Advantages with FiberDry

+ Highest product quality due to uniform distribution of air speeds and temperatures

+ Adjustable web width handling system ensures uniform drying of the product and lower energy consumption

+ Industry 4.0 platform (predictive and condition based maintenance, trend monitoring and virtual sensing)
The main challenge for a new generation of glass mat dryers is to increase machine availability, reliability, productivity and the quality of the produced glass mat all at the same time. The production must be highly efficient with regard to economic aspects. This means that the machines have to run 24/7 and deliver continuously high-quality products. Voith understands the needs of producers and developed the FiberDry glass mat dryer to satisfy those needs exactly.

The optimal dryer you need for producing your glass mat
With our expert knowledge in the three heat transfer principles from the paper industry and from other industrial drying applications, we recognized early that we can offer added value to customers in this market.

FiberDry is an innovative dryer that combines both proven components and solutions with newly developed components especially for the requirements of the glass mat market. As a result, this dryer offers advantages to glass mat producers in all areas such as glass mat quality, dryer availability, productivity, operating costs and Industry 4.0.

FiberDry is a dryer of the latest generation, and as such a modern and reliable key component for our customers.

The challenge of pure air dryers
The current generation of dryers are pure air dryers and face several challenges like high contamination, low quality of produced glass mat, low productivity and poor reliability. Especially at the beginning of the drying process, convective dryers reach their physical limits. Glass fibers and binders are not yet bonded to each other, and the product is not yet strong. It can therefore only be dried with limited drying intensity.

In order to produce high quality glass mat, producers are forced in the beginning of the drying process to dry at low air velocities to avoid fiber and binder blowing. Also, the air temperatures must be low to avoid popcorning.

Infrared emitters for even better product quality
Optionally, an upstream infrared drying module can be used to achieve high drying intensities right at the start of the process, increasing both the quality of the glass mat and the productivity of the entire dryer. In addition, fouling in the air dryers due to dispersed glass fibers and binding agents is minimized, which results in better availability.

Each FiberDry can be individually adapted to the needs of the customer thanks to the developed modular system. For example, customers who want to drive different product widths can additionally optimize their FiberDry with an adjustable working width control. This allows for uniform drying of the glass mat while reducing energy consumption.

The positioning of the units, such as burners and fans outside the air dryers, allows maximum accessibility, maintenance friendliness and the greatest possible freedom in their selection. In combination with the modular design of the Air Dryer, the drying system can be flexibly adapted to changed products at any time.

Upgrade of existing dryer systems
Due to our decades of experience in the rebuild business in the paper sector, we use this know-how to offer upgrades for active plants with our products and solutions or optimization of existing components.

For example, an active system can be upgraded with an infrared dryer in the incoming area tailored to this system in order to increase the performance of the dryer and improve the quality of the glass mat. With the help of the individually adjustable infrared dryers, the uniform drying across the entire working width can be optimized very efficiently.

No matter if glass mat producers have quality, productivity, availability or reliability problems, we support them with our innovative products like our infrared dryer, vibrating unit Vibro-Beam or belt cleaning systems.
FiberDry – Our new glass mat dryer

Further advantages with FiberDry
+ Modular concept allows high flexibility and operability even in the case of malfunction
+ Optional infrared dryers for productivity, quality and increased availability
+ Longer lifetime and compliance with the highest safety standards thanks to changeable insulations
+ Belt preserve operation
+ Designed for minimized contamination for fewer cleaning shutdowns