HiFlux Filtration A/S

”It doesn’t get any bigger! New giant filter for water treatment.

A Danish-developed automatic filter meets the increasing need for filtration with a large flow. Environmental considerations and operational optimization make the filtering process more relevant than ever before, and the growing demand forms a solid foundation for the world’s largest filter of its kind.

A large and a small one. Martin Holgaard, Sales Director at HiFlux Filtration A/S, next to the company’s largest filter ever. The new Auto-line LVLR filter can process 2000 cubic meters of water per hour, and the filter housing is over four meters in height.

In many ways, it is significant that HiFlux Filtration A/S has constructed the world’s largest pressure filter with a scraping system. Not only significant for the company itself but also for players in the wastewater sector, the food industry, and the production industry. These three segments primarily demand water filtration with the largest possible flow, as it can positively impact the climate footprint. The newly developed Auto-line LVLR filter can process 2000 cubic meters of water per hour, more than doubling the flow capacity compared to the manufacturer’s second-largest solution in Hedensted.

Utilization of technical water.

The extraction of excess heat from cooling and wastewater is one of the factors that make the large filter flow relevant in the context of green transformation. Large amounts of technical water are used in modern production facilities, and the facilities are becoming larger and more automated. Filter solutions naturally follow this development, says Martin Holgaard, Sales Director at HiFlux Filtration A/S. The continued interest in

the optimal use of technical water is reflected in the East Jutland-based manufacturer, which has focused on energy-saving automatic filters for customers worldwide for several years. And in recent years, progress has been swift.

Image 2: The self-cleaning filter solutions have significantly grown in recent years. Far left is the gigantic Auto-line LVLR filter, setting new standards when it comes to flow. The filter has a capacity of 2000 cubic meters of water per hour.

”The launch of the self-cleaning VLR filter in 2017 was a big deal. It is still a highly sought-after filter as it can process over 1000 cubic meters of water per hour, but several sectors today require more. That’s why we have worked diligently on further developing the filter flow,” says Martin Holgaard, adding that they have increased their participation in foreign trade fairs with European partners, providing valuable insights into the market and global potential for large flow filtration. However, the development is based on inquiries received from Northern European customers.

”It is in the local area that we, so far, feel the most interest. This is also where there is the greatest focus on the climate gains of energy-efficient liquid filtration, although we sense that more markets are starting to join. At foreign fairs, there are certainly more questions about energy consumption and environmental impact than before,” notes Martin Holgaard.

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Filtration contributes to green energy.

He further explains that the energy crisis has been a driving force for many companies to embark on the green transformation. In this regard, the new self-cleaning Auto-line LVLR filter is highly relevant. The filter operates with minimal backwash, optimizing both water consumption and operation, thereby reducing the CO2 footprint in production. The scraping system has a range from 1000 micrometers down to 100 micrometers, eliminating even the smallest impurities and dirt particles.

When the flow capacity is also 2000 cubic meters of water per hour, it makes sense for the wastewater sector to embrace the new possibilities. The LVLR filter meets all the requirements of a modern purification plant for filtration and the use of water with green energy in mind. The demands for the efficiency of wastewater systems are increasing, as rainfall continues to grow, and even more water needs to be purified and discharged. These are current challenges that make large flow filtration highly relevant, points out Martin Holgaard, emphasizing that filtration is needed not during the discharge of water but when the water needs to be utilized and reused.

Protecting components.

The filtered water can be used for heat recovery, and the filtration effectively protects heat exchangers from clogging. It also protects components such as nozzles, valves, and measuring equipment, providing support for fully automatic filters in the wastewater sector and industries with significant consumption of cooling and rinsing water.

”The awareness of optimal use of technical water is greater than ever. Self-cleaning filtration is one of the means to achieve the goal. Our new filter has been developed based on concrete interest from customer segments that are all heavy consumers of water. And ’large’ is a keyword. The LVLR filter is in every way a large construction, and the filter housing is over four meters in height. It doesn’t get any bigger, we believe modestly,” concludes Martin Holgaard with a smile.

Engineers at the East Jutland liquid filter manufacturer have worked intensively on the development of the new filter to meet the ever-increasing need for large flow water filtration.

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Facts:

HiFlux Filtration A/S is a Danish company that has specialized in delivering tailored filtration solutions to the process industry, as well as the food and energy sectors for over 60 years. The focus is on the development and manufacture of liquid filters. Consulting, problem-solving, assembly, and servicing are important elements of the company's activities. HiFlux Filtration A/S has dealers throughout Europe and a branch office in Holland."