



Two-step drying of micro chips

Rindi Energi, Älvdalen Pellet Plant

This project

Rindi Energi initiated in 2008 the building of a pellet facility to complement their already existing plant at Vansbro. Design and delivery of the drying process was assigned to Torkapparater, and the two-step drying technique was selected for the task. The facility is unique in the aspect of energy recovery.

YEAR OF DELIVERY:
2009

TECHNOLOGY:

Two-step drying. Indirect tubular steam dryer Bojner systems with pre-drying in a belt dryer Stela.

High temp dryer: steam

Low temp dryer: hot air

TREATED MATERIAL:

Saw dust and microchips

EVAPORATION CAPACITY:

Totally up to 10 t/h

DRYNESS IN/OUT (w%):

Approx. 45-50 / 90

HEAT SOURCE:

16/3 bar steam from biofuel boiler, condensate heat from ventilation air and flue gases.

HEAT RECOVERY:

Condensers provide hot air for low temp dryer.

GAS / DUST CLEANING:

Dry separation by cyclone and final separation in condenser.

SCOPE OF DELIVERY:

Material handling with feed, input and discharge, dryers, ventilation system incl. cyclone, condenser, PLC and MCC systems, etc.

Alternative solutions

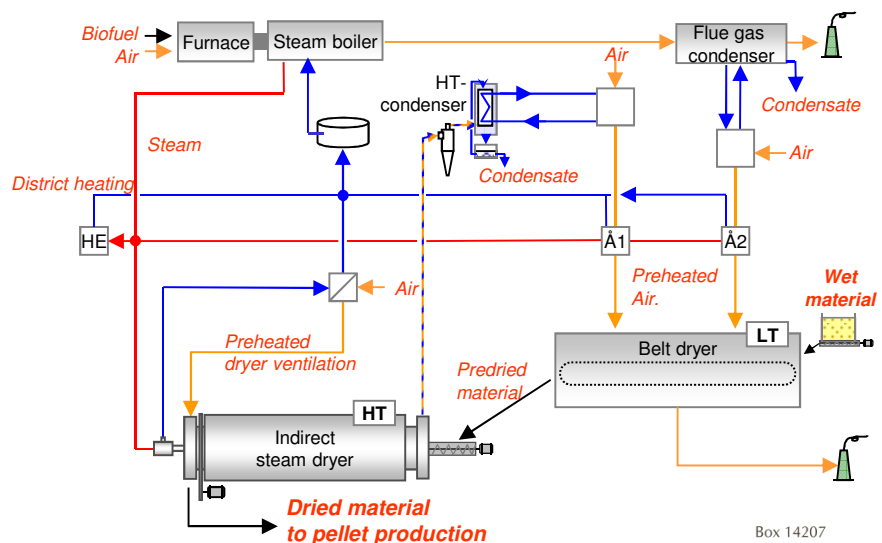
We offer tailor-made systems for drying of all types of solid biofuels – indirect systems in one or two steps being our specialty. Besides steam, exhaust gases, thermal oil, etc can be applied as heat source. We also offer direct drum drying which is a simple and robust technology, however with less opportunities for heat recovery and elimination of fire hazards. Please get in touch with us and explain your situation!



The drying takes place in an advanced energy recovery system based on the combination of a belt dryer and a rotating tubular dryer. The tubular high temp dryer (HT) uses steam as heat source which provides a high drying capacity and an even final dryness in the material. The hot and humid ventilation gas from the HT dryer together with the flue gas from the biofuel combustion are condensed. The heat is then recovered for usage in the

low temperature belt dryer (LT) as hot air. Further heating of the drying air is made through the steam which also heats the HT dryer.

Usage of both the condensation energy from the steam dryer ventilation air and the flue gases significantly reduces the biofuel consumption of the plant.



AB TORKAPPARATER
THERMAL PROCESSING EQUIPMENT

Box 14207
SE-104 40 Stockholm, Sweden
Visiting address: Riddargatan 17
Tel +46 (0)8 660 20 60
Fax +46 (0)8 661 11 12
info@torkapparater.se
www.torkapparater.se