voith.com

VOITH

Efficient fiber treatment through a unique design

TheWall disperger filling

Advantages

+ More efficient fiber treatment through an innovative design
+ Reduced energy demand
+ Long service life due to wear-resistant material
+ Very wide range of applications thanks to adjustable operating gap

New design for efficient fiber treatment

The goal of dispersing is to improve paper quality through effective fiber treatment. Efficient dispersing starts with proper feeding. TheWall filling is equipped with feeding vanes on the rotor, followed by a specific arrangement of teeth for uniform distribution and feeding of the pulp before entering the dispersing zone.

A characteristic feature of the filling is the space between the teeth which is partially closed by a continuous supporting structure. This is known as the wall. As a result, the disperger can be operated with a gap width between 0.5 to 8.5 mm without the risk of short circuiting untreated fibers. This unique, patented design reduces energy demand and improves dirt speck and sticky reduction.

Long service life due to wear-resistant material

The disperger filling consists of a continuous supporting structure that provides the fine teeth with necessary support and integrity to withstand a wide range of foreign contaminants. This allows the use of harder wear-resistant materials that extend service life and thus reduce maintenance time and cost.

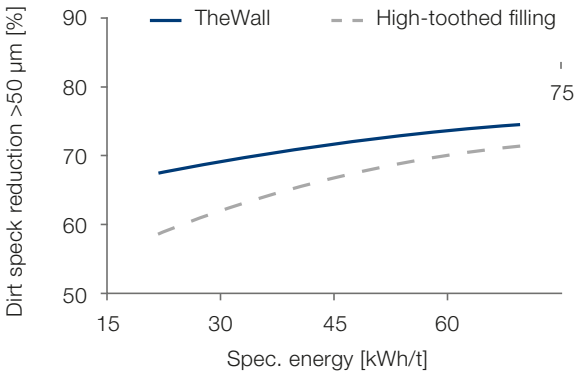
Wide range of applications

With its adjustable operating gap, the new disperger filling can be used in a wide range of operation. The specific energy consumption can be adjusted to process requirements for different RCF qualities without having to change the filling. With TheWall, both high and low specific energy inputs are possible with excellent efficiencies.

Superior results are achieved by combining TheWall with the newly developed Voith disperger InfibraDisp and the Compact Dispersion System. In addition, the filling is available for all Voith dispergers that can take casted segments and select disperger sizes from other manufacturers.

Dirt speck reduction

TheWall vs. conventional high-toothed disperger filling



Upgrading to TheWall – Case study from a paper mill

Objective: Optimum adaption of the specific energy to the requirements of production and product quality with minimal energy consumption

Product: graphic paper (predominantly sorted recovered office paper, sorted mixed recovered paper)

	Before	After
Filling type	High-toothed filling	TheWall
Specific energy [kWh/t]	50 - 70	30 - 50*
Operating life [months]	6	10
Gap [mm]	2 - 5**	1 - 6

*If required, it is possible to record 100 kWh/t with TheWall, which could only be achieved previously after changing the filling.

**Short circuiting can occur with gaps >3.0 mm

Voith Group
St. Poeltener Str. 43
89522 Heidenheim
Germany

www.voith.com/paper

Contact:
Phone +49 7321 37 2487
paper@voith.com

VOITH
Inspiring Technology for Generations