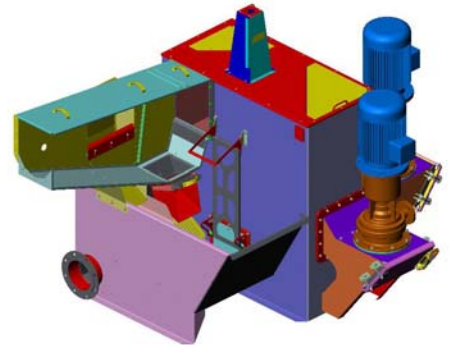


Screenings Handling Systems



What is an ACE Package?

An ACE Package normally consists of 3 modules to provide a flexible solution to Screenings Handling Applications



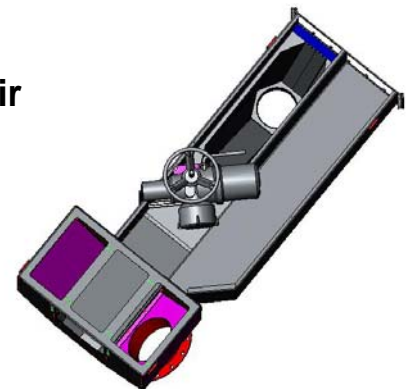
1. Grit Settlement / Removal

Small works - limited grit – Manual Weir

- Stones and grit are retained in Weir.
- Periodically manual discharge into Bund area for manual removal.

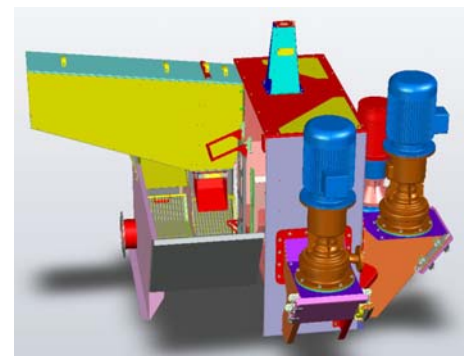
Large Works – significant grit – Automated Weir

- Grit settles in Weir.
- Periodically penstock closes routing flow to tank via bypass.
- Screening material floated off into tank with water.
- Actuated valve on base of Weir opens discharging grit. Valve closes.
- Penstocks Open



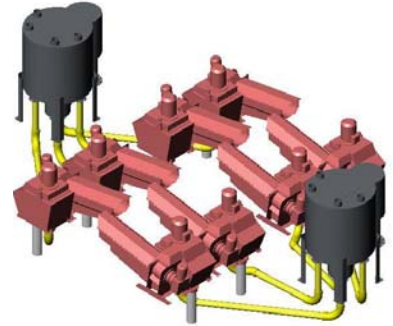
2. Maceration Phase

- Weir feeds into a conditioning tank.
- Macipumps mounted on toes on conditioning tank.
- Macipumps operate on levels in tank.
- Macipumps condition screenings and pump to separation phase.
- Macipumps easily maintained.



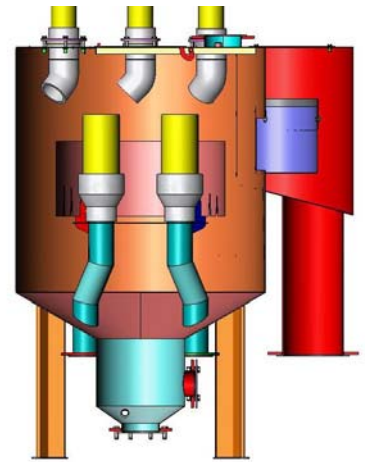
3. Separation Phase

Comprises Distribution Tanks & Liquid Separators.



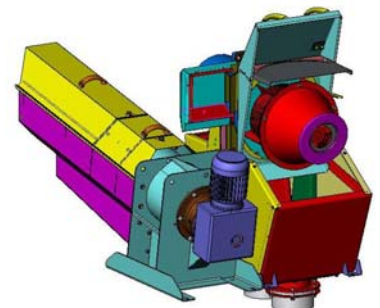
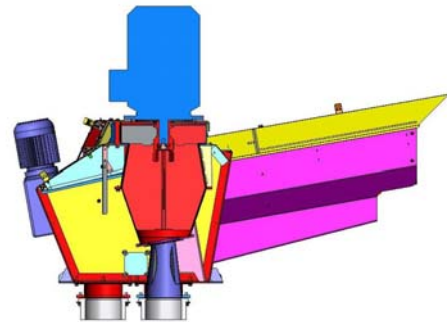
Distribution Tanks

- The distribution tank receives flows from the Macipumps.
- Any fine grit settles out and is periodically discharged.
- Bellmouths within the distribution tank feed the conditioned screenings and water to the Liquid Separator stations.



Liquid Separator (Lisep)

- The Liquid Separator (Lisep) receives flow from the distribution tank via an actuated valve in the feed line
- High speed action of the Lisep separates the liquid from the solids.
- Liquid either returned to main flow or can be used as additional wash water under storm conditions.
- Solids discharged into Lipactor where they are further dewatered and compacted before being discharge to skip
- Lisep tilts through 90 degrees to allow easy access to components for maintenance.



Output: ACE Screenings

- Low Volume, Low Odour, Dry screenings.
- Skip movements reduced to 1/6th.
- Landfill costs reduced.
- Organics returned to flow.



Screenings Removal and Disposal Costs.

Ordinary compactors reduce the volume of wet screenings by 70%, so 30% of the volume gets skipped.



Washing compactors reduce the volume of wet screenings by 80%, so 20% of the volume gets skipped



Lipactors reduce the volume of wet screenings by up to 94%, so around 6% of the volume gets skipped.



For the same screenings input, Lipactors will massively reduce the skipped quantity and hence the disposal costs associated with admin, transport, landfill or incineration.