

We invented the Exergy steam drying technology in late seventies and have over 35 years' experience in designing and delivering drying plants using our technologies integrated with other processes. We strongly believe in long term trust based relationship with our clients, partners and suppliers. Our drying solutions reinforces your process.



EXERGY DDGS DRYING

– Value Added Protein Meal

The bottom stillage from fermentation is a sludge rich in protein with 75% to 80% water. The dried sludge is called DDGS and is an excellent animal feed. With Exergy Superheated Steam Dryer the value of DDGS is further enhanced by increasing the protein uptake for animals while at the same time reducing the energy consumption for drying considerably.

GENERATING PROFITABILITY

We analyse our customers' needs to provide effective drying processes that leads to a cost effective complete solution with high productivity and energy efficiency.

LOW OPERATING COST

- 150 kWh/ton water evaporation – Energy saving
- Few rotating parts – High availability and low maintenance cost

COMPACT AND DURABLE DESIGN

- Small foot print, built on height – Save on land
- First plant built 1979 and still in operation – Long lifetime

ENVIRONMENTAL FRIENDLY AND SAFE

- No emissions to atmosphere – No VOC or odor treatment needed
- Oxygen free – No fire and explosion protection systems needed

ADDING VALUE TO YOUR END-PRODUCT

Exergy steam drying technology does more than just drying. The dried product receives many unique benefits and improvements compared to other drying methods.

DDGS FOR ANIMAL FEED

- Non-oxidized product
- Sterilized product
- Increase by-pass protein value
- Healthier animals



EXERGY SUPERHEATED STEAM DRYER

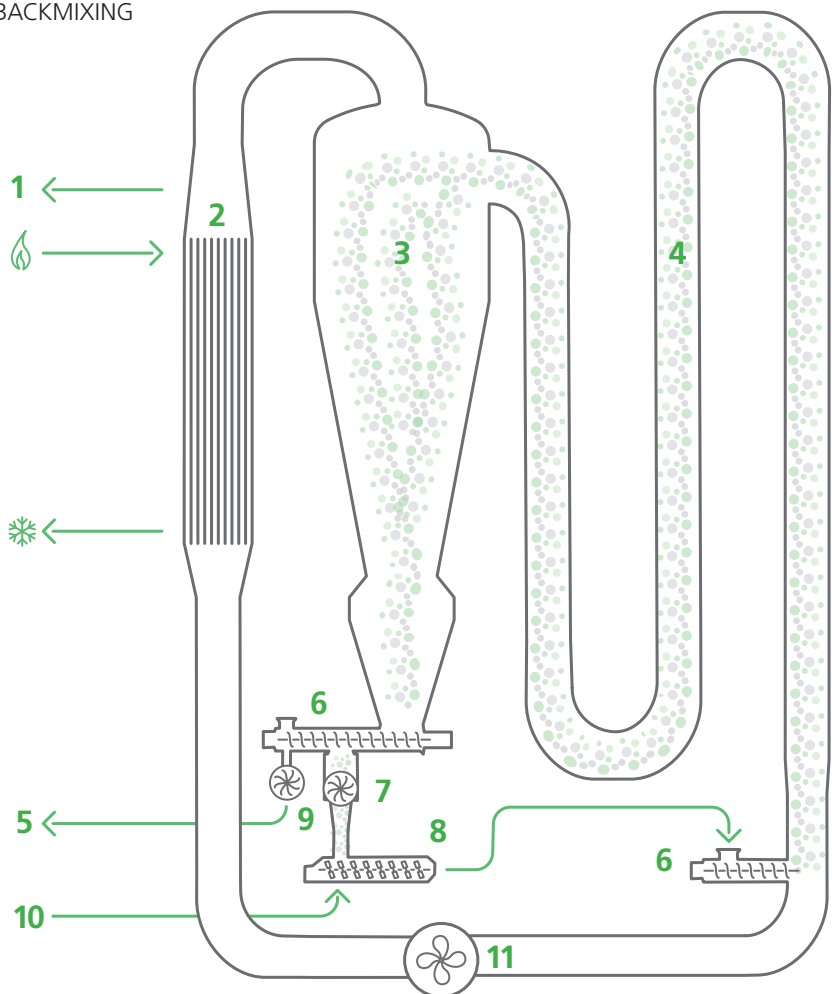
The steam dryer is a closed, pressurized system where the wet product is exposed to superheated steam. The steam serves as a transport gas for the product in the dryer. The heat for drying is transferred from the drying medium through the super heater surfaces to the steam and the suspended product. Flue gas, steam or thermal oil can be used as heat source for the dryer. Dried product and superheated steam are separated in a cyclone and the steam is recirculated. Part of the dried product is recirculated back to the mixer where it is mixed with wet product and the partially dry mixture is fed into the dryer. Water in the wet product becomes steam in the dryer and is discharged through a pressure control valve to maintain constant pressure in the dryer. Typical residence time for the product is 10 seconds in the steam dryer.

DDGS (Dried Distillers Grains with Solubles)



SUPERHEATED STEAM DRYER WITH BACKMIXING

- 1 Generated steam
- 2 Superheater
- 3 Cyclone
- 4 Drying ducts
- 5 Dry sludge
- 6 Screw conveyor
- 7 Rotary valve
- 8 Mixer
- 9 TroMaxx rotary valve
- 10 Wet sludge
- 11 Fan



SWEDISH EXERGY AB | EXPERIENCE & KNOW-HOW FOR OPTIMAL SOLUTIONS

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