

# WATER & SILT MANAGEMENT SYSTEMS

## DEEP CONE SILO: MUD THICKENER & WATER CLARIFIER

The Stainless steel Silo has no moving and can recycle 85%-90% of the washplant water. It offers maximum control over mud thickness which is achieved with the addition of flocculant and settlement principles of gravity.

### How does it work?

- Floc is added to waste water which is pumped into the central mixing chamber of the tank
- Flocculation occurs allowing the separation of heavy particles to fall down into the cone section and the clean water to flow into the weir of the overflow channel for reuse back at the plant



### Benefits of the system

- No power consumption
- No moving parts
- Small operational footprint
- Reduced foundation costs
- Reduced flocculant consumption
- Additional sludge storage
- Effective sludge control
- Low maintenance

## AUTOMATIC FLOCC DOSING & CONTROL

**FloccMAX** is a fully automatic system for the preparation, dosing and metering of flocculant for the waste water treatment process.

The flocc dosing rate is continually monitored within the process to ensure optimum settlement rates even with varying silt contents. The stainless steel modular **FloccMAX** tanks can be incorporated into existing water recycling plants or used as standalone systems



## PLATE FILTER PRESS

A filter press is designed to dewater the sludge (mud slurry) to produce dehydrated stackable silt cakes

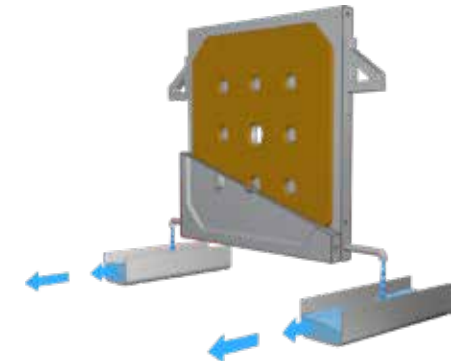
### Filter Press Cycle

- A plate filter press contains a mainframe, polyurethane plates, single or dual piston and an opening and shaking system
- The polyurethane plates have a recessed chamber, single feed port, dual drainage ports and are covered by filter cloths. The plates are pressed together with hydraulic rams under high pressure.
- The HPT sludge pump fills the recess in each plate and forces the water to filter through the cloths and exit the press into a trough for recycling.
- The silt and clay solids are held in the chamber between each plate until the water has drained and a dry silt cake is produced. The press automatically opens and the cakes are discharged.



### Benefits of the system

- Elimination of settling ponds
- Reduced rehandling, maintenance and cleanup costs
- Sludge volume is reduced by 80%
- Recover and Recycle 95% of the total process water
- Fully automated with low running costs



## MODULAR PLANTS

Specifically designed for short to medium term projects enabling fast setup and teardown with zero foundations required. This Portable system is fully containerized and stackable ensuring no ground water is discharged and benefits from a one point hookup for electrical and water.



- Faster Cycle Times
- Drier Silt Cakes
- No Additional Floc Required In Press