

Technical Data and Models

	MCD 2	MCD 3	MCD 5	MCD 7	MCD 10
Available heat	50-140 kW	140-208 kW	208-347 kW	347-486 kW	486-698 kW
Electricity consumption Ø	6 kWh	9 kWh	11 kWh	16 kWh	26 kWh
Water evaporation Ø	163 l/h	243 l/h	405 l/h	568 l/h	812 l/h

All information depending on the climatic conditions,  
Real values at 90° C water inlet and 0° C ambient temperature, etc.

# Multi-Container-Dryer (MCD)

for digestate and sewage sludge

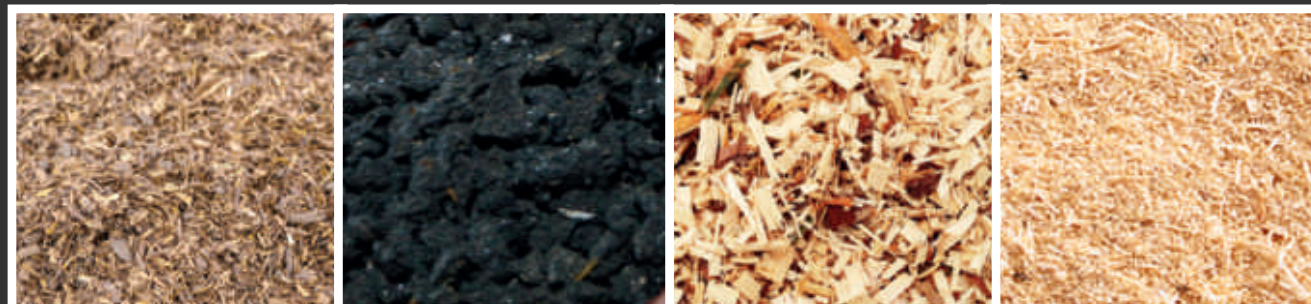


Digestate

Sewage sludge

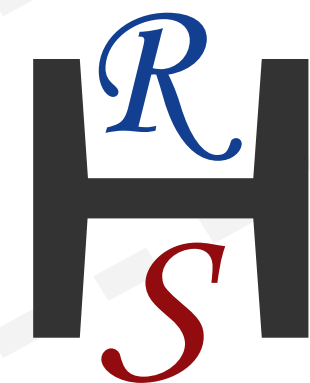
Wood chip

Wood shavings



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**Process-Description:**

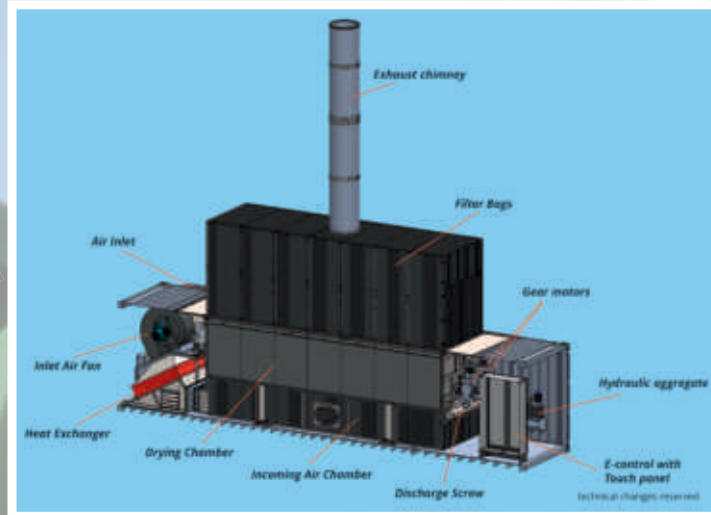
The Multi-Container-Dryer (MCD) consists of a stainless steel drying chamber, standing on load cells. Inside the drying chamber twin paddle mixer works for homogenization and loosening up the drying material. The twin paddle mixer driven by robust gear motors. With the help of agitators, the dried material is constantly in motion held. This ensures that the drying air is forced evenly through the material to be dried.

The input of the by a heat exchanger heated drying air is controlled by a frequency controlled air fan, an air canal, and a special air screen. The screen is equipped with a hydraulic cleaning device, which ensures that no digestate will block the screen. This ensures an always equal hot air and pressure distribution inside the dryer. The heat exchanger is designed to not lose any performance.

The exit of the dried material is controlled by stable screw auger, which is placed at the front end of the drying unit. When the preset, desired, drying grade (or weight) is achieved in the drying unit, the gate to the auger will open automatically, and the dried volume will be transported out of the dryer for further use by the client. The exit auger will run until a preset minimum level of solid material in dryer is reached and then close automatically, before new liquid digestate is added.

The exhaust air is forced into a chamber mounted on the dryer, which is equipped with bag filter units and leave the dryer through an exhaust chimney. The cleaned air goes through an ozone generator, which continuously adds ozone molecules to the exhaust air. These ozone kill all rest of organic in the air and therefore significantly reduce the odor. The clean air will vent to the atmosphere.

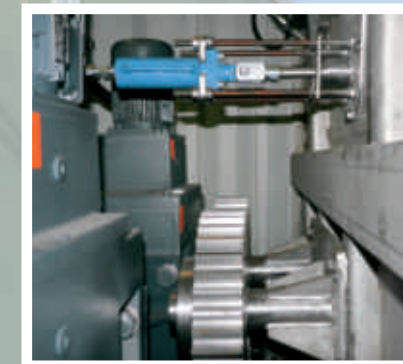
The uniform supply of heated air, continuous mixing and on-line monitoring of the dry material are the guarantee of good drying results, low at the same time electrical and thermal energy demand.



Supply air with heat exchanger and blower



Equipment room



Massive drive unit



Ozone Generator



Bag filter unit



Twin paddle mixer



Air channel and hydraulic screen

**The advantages:**

- Minimum spacs required by container constuction
- Semi transportable: Fast assembly and commissioning times
- Only three ports: Cold and Warmwaterline, Digestateline and Network Cable
- Remote maintenance via smartphone or PC made easy because all values are measured and displayed
- Archiving of all process values
- Introduction of liquid or solid digestate
- No additional air purification necessary through innovative Exhaust air treatment / no chemical exhaust air scrubber
- Low electrical and thermal energy demand
- All electrical drives are frequency-controlled
- Very low maintenance, robust technology and independent cleaning
- universally applicable

