

Continuous flow Biomass Dryer

Tehnodry CFD



The main purpose of biomass drying is evaporation of water to reduce its moisture-to-dry matter ratio. This reduction of moisture is beneficial in a number of ways. Low water content in biomass intended for energy applications, such as heating and power cogeneration greatly increases fuel efficiency, lowers emissions and improves overall process equipment operation. In agriculture, post-harvest drying is essential for safe and long term storage of some product groups, such as grains. Drying the organic waste and other organic by-products results in substantial reduction of weight, which lowers treatment and storage cost, as well as encourages novel uses of the biomass, e.g. pelletizing and fertilizers.

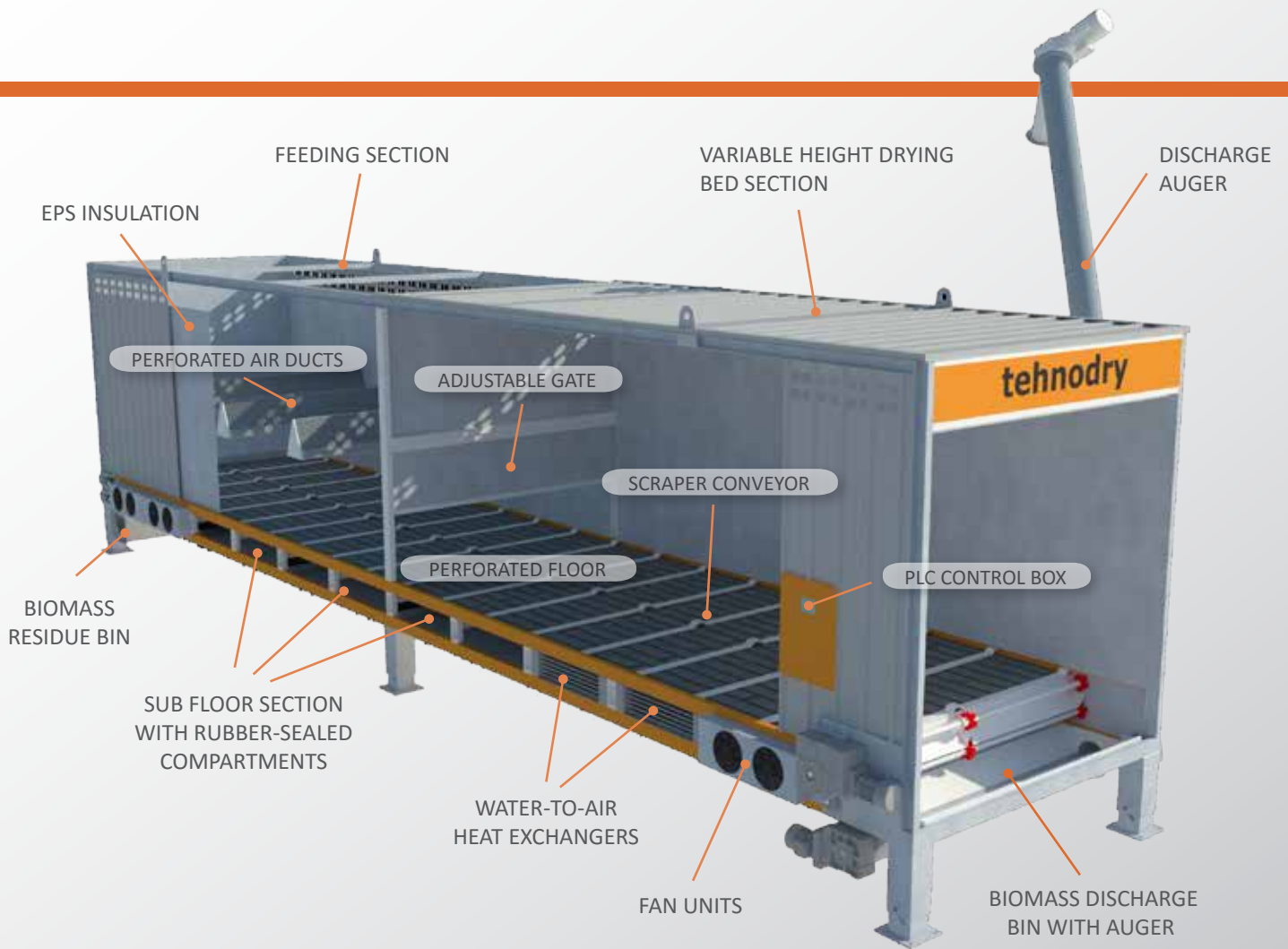
Further positive economical and environmental effects can be achieved when combining drying process with the use of residual or waste heat from CHP and biogas power plants, as well as from other thermal energy intensive industrial operations.



KEY FEATURES:

- proven technology
- wide selection range of biomass
- high loading capacity
- low energy consumption
- ECO or FULL mode running option
- superb drying efficiency
- unique close-loop conveyor system
- fully automated operation
- touch screen controls w. remote access
- moisture and temperature supervision
- compact and durable construction
- insulated sandwich walls and roof

Tehnodry CFD is a continuous flow type dryer intended for a wide range of biomass materials, such as; wood chips, sawdust, bark, grain, nuts, organic waste, digestate, and much more. The dryer's compact and innovative design, including features such as high volume feeding container with cross-sectional air flow, adjustable biomass bed height, sectional longitudinal drying, high torque close-loop chain scraper conveyor system and fully PLC controlled operation, makes the Tehnodry CFD one of the most energy efficient and economic drying solutions on the market today.



Technical specifications	CFD-20	CFD-40
Overall dimensions L x W x H	6.1 x 2.5 x 3.3 m	12.2 x 2.5 x 3.3 m
Transportable dimensions	20 ft ISO container	40 ft ISO container
Gross weight	5,000 kg	7,000 kg
Biomass loading capacity (maximum)	20 m ³	40 m ³
Biomass drying capacity (range)	10 - 20 m ³	20 - 40 m ³
Drying bed surface area (m ²)	11.5 m ²	25 m ²
Adjustable drying bed height	0.2 -0.6 m	0.2 -0.6 m
Temperature sensors	10	13
Biomass level sensors (#)	3	4
Biomass moisture content sensor	Yes	Yes
Thermal input (maximum)	80 kW	160 kW
Power consumption (average)	1.3 kWh	2 kWh





Authorized representative: