

# Suction Scraper Bridge KD 15R

Suction scraper bridge type KD 15R for rectangular tanks.

The suction scraper bridge is designed based on the desire for a long service life as well as making operation and maintenance of the equipment as minimal as possible.

## Standard material choice

Parts which are not in contact with the medium are as standard hot galvanized, including bridge structure, centre bearing unit and bogie.

Parts in contact with the medium are as standard made from stainless steel 1.4301, which has been pickled after processing, including the sludge scraper and sludge removal unit.

Other material choices and surface treatments are possible upon request.

## Bridge structure

The bridge itself is a self-sustaining trussed structure made from square profile tubes.

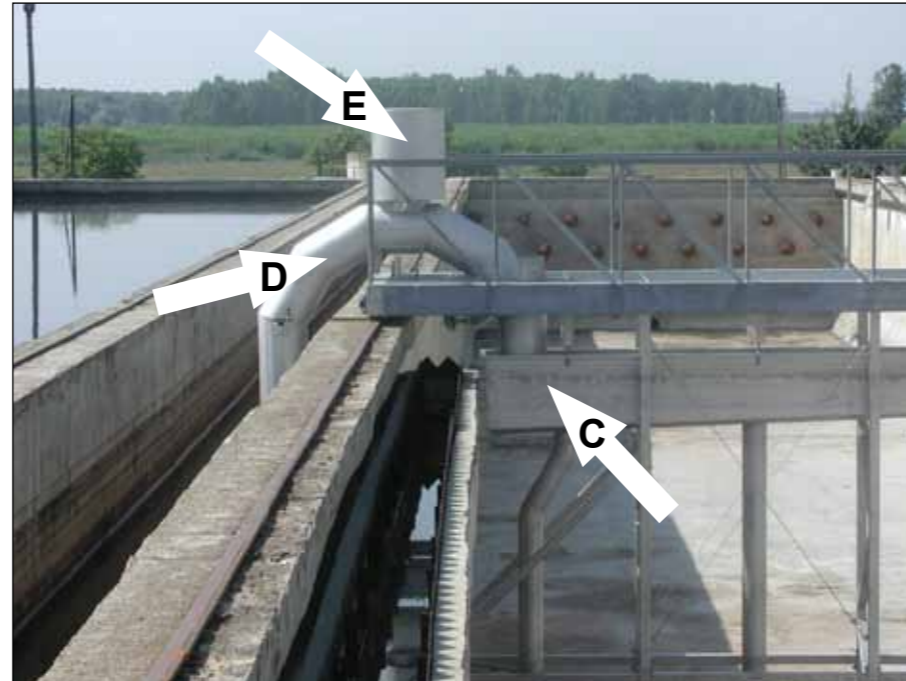
## Bogie

Designed for driving on rails or directly on concrete.

Wheel bearings are SKF quality bearings. As standard gears are surface treated according to type 3.1/EN 12944 cor. cat. C3. Wheels are equipped with rotation monitoring.

## Control panel

As standard the suction scraper bridge is supplied with a local control panel made from fibreglass reinforced polyester. Signal transferral as well as power through flat cable unit.



## Sludge scraper

KD Standard sludge scraper is mounted under the bridge. A simple structure which makes mounting very easy. No welding during installation.

## Sludge removal unit consists of:

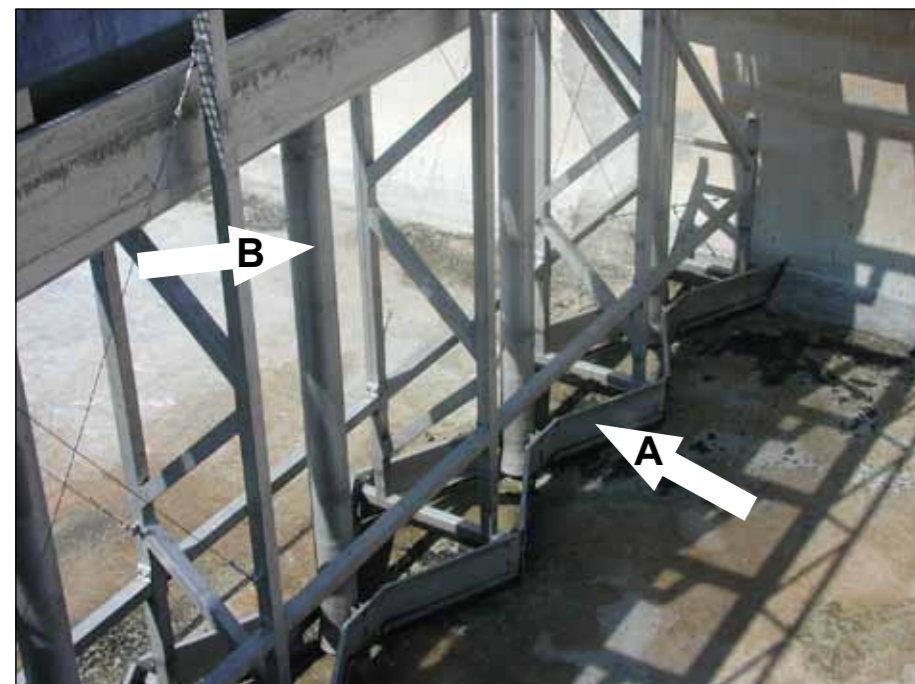
- V-shaped bottom scraper sections (A)
- Suction pipe (B)
- Collection vats with adjustable overflow pipes (C)
- Siphon pipe (D)
- Vacuum pump unit (E)

V-shaped bottom scraper sections collect the sludge in the middle of each section.

The sludge is transported through suction pipes from the bottom of the tank to collection vats.

The suction flow is equalized by adjusting the overflow pipe. Adjustment is carried out from the walkway.

The sludge is led through the siphon pipe from collection vats to the outlet duct/channel. The suction effect is started by a vacuum through a vacuum pump. This vacuum meets the physical law of "linked liquids' equalizing abilities". Adjustment of flow is carried out from the walkway.



## The advantages of suction scraper bridge KD 15R are as follows:

- Sludge flow is carried out through a siphon solution (no energy consumption)
- Sludge flow can be visually inspected and regulated which ensures uniform "suction" of the entire bottom and provides security in case a pipe gets clogged.

## Enquiries

KD Suction scraper bridge is a standard product which is adapted to the customer's wishes. So we only need a few parameters like:

- capacity m<sup>3</sup>/h (sludge removal)
- length/width of the tank
- level for:
  - bottom
  - hammer head
  - water level
  - driving on rails or concrete

Besides standard the suction scraper bridge can also be made from alternative material qualities. The bottom and sludge scrapers are available in acid-resistant steel. Bridge, centre bearing and bogie are available in stainless steel and aluminium, and the walking area is available in acid-resistant steel or composite material.





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