

Press Release

Voith Group

Mailing address:
Voith GmbH & Co. KGaA
St. Pöltener Straße 43
89522 Heidenheim, Germany
Tel. +49 7321 37 0
www.voith.com

Voith launches PluraMaze to reduce energy consumption in refining with proven customer benefits

- Energy savings of more than 25 percent on no-load energy, significantly increased lifetime or improved refining results (details below)
- Labyrinth-based design innovation (patent-pending) enables optimized flow and reduced energy losses
- Three tailored variants available to meet customer requirements in refining applications

Heidenheim, Germany, June 24, 2026. Voith introduces PluraMaze, a new generation of refiner fillings designed to significantly improve energy efficiency and lifetime in refining. The new solution addresses key challenges faced by paper manufacturers worldwide, including rising energy costs, increasing pressure on efficiency and changing raw material qualities.

Initial customer installations are demonstrating measurable benefits. For example, Progroup, a packaging paper producer of containerboard based in Burg, Germany, selected PluraMaze 5.6, focusing specifically on energy efficiency and process stability under comparable operating conditions. "With PluraMaze, we were able to reduce no-load power by more than 30 percent compared to the previous filling, which has a direct impact on our energy consumption. At the same time, the process runs more stable, and we achieve more consistent quality of the final paper," said Kevin Zilm, Deputy Production Manager at Progroup.

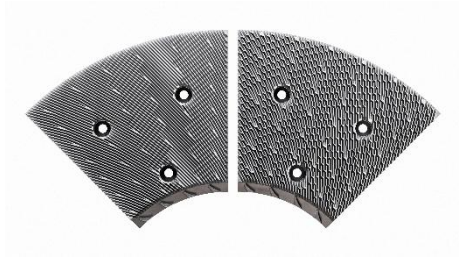
These energy savings are the result of a newly developed filling geometry based on a labyrinth-like structure. The patent-pending application design reduces internal backflow and significantly lowers no-load power.

Further customer installations confirm energy-saving potential in different refining applications. In a long fiber application at Pfleiderer Spezialpapiere, a German producer of specialty papers made from virgin fibers in Teisnach, PluraMaze 5.3 was evaluated against the previous Voith Pluralis filling with a focus on energy saving under comparable operating conditions. "With PluraMaze, we saw clear improvements in energy efficiency reducing no-load power by 27 percent," says Reinhold Walter, Head of Research and Development at Pfleiderer Spezialpapiere.

The new PluraMaze 5.6 variant optimized for European and Asian OCC pulps enables enhanced fiber treatment and delivers longer lifetime. At a Japanese specialty paper mill, PluraMaze delivered a 70 to 80 percent increase in lifetime compared to Pluralis, Voith's previous filling generation under comparable operating conditions. This performance directly reduces annual wear-part costs and the frequency of filling changes.

In China, a leading containerboard producer tested PluraMaze 6.5 in an OCC line with a focus on improving refining efficiency. In comparison to Voith's Pluralis fillings, PluraMaze delivered a higher refining degree under comparable operating conditions, pointing to more efficient fiber treatment.

PluraMaze is available in three variants for different requirements: PluraMaze 5.3 for customers with a primary focus on refining results and energy efficiency, PluraMaze 5.6 for a balanced combination of energy efficiency and lifetime, and PluraMaze 6.5 optimized for maximum lifetime. This modular approach allows paper manufacturers to select the ideal type depending on their operational priorities.



The new PluraMaze refiner filling

About the Voith Group

The Voith Group is a global technology company. With its broad portfolio of systems, products, services and digital applications, Voith sets standards in the markets of energy, paper, raw materials and transport. Founded in 1867, Voith today has around 21,000 employees, sales of € 4.8 billion and locations in over 60 countries worldwide and thus is one of the larger family-owned companies in Europe.

The Group Division Voith Paper is part of the Voith Group. As the full-line supplier to the paper industry, it provides the largest range of technologies, services and products on the market and offers paper manufacturers holistic solutions from one source. The company's continuous stream of innovations facilitates resource-conserving production and helps customers minimize their carbon footprint. With its leading automation products and digitalization solutions from the Papermaking 4.0 portfolio, Voith offers its customers state-of-the-art digital technologies to improve plant availability and efficiency for all sections of the production process.

Contact

Naomi Voith
Head of Solutions Portfolio Communication
Tel. +49 7321 37-2209
Naomi.Voith@voith.com

LinkedIn

www.linkedin.com/company/voithgroup

www.linkedin.com/company/voith-hydro
www.linkedin.com/company/voith-paper
www.linkedin.com/company/voith-turbo

YouTube

www.youtube.com/voithgroup

Instagram

www.instagram.com/voithgroup
www.instagram.com/voith.paper