

Drying With the New KAHL Fabric Belt Driers

Modular plant system for drying of biomass,
wood shavings, wood chips and many more ...



Drying

With the New KAHL Fabric Belt Driers

A distinctive feature of the KAHL fabric belt drier is the special, tightly woven plastic fabric belt which fulfils two functions: Transport of the product to be dried and filtration of the exhaust air to ensure that the legal limit value of the dust loading in the exhaust air is not exceeded. Discontinuous automatic cleaning of the belt avoids clogging of the belt openings.

Measurements by independent institutions have confirmed the observation of the limit value. The average value was less than half the admissible value. Requiring very low inlet air temperatures of less than 120°C, the drier is particularly suitable to be operated with waste heat from cogeneration. Another advantage is the low concentration of volatile organic compounds (VOCs) in the exhaust air resulting in very low odour emissions.

The newly developed product supply system allows the supply of a uniform layer of product to be dried, even if



The fabric belt drier in a wood pelleting plant

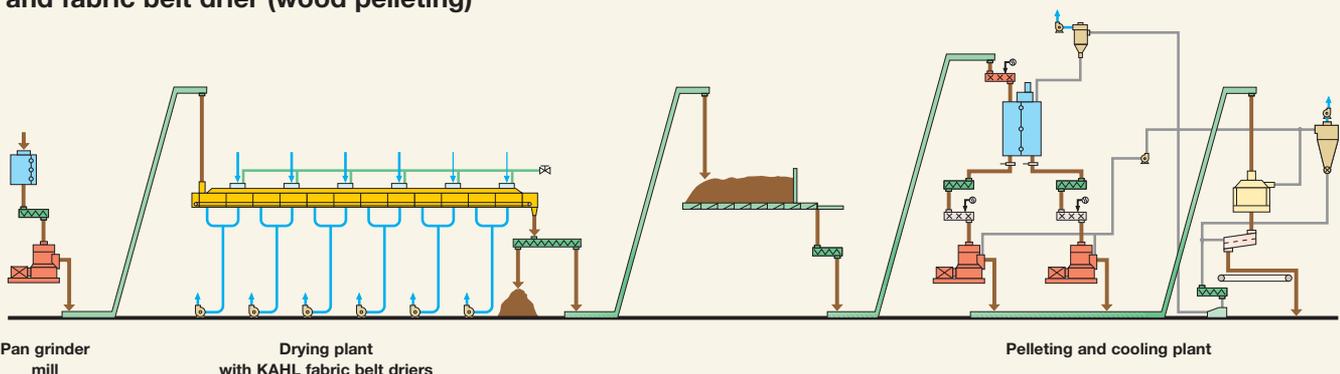
the input material and the throughput capacities vary significantly. The product is turned over in the drier by means of specially adapted devices so that a very uniform final moisture content of the product is obtained.

The on-line measurement of the product moisture ensures that the drier is constantly operated with an

optimum energy consumption and that the residual moisture is kept at a defined value.

Belt widths of 4 m or 6 m are possible. The efficient belt lengths available for drying are 11 m to 45 m.

Example of a plant with KAHL pan grinder mill and fabric belt drier (wood pelleting)



Advantages of the KAHL fabric belt driers

- Convective, gentle drying by means of hot air
- Modular plant system
- Individual technical design for each product, the desired throughput and the available or desired heat source, for example hot water or saturated steam
- Use of a special plastic fabric belt which simultaneously serves as an exhaust air filter
- Intelligent control for optimum and economic drying
- Monitoring of the relevant operating and process parameters
- Automatic operation
- Optional: Comprehensive safety system
- Easy to maintain construction



Fabric belt drier during construction

KAHL fabric belt drier: Convincing details

- 1 Fabric belt
- 2 Drive motors for the product supply system
- 3 Belt control unit
- 4 Tension station
- 5 Product turn-over device
- 6 Product supply unit
- 7 Brush sealing



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KAHL Driers/Coolers – Successful All Over the World



More than 1,000 KAHL belt coolers/driers with traditional chain drives are now in operation in various industries all over the world.

KAHL belt driers/coolers are appropriate for different types of products. Examples: Pellets, extruded products, Expandat®, agglomerates and pasty products.



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