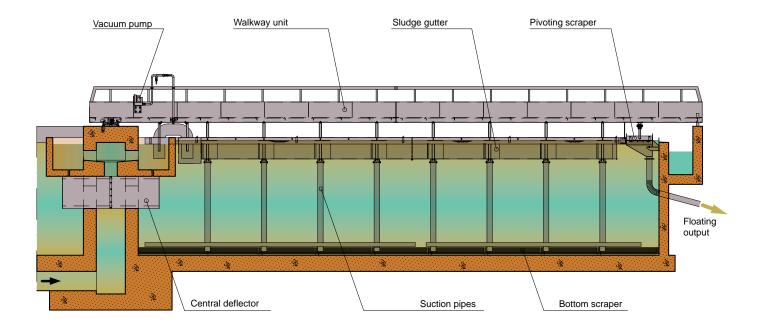
SUCTION DECANTING BRIDGE - CIRCULAR ENCLOSURE Type: MR39

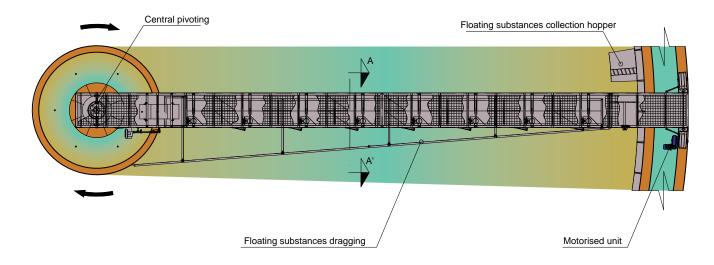
This equipment is designed for mechanical separation of solids and suspended particles, which are decanted due to their nature or with the help of a flocculant reagent, in the primary and secondary decanting processes of water treatment plants. Sludge is extracted via a suction system that hoists them to the outside.

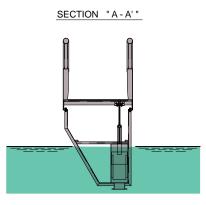
#### **Descriptions and Features:**

- **Walkway unit.** One end rests on the central pivot and the other one is connected to the motorised unit. Built in drawer-like steel plate and tubular profiles that also serve as a handrail. Galvanised metal or GFRP lattice work for personnel access.
- **Motorised unit.** Located on one end of the walkway and consisting of a geared motor and two wheels, one powered, one guided with red-band wheels and supported by ball bearings.
- **Central pivoting support.** This articulated unit allows circular movement of the walkway. The unit rests on one end of the walkway and, thanks to a large diameter bearing, supports the possible efforts due to irregularities of the terrain. It has an integrated contact ring collector for the electrical supply of the motor.
- **Central deflector.** Welded in steel plate. Its purpose is to slow down water inflow to the decanter, resulting in even distribution throughout the entire enclosure.
- **Bottom scraper.** With adjustable elastomer profile that carries out the sweeping, attached to a saw tooth shaped plate that conducts the sludge towards the suction pipes.
- **Suction pipes.** These pipes suction the sludge from the bottom of the enclosure and hoist it to the inside of the sludge gutter while supporting the bottom scrapers.
- **Sludge gutter.** Built in steel plate, it collects the sludge suctioned by the suction pipes and conducts it to the trap, which conducts it to the central sludge gutter for removal. It hangs from supports on the walkway and has regulation knife gates for sludge inflow.
- **Trap.** Element that serves to transfer sludge from the sludge gutter to the central concrete channel, for extraction.
- **Vacuum pump.** Primes the trap, which serves to transfer the sludge between the gutters. It is installed on one side of the walkway and connected to the upper part of the trap.
- **Floating substances dragging system.** Consisting of the surface sweeping scraper that has a special design to move the floating substances to the outer end, where a pivoting arm introduces them inside the collection hopper.
- Floating substances collection hopper. Installed on the outer end of the enclosure and directly anchored to the foundation work. It can be manufactured in two versions, overwater (standardised) or underwater.









\* Gutter detail

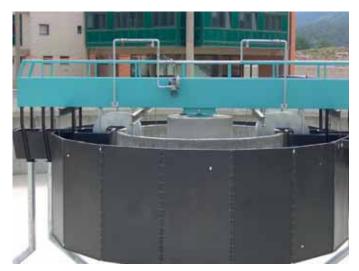
























Spillweir:

Screen for pouring clarified water into the circular or rectangular decanting and thickening tanks.

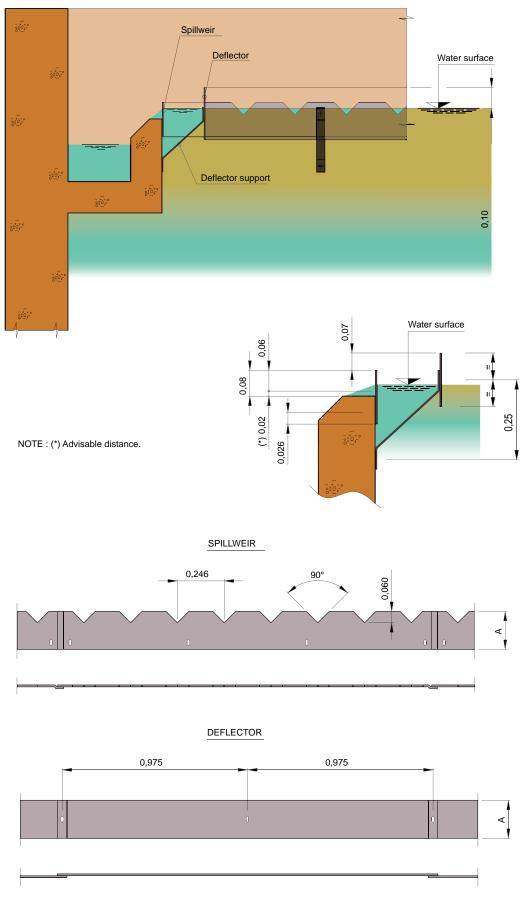
Stainless steel or aluminium plate figure, manufactured in 2000 mm lengths and various heights and with 90°, 60 mm deep triangular notches. To facilitate levelling, it is anchored with screws that can be moved along slotted holes.

#### Deflector:

Protective screen to contain floating substances in the circular or rectangular decanting tanks.

Stainless steel or aluminium plate figure, manufactured in 2000 mm lengths and various heights. To facilitate levelling, it is anchored with screws that can be moved along slotted holes.





Dimensions in meters

