

Next generation refining

InfibraFiner



Customer benefits

- + Sustainable refining due to reduced energy requirement
- + Increased refining efficiency thanks to higher throughput and improved mechanical properties
- + Maximum occupational safety and reduced maintenance effort thanks to new rotor change device
- + Refining 4.0 using cutting-edge I/O sensors for optimized refiner management plus full control thanks to the SmartLight
- Minimal footprint due to compact design with integrated gearbox





Voith's latest refiner, the InfibraFiner, combines cutting-edge technology, ultra-modern industrial design, and digitalization. The development is based on more than 60 years of R&D and more than 1,000 successful installations of its predecessor, the TwinFlo Refiner. The fiber treatment is especially sustainable, as the InfibraFiner demonstrably consumes less energy, offers higher hydraulic capacity, and extends the service life of the refiner fillings. The combination with the Voith Pluralis refiner fillings allows particularly gentle refining with reduced energy consumption. Compared with conventional refiners, the InfibraFiner achieves an additional production capacity of up to 28 percent. It also has an innovative design, with the gearbox integrated into the machine, for example.

Refining 4.0 with InfibraFiner DG

The optional "Digital Generation (DG) Package" offers even more bottom-line benefits. With the help of the SmartLight built into the cover of the refiner, operating personnel have information at all times and at a glance on the machine status, performance and current maintenance status, meaning that process deviations never go unnoticed again. Up to 15 latest-generation I/O-Link sensors are used for machine and process monitoring and optimize refiner control.

Especially valuable for operators are the unique contact detection, which identifies and pro-actively counteracts filling collisions, and the no-load power control, which allows enormous energy savings to be made. In addition, the wear condition of the fillings is constantly measured, so that the next filling change can be scheduled for the ideal time. All relevant information is displayed directly on the control panel next to the machine and in the control room, so that operating personnel can intervene at any time.

Outstanding design for optimum maintenance, safety and efficiency

The new design combines a modern look with numerous technological benefits that enable a much more consistent and energy-efficient refining process. For its outstanding industrial design, the InfibraFiner was awarded the Focus Open International Design Award Baden-Württemberg in silver by design experts.

The user-friendly and safe maintenance of heavy parts with the rotor changing device (patent pending) also improves occupational safety and reduces the maintenance effort.



- 1 A new rotor changing device (patent pending) ensures maximum occupational safety. Using this tool, the rotor can be secured, removed and put back into the machine without having to touch the rotor itself.
- 2 The innovative SmartLight ensures optimum operator guidance. Thanks to three colored illuminated segments, information is available at any time and at a glance about the machine status, performance, and current maintenance status.
- 3 Up to 15 latest-generation I/O-Link sensors, combined with direct refiner control, allow for an immediate response through the local control panel and remote access.



"We are excited about the new InfibraFiner DG from Voith as it marks an important milestone in refiner technology for safety and efficiency. Already, it allows us to increase the paper machine speed and thereby our production

by an average of 4.5 t/day. Besides this, we achieved an increase of the Burst Test result due to better pulp refining quality and process stability.

The IF90 DG is a great fit for us, and we are proud to have started up one of the very first machines at the Otacílio Costa mill. It has a robust design and is state of the art in terms of remote connection and onboard sensors and control systems."

Ênio Antônio Dos Reis

Process and Engineering Consultant at Klabin

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