

## Practical Tip: Slurry separators

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Mechanical separation of slurry removes some solids and provides a liquid that can be pumped. The solid portion, typically 10 to 20% of the original slurry volume can be stacked and stored in a similar way to farmyard manure, although you must make provision to collect run-off (usually from beneath the separator).

Simple wedge-wire run-down screens or vibrating screens for pig slurry, produce separated solids which will not stack but tend to slump. For pig and cattle slurries, separators which press and squeeze the slurry against a fabric belt or steel screen will produce separated solids of 18 to 30% dry matter that can be more easily stacked and composted.



Rotary screen (Source: ADAS)



Screen press (Source: ADAS)



Screw press (Source: ADAS)



Screw press (Source: ADAS)

The liquid portion can be used by band spreaders, slurry injectors and umbilical systems without causing blockage problems. Separated liquid also produces less odour than whole slurry.

Separators work best with slurries of no more than about 5 to 6% dry matter. Slurry needs to be thoroughly mixed in a reception pit before being pumped to the separator, usually mounted on a gantry. Typically, a gravity discharge of separated liquid to the slurry store can be arranged while separated solids can fall into a trailer below the separator or directly onto concrete.

The cost of installing a mechanical separator may be 2 or 3 times the cost of the basic machine.