

THE ORECLEAN WASTE RECOVERY SYSTEM

The major design features of the machine include:

- There are three 7" colour video screens in the operator's cabin – one on each side of the boom delivering direct line of sight along the boom to the rake head, and 1 for the rear of the house (eyes in the back of your head).
- The boom cameras allow direct vision of the surrounds and the blade where line of sight from the operators cabin is not possible and are placed just above the operators' normal line of vision
- There are 2 x 1000 lumen LED flood lights fitted to the boom, along with cabin mounted lights, allowing safe night operations and improved visibility for low light and shaded day time operations
- There is a pull-back pressure limiting device on the hydraulics which is currently calibrated to 600kg of force – this means that in the event an operator error occurred and the blade contacted a leg or footing, the force applied would not be enough to disturb the leg/footing or affect the alignment of the belt
- There are two standard blade sizes – 1500mm for bulk open areas and a 900mm blade which allows access to the tightest and most delicate areas
- There are also two blades specifically designed for areas where concrete is present under the spillage which incorporate a bolt-on nylon cutting edge to prevent damage to the concrete surface
- The machine has a tilting function which allows the blade to be rotated up to 15 degrees in either direction, allowing the operator to neatly clean in areas where the base material under the spillage is sloping or uneven
- The boom can be raised to the vertical position for tracking and transport, which minimizes the length and footprint of the machine
- The machine is built on a standard Bobcat brand E50 5t hydraulic excavator. This machine is very popular in the industry due to excellent operator ergonomics and comfort and extreme reliability in tough conditions.
- All controls are closely aligned to the standard control layout in a conventional excavator and are very intuitive and easy for a trained excavator operator to adapt to. Pilot controlled hydraulic circuits allow excellent precision and controllability.

The major advantages of this process are as follows:

- It allows spilled ore to be recovered dry, without the need for pressurized water to wash the ore towards a vacuum hose from a vacuum truck
- It uses no water, which is an expensive and precious commodity on a mine site
- It eliminates the need for "drying out ponds" which are traditionally used to separate water from recovered ore.
- It eliminates the manual handling associated with vacuum recovery – personnel trying to move and hold on to heavy 6" vacuum hoses which jerk around
- Recovered ore can be stockpiled in a dry state ready for re-processing or re-purposing.
- It is more than 50 times faster than recovering spilled ore using vacuum trucks. This presents a huge cost saving potential.
- It is around 5 times faster than micro remote controlled machines and very cost competitive
- It eliminates the need for personnel to be within the lanyard area of a conveyor, meaning ore can be recovered at any time, even while the belt is running
- The telescopic boom is extended while the machine is stationary, meaning there is no bouncing, jerking etc as with fixed rakes on skid steer loaders etc.
- The machine has an overall extended boom length of 5.8m which allows recovery of ore from belts which are side by side with access from only one side.
- Recovered material is pulled out into a windrow parallel to the belt, then collected with a skid steer loader or small front-end loader and tipping truck, meaning that access tracks and other areas next to the belt are continuously worked to a smooth flat surface by the operators during the collection process. This eliminates the need for grading and track maintenance in these areas.
- No rotating parts anywhere near conveyor belts.



MATT LANGLEY
General Manager

m 0413 212 545
e matt@langleysolutions.com.au

www.langleysolutions.com.au
www.oreclean.com.au

ABN 31 169 304 939
ACN 1693 04 939