

Sand Lane Recovery System

The SAND LANE RECOVERY (SLR) System has been specifically designed to clean sand recovered from sand lanes by removing the residual slurry liquor trapped between the sand particles. Liquor that contains a mixture of fine organic matter, bacteria, and potentially other pathogens.

Each tonne of sand excavated from the sand lane theoretically contains up to 400litres of bacteria contaminated liquid. By passing the sand through the SLR unit, the liquid content can be reduced by up to 50%. Transforming the sand from a semi-liquid to a damp stackable state.

How does the SLR System Work?

The sand is loaded into the feed hopper from where it is fed via a variable speed auger onto the dewatering screen. This screen is fitted with 2 electrical vibrators arranged to provide a linear motion. These lift the sand, forcing the liquid through the underlying screen and provide forward motion to carry the sand across the screen.

If required, the quality of the sand can be further improved by rinsing it with clean water. The amount of water required depends on the sand characteristics and level of cleanliness required. Typical values being between 100 and 500litres per tonne of sand.

The quality of the sand can be further improved by adding a small amount of hypo-chloride to kill any remaining bacteria.

Where the water supply is limited or slurry storage is critical, a separate treatment system can be added to allow partial reuse of the rinse water.



Sand Lane Recovery System

Feed hopper + vibrating Screen

Basic scope of supply:

- Feed hopper suitable for loading with a telehandler, complete with transfer auger and hungry boards to reduce the risk of spillage.
- Vibrating screen fitted with 2 electric motors arranged to provide a linear motion to aid dewatering and drive the sand across the screen.
- Screen deck comprising either polyurethane or stainless steel units depending on the sand particle size.
- Sump beneath the vibrating screen to collect the recovered liquid with gravity drainage connection.
- Local control panel with variable speed drive to allow the sand feed rate to be varied (power supply to the panel to be supplied by client)
- Delivery installation and commissioning on existing concrete slab

Optional extras:

- Wash water spray bar to flush the residual slurry liquid from the sand.
- Booster pump to provide pressurized flush water
- Screen sump pump to forward the liquor flushed from the sand
- Conveyor to allow the treated sand to be either loaded into a trailer or stacked on the ground.



Feed Material from Sand Lane





Feeding with Telehandler





Dewatered Rinsed Sand ready for use again