



## Svedala Spiral Dewaterer



### Optimal for Dewatering of Slag and Mill Scales

Washing effluents coming from the steel industry with high flows and a low to moderate content of well defined solids like mill scales and slag has been proven optimal for the spiral dewaterer. In the sedimentation tank the wash water is reclaimed and sent back to the washing operation again. The solids are removed by and dewatered in the discharge spiral and can be sent to recycling if this is considered of value.



Discharge of dewatered material.

### Robust Design for Reliable Operation

Like the spiral classifier the spiral dewaterer consists basically of an open tank for sedimentation of solids and a transportation spiral for removal and dewatering of the settled product.

All machines have equal spiral diameter, 600 mm. The spiral flights are welded directly to the spiral shaft. The flight wear shoes are made of high chrome iron and are bolted to the flights. The submerged bearing assembly is of grease purged type and is lubricated every second week. The bearing pack can be disassembled and replaced without lifting the spiral out of the tank. Hydraulic spiral lifting device can be supplied as an option.

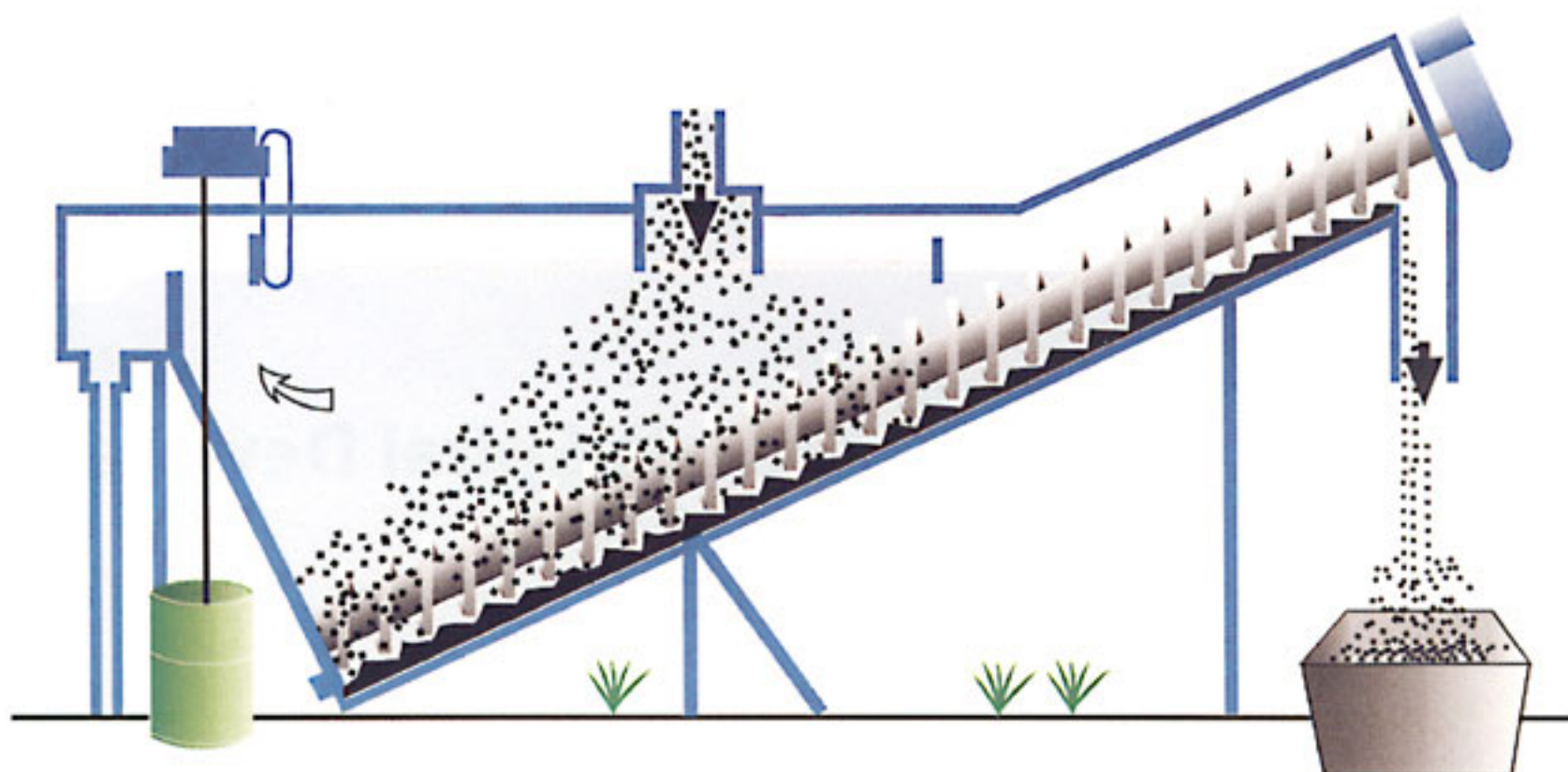
The drive consists of an electric motor, V-rope drive and speed reducer for reliable operation at low spiral speeds needed for low wear and improved dewatering.

### Easy to Install and Maintain

The spiral is generally delivered as a prefabricated unit complete with stairs, handrails and platforms. The larger units may in some cases be delivered in parts for erection on site.

After erection on a levelled foundation only power and pipes need to be connected.

The discharge launder for the dewatered product is then positioned over the discharge bin or bins as the launder can be adjusted in two positions.

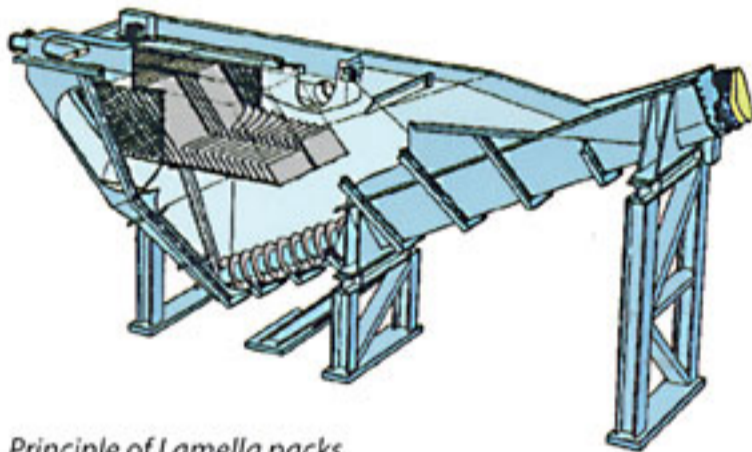


Principle of operation.





*Clarified water overflow.*



*Principle of Lamella packs.*

## **Large Pool Area – for High Flow Applications**

Typically for the spiral dewaterer is that the tank area is larger than for the spiral classifiers. This enables these machines to take on high flows with limited solids content, applications very common for different Industrial washing effluents. With the addition of in-clined lamella plates in the tank this gives settling areas from 8 up to 200 m<sup>2</sup> and flow rates up to 1600 m<sup>3</sup>/h.

## **Oil Skimmer as Option**

In some applications the feed contains oil and grease. These are floating products reporting to the clear water overflow. A special designed oil skimmer can be supplied for removal of these floating products.



*Feed distribution in a SD60-200.*