

# THICKENERS

## THICKENER Type: MR21

This equipment, designed for installation in circular enclosures, mechanically separates the sludge, which is decanted due to its composition or with the help of a flocculant reagent, in the thickening processes of water treatment plants.

### Descriptions and Features:

- **Power unit.**
  - (1) **Simple unit:** Central operation, anchored to the walkway, consisting of a geared motor unit that acts directly on the main axle of the thickener.
  - (2) **Control head:** Central operation device anchored to the walkway, consisting of a geared motor and a set of parts that is used to elevate the thickening mechanism in case of high concentrations of sludge.
- **Main axle.** Connected to the power unit. Through a flanged connection, it transmits all the effort to the bottom scraper and thickening pick units. The scraper holder structure is anchored to the lower part of the axle.
- **Scraper holder structure.** A steel plate structure consisting of two radial arms on opposite sides of the circle and properly braced that the picks and scrapers are mounted on.
- **Thickening picks.** The profiles used to break the floc are built in steel plate screwed to the scraper carrier arms.
- **Bottom scraper.** With adjustable elastomer profile that carries out the sweeping, anchored to a steel plate that conducts the sludge to the central basin.
- **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.
- **Guiding system.** Built in steel plate and technical plastic, which serves to maintain the central axle in a vertical position during its rotation.

### **Optional elements:**

- **Central walkway.** Diameter fixed walkway that supports the entire thickening unit. Built in drawer-like steel plate and tubular profiles that also serve as a hand-rail. Galvanised metal or GFRP lattice work for personnel access.
- **Floating substances dragging system and deflector.** Consisting of the surface sweeping scraper that, due to its design, moves the floating substances to the outer end, where a pivoting arm introduces them inside the collection hopper.
- **Electronic overload clutch.** To control overloading.





