

PPP Industries Ltd

Serving New Zealand's Primary Industry Since 1963

Breweries & Distilleries **Waste Treatment**

The New Generation FAN Separator Press Screw Separator (PSS)

Press Screw Separator PSS 3.2

The FAN PSS is the market leader in its ability to handle a broad spectrum of products which require to be separated. The PSS is suitable for all sectors such as pulp & paper industry, agriculture, horticulture, breweries and distilleries, abattoirs and biogas plants.

Features:

- ❑ Motor gearbox design 4 – 18.5 kW
- ❑ New Oscillator/Vibrator
- ❑ Output regulator in stainless steel
- ❑ Screen apertures from 0.1mm to 1.0mm dependant upon application.
- ❑ Revolutionary screen "HDX" to handle high pressures and very abrasive materials
- ❑ V-Shaped body
- ❑ Stainless Steel stand with openings for forklift



FAN Press Screw Separator in Distilleries and Breweries

- ❑ The alcohol industry processes basic products containing starch or sugar into alcohol or alcoholic drinks.
- ❑ The residue in distilleries after fermentation and rectification is called distiller's wash. The residue in breweries is spent malt grain.
- ❑ Both by-products are highly nutritional animal feeds that have the disadvantage of a high moisture content.
- ❑ The separation with the FAN Press Screw Separator (PSS) increases the solid content, and therefore, the value as animal feed.

- ❑ **The Separation of Distillers Wash**
The distiller's wash can be separated immediately after the rectification.
- ❑ After the separation, there is a liquid phase and a solid phase.
- ❑ The solid content and nutrients in the liquid phase are reduced compared to the raw wash.
- ❑ The separated solids have a solid content of 30 - 50%. The solids are usually sold as highly nutritious animal feed.

❑ Grain Distillers Wash Recycling

The big advantage of the FAN Press Screw Separator (PSS) turns out in the separation of grain wash, in addition to recycling. In the mashing process, 50% of the water is replaced by separated wash.

- ❑ The volume of the remaining wash is reduced by up to 60%.
- ❑ Although the solid and salt content rises due to the recycling, no problems occur in the process.
- ❑ The Press Screw Separator is a screw press that operates totally differently than decanters or centrifuges, which are also used in this application.
- ❑ The PSS is more profitable with its lower purchasing and maintenance costs. The maintenance is minimal.
- ❑ It is worth considering the distiller's wash recycling method.
- ❑ Due to the reduction of the volume of wash disposal costs can be eliminated. Efficient separation saves money.

Spent Grain

- ❑ Separation of spent malt grain from the mash strainer is one application for the FAN Press Screw Separator.
- ❑ Due to the reduction of moisture, the value of the spent grain as animal feed increases.
- ❑ The transport cost is reduced. Trials in the near future will show whether the PSS can also be used directly in the mash straining process.
- ❑ In this case, less malt would be needed, and therefore, costs decreased due to the possibility of the use of a smaller grain.

