

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 DRYING FOR PELLET PRODUCTION

– Environment, energy and money saving drying technology

Drying is a costly and energy demanding stage in pellets production. With Exergy Superheated Steam Dryer the water that is removed from the wet product is turned into steam thus allowing 80% of the energy input to be recycled. The raw material is also conditioned in the drying process increasing output and quality from pellet mills.

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
- Pellet production cost reduced by 10%

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.

WOOD PELLETS

- Steam conditioned product
- High durability pellets
- Precise and uniform moisture
- Open fiber structure
- Improved combustion properties



EXERGY SUPERHEATED STEAM DRYER

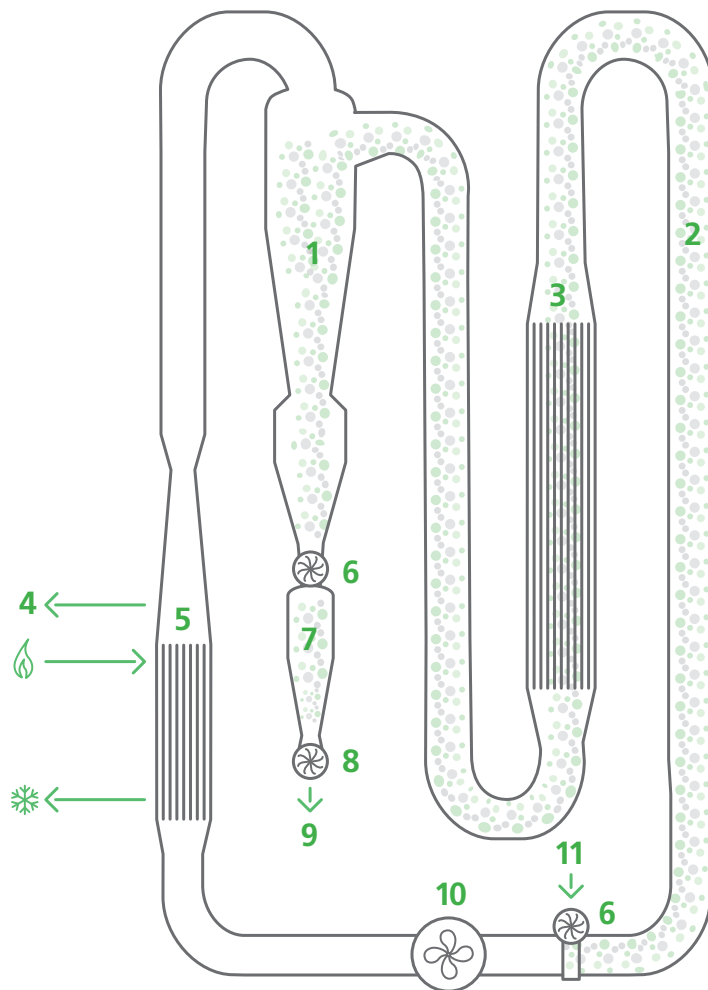
The steam dryer is a closed, pressurized system where the wet product is exposed to superheated steam. The steam serves as a transport gas for the product in the dryer. The heat for drying is transferred from the drying medium through the super heater surfaces to the steam and the suspended product. 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. 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.

Hard wood pellets



EXERGY DRYING FOR PELLET PRODUCTION

- 1 Cyclone
- 2 Drying ducts
- 3 Loopheater
- 4 Generated steam
- 5 Superheater
- 6 TroMaxx rotary valve
- 7 Flash vessel
- 8 Rotary valve
- 9 Dried product
- 10 Fan
- 11 Wet product



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

Gamla Rambergsvägen 34, SE-417 01, Gothenburg, Sweden | Phone: +46 (0) 31 51 39 90, Fax: +46 (0) 31 51 79 60
E-post: info@swedishexergy.com | www.swedishexergy.com