Plug & Play Container Solution Wood Fiber as a Sustainable Peat Substitute

FIELD OF APPLICATION

The **Plug & Play** (PnP) container solution revolutionizes wood fiber production with refining technology, offering a green **substitute to peat**. This highly efficient system can be adapted flexibly to a wide range of customer requirements and ensures reproducible and homogeneous fiber production with **low maintenance**.

The process starts with customer-specific raw materials fed into a filling trough, serving as a defined feeding point, and offering an optimal buffer option. The continuous feeding mechanism through a conveyer screw ensures a reliable supply to the refiner, which is mounted right within the container. This dynamic setup and the compact, mobile system allow fibers to be produced almost anywhere. It even offers the opportunity to bring the machine or system to the customer-specific material source. Thanks to the plug & play technology, the system simply needs to be supplied with sufficient energy. Due to atmospheric refining, no steam is required for the process, ensuring cost-efficient and robust production.

The unique refining technology employed enables the adjustment of variable process parameters to influence both fiber morphology and specific energy consumption. Achieving consistent fiber quality is made attainable and reproducible thanks to refiner plate gap adjustment, with maintenance made seamless by the refiner's swing door design for rapid plate changes. Additionally, the refiner serves a dual purpose, also functioning as a mixer for solids, liquids, and various additives, facilitating the coloring of fibers. Operating at temperatures ≤ 100°C ensures compliance with the CMC2 classification under the new EU regulation for fertilizing products (EU 2019/1009). Furthermore, the mobile system supports rapid on-site repairs to minimize downtime and offers the option to revitalize the entire container in our specialized workshops during the "off-season."



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BENEFITS IN BRIEF

- + Cost-efficient and eco-friendly operation in compliance with EU regulations
- + Location-independent production, adaptable to diverse raw materials
- + Minimal energy requirements for streamlined operations
- + Quick implementation and limited personnel required for enhanced operational simplicity
- + Mobile system enables rapid on-site repairs, minimizing downtime
- + Modular construction for tailored setups and optimized resource utilization

TECHNICAL DATA

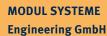
Pofinor an 4C

| Keimer 22-1C | | | | |
|--------------|----------------------------|---|-------------------------------|-------------------------|
| | Throughput* [kg/h atro] | Throughput* [m ³ /h atro]** | Throughput* [m³/h atro]*** | Installed power [kW] |
| | 1.000 | 6,7 | 14,3 | 200 |
| | 1.250 | 8,3 | 17,9 | 250 |
| | 1.500 | 10,0 | 21,4 | 300 |

* depending on raw material and moisture

- ** based on a wood chip bulk density: approx. 150 kg/m³ atro
- *** based on a fiber bulk density: approx. 70 kg/m³ atro





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