

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 conveyor 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 $\leq 100^{\circ}\text{C}$ 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

Refiner 22-1C

Throughput* [kg/h atro]	Throughput* [m³/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

