

# Optimization options for LC cleaners Cleaner rebuild



# Increase cleaning efficiency to save resources

Is your goal to increase efficiency in the cleaning process without costly new investments? Save valuable resources with our rebuild solutions and at the same time improve the performance of your existing system.

## Rebuild opportunities for your LC cleaner in Voith machines



Easy EcoMizer



CleanView Cone



LightPlus

	Easy EcoMizer	CleanView Cone	LightPlus
HCL5/IDC5	Standard	x	x <sup>1)</sup>
HCH5	x <sup>1)</sup>	x <sup>1)</sup>	x <sup>1)</sup>
HC5	x <sup>1)</sup>	x <sup>1)</sup>	x <sup>1)</sup>
KS160	x <sup>1)</sup>		
KS60/IDC		x	
KS250	x <sup>1)</sup>		

<sup>1)</sup> Some restrictions apply. Please contact your local Voith sales representative for further information.



## Rebuild opportunities for your LC cleaner in third party machines



Easy EcoMizer



EcoMizer



AdaptClean

GL&V Celleco Cleanpac 350/700	x <sup>1)</sup>	x <sup>1)</sup>	x
GL&V Celleco 1500LF/SF	x <sup>1)</sup>		
Andritz SC133/TC132/TC133	x <sup>1)</sup>		x
GL&V Albia A500T		x <sup>1)</sup>	
Bauer 606		x <sup>1)</sup>	
Kyoung Yong ST10	x <sup>1)</sup>		
Palmac P200/P300	x <sup>1)</sup>		
Kadant Ultra-Clone 6"		x <sup>1)</sup>	
Kadant CT60/CT30	x <sup>1)</sup>		

Rebuild of further machines available on request.



- 1 Quick-to-assemble Easy EcoMizer Kit
- 2 EcoMizer for many applications
- 3 Easy EcoMizer for optimal monitoring of the reject flow

# Up to 70 % less fiber loss EcoMizer & Easy EcoMizer

Fiber loss and plugging are the main problems in LC cleaner systems. The reason for excessive fiber loss is the incomplete separation of fibers from the rejects in the cleaner. In addition, unstable flow conditions and excessive thickening in the lower cone area lead to clogging. By upgrading a cleaner system to the EcoMizer technology, fiber losses and energy consumption are reduced significantly and higher machine runability is achieved. Higher stock consistencies of up to 3% are possible, which reduces the number of cleaners and cleaner stages necessary for your current production.

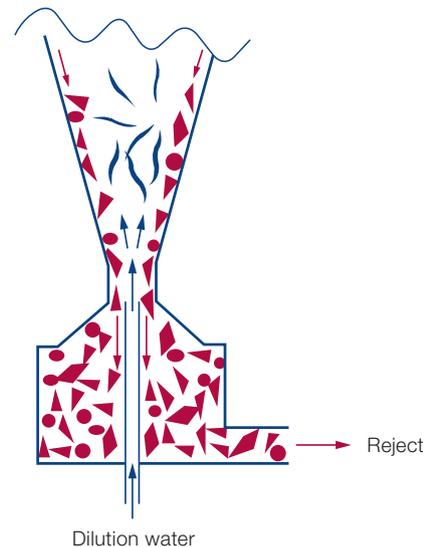
## The Easy EcoMizer kit

As a refinement of the standard design, Voith offers the Easy EcoMizer kit for many cleaner models. Thanks to the low number of components it is exceptionally fast and easy to install. Because of the transparent material the reject flow can be easily monitored.

## The EcoMizer principle

The internationally proven concept of axially injected backflush water allows minimal fiber loss with high operational reliability. The axial injection proactively supports the natural flow pattern in the cleaner. Fibers are not removed along with the rejects but are washed back to the accepts. This results in maximum separation efficiency with minimum fiber loss and optimal runability.

## Improved runability with reduced fiber loss



## Your benefits

- + Up to 70 % less fiber loss
- + Significant energy savings thanks to reduced number of cleaners and cleaner stages
- + Reliable operation at stock consistencies of up to 3%
- + Optimum monitoring thanks to transparent design
- + Fast and easy installation using V-clamp



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4 LightPlus upgrade installed in an HCL5 cleaner bank

5 LightPlus takes care of even the lightest contaminants

# Small expense – big effect

## LightPlus upgrade

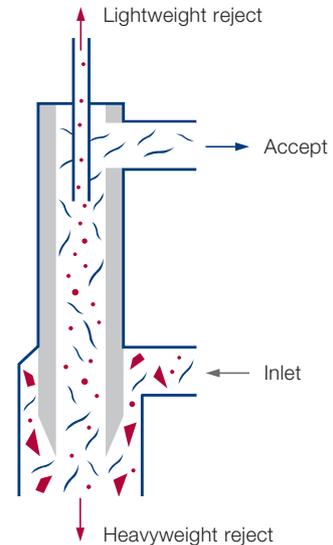
Specific lightweight contaminants such as air, Styrofoam, and adhesives are difficult to remove in the cleaning process from the suspension without a lightweight cleaner. A LightPlus upgrade transforms your standard LC cleaner into a combination cleaner to remove these light contaminants, which also has a positive impact on paper quality. The upgrade is a great value alternative to a large investment in extensive new lightweight cleaning systems.

LightPlus requires only limited space since it is installed on top of the existing LC cleaner. The system, moreover, can be complemented with a few additional lightweight cleaners, if required. After a rebuild to LightPlus, markedly fewer cleaners are necessary overall when compared to the investment in comprehensive new lightweight cleaning systems, resulting in additional savings in energy consumption and maintenance outlay.

### The LightPlus principle

Since light contaminants travel together with fibers in the central flow of the cleaner due to their weight, they are usually not removed via the heavyweight reject. Nonetheless, since they also feature lower specific weights than fibers, they tend to collect in the center of the fiber flow on their way to the accepts outlet. The LightPlus principle utilizes this effect with an additional outlet for light contaminants, preventing them from staying in the accepts suspension.

### LightPlus upgrade functional principle



### Your benefits

- + Improved paper quality
- + Minimal investment costs
- + Low specific energy consumption
- + Improvement in efficiency of downstream processes
- + Space-saving solution
- + Reduced maintenance outlay

# Voith expertise for LC cleaners AdaptClean

AdaptClean technology enables an improvement in overall efficiency through a quick and easy rebuild of LC cleaners from any manufacturer with diameters of 105 mm and more.

The rebuild kit consists of an adapter, the thoroughly proven cones in a variety of materials, and the Easy EcoMizer. For the rebuild, all components underneath the cleaner head are removed. Using an adapter, a Voith separating cone and the Easy EcoMizer are then mounted to the existing head piece. The rebuild can be completed during a shutdown of just a few days.

This means that regardless of manufacturer, most existing LC cleaners worldwide can be rebuilt in an efficient, simple and fast rebuild process.

Thanks to ongoing refinements, Voith guarantees solutions to meet the challenges of the future. AdaptClean allows our customers to benefit from these improvements and ensures that their LC cleaning systems consistently keep pace with the latest developments.

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## Your benefits

- + Improved paper quality
  - + Minimum investment cost
  - + Low specific energy consumption
  - + Reduced fiber loss
  - + Participation in the ongoing development of components
  - + Minimal rebuild effort
  - + Improved overall efficiency
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## AdaptClean in LC cleaner system



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## Adapter for AdaptClean rebuild kit



# Cleaning process becomes visible

## CleanView Cone

Voith offers transparent cones for some LC cleaners. Using the rebuild solution AdaptClean, these CleanView Cones can also be fitted to machines from other manufacturers. Thanks to the characteristics of the transparent cones, process parameters like stock consistency or dilution water input volume can now be adjusted not just with the usual systems but also based on visual assessments. As a result, much less sampling needs to be done.

The fast and simple setting of process parameters leads to considerable savings in fiber and energy. In addition, changes in process parameters, like a plugged cone, can be identified at all times without tools.

To determine the wear condition, the CleanView Cones are fitted with a wear indicator showing the remaining wall thickness of the cone, even during operation.

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### Your benefits

- + Improved paper quality
  - + Minimum investment cost
  - + Clogging is visible
  - + Dilution water volume can be monitored visually and adjusted
  - + Wear is visible
  - + Fiber and energy savings can be achieved
  - + Cleaning process is visible
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### CleanView Cone with wear indicator



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### Cleaning process is visible



How can we support you?  
Just contact us via our  
**webform.**



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