

Maximum flexibility and superior cleaning efficiency InduraClean



Customer benefits

- + Improved paper quality thanks to maximum separation efficiency
- + High inlet stock consistencies allow low specific energy use, fewer machine units and therefore lower costs
- + Minimum fiber loss due to high concentration of contaminants in the rejects
- + The EcoMizer rejects dilution function maximizes operational reliability even at the highest stock densities

Fiber suspensions in stock preparation contain abrasive material and dirt. The heavyweight cleaner InduraClean efficiently removes these up to a stock consistency of 3%. In addition, the minimization of contaminants in the raw material leads to improved paper quality. The combination of high stock consistency and reduced volume flow also reduces energy consumption and consequently, operating costs.

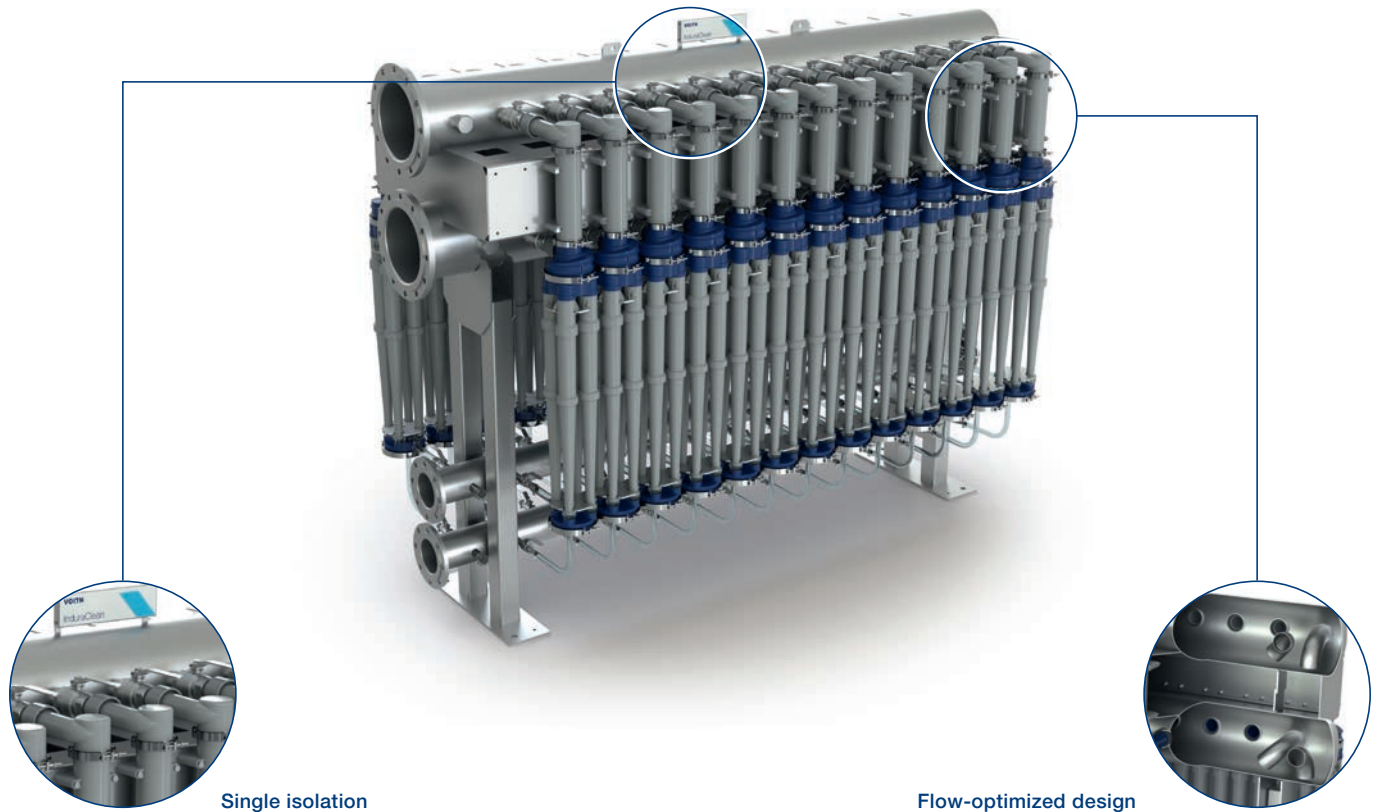
One system – Multiple configurations

The modular cleaning system InduraClean consists of a re-designed cleaner bank and various cleaners that are perfectly matched to one another. Depending on process requirements, the system can focus on achieving a much higher production volume, a reduction of energy consumption, or a significantly improved separation efficiency.

High throughput with reduced footprint – InduraClean cleaner bank

With its flow-optimized, space-saving and modular design, the InduraClean cleaner bank is a winning solution. Thanks to the optional single isolation, individual cleaners can be separated for maintenance without having to stop production, resulting in increased system availability and better productivity. In addition, the cleaner bank features a flow-optimized design that prevents deposits in it due to rejects or highly contaminated stock. The Clean Design of the InduraClean bank ensures a low-maintenance, robust process during operation.

InduraClean cleaner bank



Single isolation

Flow-optimized design

Optimum cleaning efficiency for any application – InduraClean IDC-4

The design of the InduraClean IDC-4 accommodates several small hydrocyclones in one unit and thus combines outstanding separation efficiency with high throughput in a single cleaner unit. Thanks to this arrangement, a significantly higher production can be achieved with a compact design compared to conventional solutions. The cleaners achieve high separation efficiency with lower pressure drop, resulting in considerably reduced operating costs due to low energy consumption.

The InduraClean concept has a modular structure, which means that the cleaner can be easily adapted to the customer's individual requirements and production targets.

- The IDC-4F (FourFlow) was specially developed for large production capacities and is used primarily in the production of board and packaging papers.
- The InduraClean IDC-4Q (FourQuality), on the other hand, is mainly suited to specialty and graphic paper grades, because it prioritizes very high cleaning efficiency and quality.

Maximum efficiency at high stock consistencies – InduraClean IDC-5I

The optimized headpiece of the InduraClean IDC-5I achieves high vortex rotation at a low pressure loss. As a result, any fiber flakes are broken up and contaminants released, which means that they can be separated easily and effectively.

Removal of contaminants with low specific weight – InduraClean IDC-5C

If required, a LightPlus outlet for light contaminants can be added to the InduraClean IDC-5I cleaner to separate light contaminants. Any specifically light contaminants in the suspension like air, polystyrene and adhesives can be significantly reduced with the InduraClean IDC-5C. This further improves paper quality with minimal investment.

All InduraClean cleaners use the proven EcoMizer principle

With the tried-and-tested EcoMizer principle, fibers in the rejects discharge are washed back to the accepts inside the cleaner. This counteracts a local thickening, improving operational reliability in the case of high stock densities and at the same time reducing fiber loss. Thanks to the low fiber content in the rejects, fewer cleaner stages are necessary, as fewer fibers need to be transferred to the next stage. As a result, much reduced overflow rates can be achieved with InduraClean compared to conventional cleaner systems. This significantly reduces the pump energy required and the number of downstream stages.

Types of InduraClean IDC-4

IDC-4F (FourFlow)



IDC-4Q (FourQuality)



Types of InduraClean IDC-5

IDC-5I



IDC-5C



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