

Copa[®] Circular Tank Scraper

Rotary Scraper Bridges for Circular Tanks

Key Features & Benefits:

- High quality construction.
- Reliable operation.
- Suitable for primary and secondary clarification.
- Peripheral and centre drive.
- Suitable for radial and flat bottomed tanks.

How We Create Value:

- Low maintenance costs and minimal spares requirement.
- Low running costs.



Copa® Circular Tank Scraper

Jacopa supplies a range of scraper bridges for all types of circular settlement tanks in diameters of up to 60 metres.

All structures are designed to withstand all loads and stresses that may be placed upon the bridges, and are manufactured to the highest engineering standards for quality. All superstructures and underwater assemblies are protected to the customer's specification.

Circular Tank Scraper Range:

The most common form of circular tank scraper is the rotary half bridge. This is mounted on a central slewing bearing supported on a tripod assembly. It is driven by an end carriage travelling around the tank's periphery.

In addition to the standard half bridge scraper, twin and triple arm rotary machines are also available. Small bridges are manufactured using a beam structure.

Larger bridges require a lattice or girder structure which offers strength without adding excessive weight.

All bridges are manufactured in steel (finished to the customer's specification) or aluminum. The end carriage unit incorporates a small electric motor and gearbox which drive onto the peripheral wall via a cast iron wheel fitted with a polyurethane tyre. The unit is designed to give a peripheral speed of between 1 and 2 metres a minute.

Scraper blades are designed in a helical curve formation which maximizes scraping efficiency and thus sludge removal. Scraper blades are hinged 400 mm above the floor of the tank, providing a more effective sludge scraping mechanism.

Hydraulic Lift Scrapers:

This half bridge scraper is specifically designed for use in flat bottomed final settlement tanks.

The scraper blades, consisting of linked individual V formations, each have a tube leading from the apex of the V up to the trough. The tube is suspended from the bridge so that its base is below water level. This creates a head differential, allowing sludge collected in the Vs by the rotation of the bridge to be conveyed simultaneously up into the trough. As this is a continuous action, there is no sludge build up in the bottom of the tank.

The rate of discharge can be varied by fitting adjustable bellmouths to the top of each tube. Sludge is removed from the trough by a siphon which discharges sludge into a collection system within the central assembly.



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Channel Cleaning:

All rotating bridges can be fitted with any of the following types of channel cleaning systems:

- Rotary brushes
- Pressure washers
- Chains
- Fixed brushes

Refurbishment:

Jacopa not only supplies new tank scraper bridges but can also carry out complete refurbishment of any existing scraper bridge.

