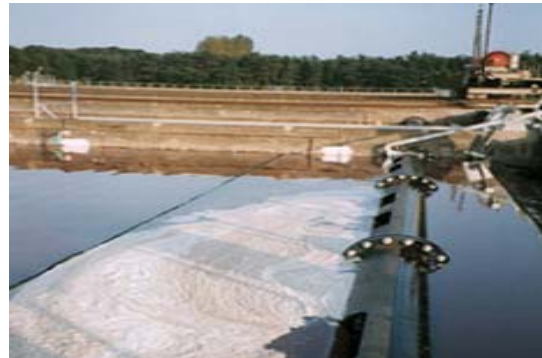


## SCRAPER SYSTEMS

Colloide offer circular and rectangular scrapping systems  
(plastic & steel systems for settlement tanks)



### Introduction

Sludge settlement tanks are generally rectangular or circular. These tanks are designed to settle out the solids from the liquid and float off the grease, oils, etc.

Colloide can design, manufacture and install systems for effectively scraping these settlement tanks:

- Circular Settlement Tank rotating bridge thickener.
- Rectangular Settlement Tank longitudinal chain and flight scraping system.

### Circular Settlement Tanks

The scraping mechanism consists of a rotating bridge structure powered via a periphery drive unit. The bridge supports a frame below it onto which is fixed sludge scraping blades at floor level and a scum blade at Top Water Level.

The sludge scraping blades divert the sludge to a hopper while a side wall scraper can also be fitted to ensure the base of the internal wall is scraped. The scum blade diverts the scum to the outer wall of the tank where it is collected into a scum box once every revolution of the bridge

### Rectangular Settlement Tanks

The mechanism used for scraping these tanks is based on a chain and flight principle consisting of two chains which move the scraping booms up and down the tanks. When scraping at Top Water Level, the booms push the scum to the scum outlet end of the tank, where it is collected by a rotating sludge pipe or, alternatively, a collection channel with an adjustable weir.

This scum then flows to a local pumping station for onward pumping. When scraping at the tank floor level, the booms push the settled solids to the thickened sludge outlet end of the tank. It is normal practice to desludge at this end via actuated valves and pump away using progressive cavity pumps.



### Advantages of Colloide Scrapers

- Complete design, manufacture & installation of mechanical and electrical systems available.
- Rectangular settlement tanks and scrapers available, offering maximum use of space.
- The designs from Colloide are suitable for heavy duty applications and offer a long life with minimum maintenance.
- Equipment available on a short lead time.
- Alternative features can be easily incorporated. Other designs include full bridge scraper with central drive, suction bridge, longitudinal travelling bridge, etc.



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