
Improved efficiency via internal recirculation in refiners

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Voith has many years of experience in the market with its product Pluralis for double disc refiners. The Pluralis refiner fillings are successfully used by numerous customers worldwide in a vast variety of applications in order to achieve the required strength properties at low energy requirements.

Since hundreds of installations of Pluralis fillings have already proven their advantages, customers have requested Pluralis technology for their conical refiners. We have developed the new product, Pluralis Conical in our R&D department.

The proven Pluralis design was transferred to the conical shape and an additional function was integrated into the product by incorporating backflow channels.

The backflow channels allow internal recirculation in the existing refiner and therefore offer higher flexibility in the operation of the machine. Furthermore by using the innovative backflow channels, a higher cutting length on the bar side of the fillings is possible which supports in refining more efficiently.

Pluralis Conical has been extensively tested in installations in Europe and Asia. The products have already been running successfully for several months with very positive customer feedback. According to our customers, the innovative design of our Pluralis Conical saves up to 35% energy in their existing applications. In some cases savings in capital equipment can be achieved. These savings are accomplished whilst maintaining high fiber quality and good fibrillation of the fibers.
