

November 8, 2016

Alfa Laval presents versatile tertiary filtration solution for water and wastewater treatment at Ecomondo 2016

At the Ecomondo exhibition in Rimini, Italy, from November 8 to 11, Alfa Laval – a leading global provider of solutions and services for the water and waste treatment – presents its AS-H Iso-Disc Cloth Media Filter. The fully automatic polishing filter removes suspended solids from wastewater and surface water to produce a high-purity, reuse-quality filtrate. A full scale unit is on display at Alfa Laval's stand no. D3 110 at Ecomondo.

For many sewage plants where secondary wastewater treatment is not sufficient to meet local authorities' increasingly stringent effluent criteria for discharge into nearby water courses, tertiary treatment such as final polishing is needed. At the same time fresh water is a scarce and very expensive resource in many regions, and many are looking for alternative water resources such as reclaimed wastewater for reuse. Alfa Laval has a solution that solves both challenges.

Superior effluent quality and certified for water reuse

The Alfa Laval AS-H Iso-Disc® Cloth Media Filter is a polishing filter that removes suspended solids from wastewater to produce a high-purity, reuse-quality filtrate that can safely be either discharged to nature or immediately reused for both municipal and industrial applications. The performance of the Iso-Disc filter is second to none. The standard cloth media is capable of solids capture to less than 10 microns, with the advantage of outside-in depth filtration for handling high solids loadings.

The Iso-Disc Cloth Media Filter is California Title 22 Certified for Water Reuse Standards, and produces effluent of such a high quality that it is suitable for immediate water reuse as it is e.g. for irrigation, cooling towers or recreation lakes.

Small footprint-to-flow ratio and easy to retrofit

Iso-Disc polishing filters are a compact, cost-efficient alternative to traditional sand filters and other disc filter technologies. They offer a robust yet simple design that can handle peak hydraulic loadings up to 15 m³/h/m² and filtration needs from <5 to >800 m³/h within a single small footprint-to-flow ratio filter. Compared to sand filters, Iso-Disc cloth media filters require substantially less space, significantly lower capital costs and less backwash water reject. Thanks to the flexible design Iso-Disc filters are easy to fit into new or existing tanks.

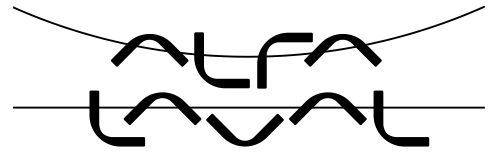
Simple, cost-effective operation with minimal maintenance

The Alfa Laval AS-H Iso-Disc Cloth Media Filter utilizes a fixed cloth media for fully automatic outside-in depth filtration. An efficient linear backwashing system cleans the media equally across the whole surface area. Compared to other disc filter technologies Iso-Disc has a very high efficiency provided by the completely submerged filter elements that offer 100% utilisation of the filtration area plus the possibility for individual filter element monitoring, maintenance and effluent sample taking.

Another contributor is the fact that Iso-Disc continues filtration even during backwash and maintenance. It is very reliable and operator friendly, and requires minimal supervision.

Municipal and industrial applications

In addition to municipal wastewater plants, Iso-Disc polishing filters can be used in a variety of industrial wastewater applications such as dairy, vegetable washing and processing, beverage, brewery and distilleries plus the biological effluent associated with petrochemical production. It is especially suitable as final polishing filter after biological wastewater treatment such as activated sludge processes, oxidation ditches, biological packaged plants, sequencing batch reactors (SBR) and fixed film processes (IFAS, MBBR and trickling filters).



Customer value examples

Iso-Disc has proven its value at numerous installations around the world. In Italy, Ecoimpianti Srl, who operates Umbria Acque's Castiglione del lago wastewater treatment plant has adopted Iso-Disc as a means of reducing final effluent suspended solids and phosphorous. Other examples include [Scottish Water](#), who replaced old sand filters with Iso-Disc filters that deliver a far superior final effluent quality than what is required by the local authorities, and [City of Meadows Place](#) in Texas, US, who saves \$ 25,000/year in fresh water fees using reclaimed wastewater filtered with Iso-Disc in their new lake for recreational purposes.

Contact people for more information

Annette Risberg, Central Communications Manager, Water and Waste Treatment, Alfa Laval, Tel: +45 2777 8539, annette.risberg@alfalaval.com

Andrew Bibby, Regional Business Development Manager, Alfa Laval
Tel. +44 7813 997 665, andrew.bibby@alfalaval.com

Editor's Notes

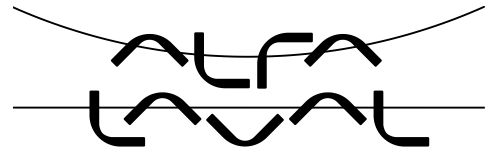
Alfa Laval is a leading global provider of specialized products and engineering solutions based on its key technologies of heat transfer, separation and fluid handling.

The company's equipment, systems and services are dedicated to assisting customers in optimizing the performance of their processes. The solutions help them to heat, cool, separate and transport products in industries that produce food and beverages, chemicals and petrochemicals, pharmaceuticals, starch, sugar and ethanol.

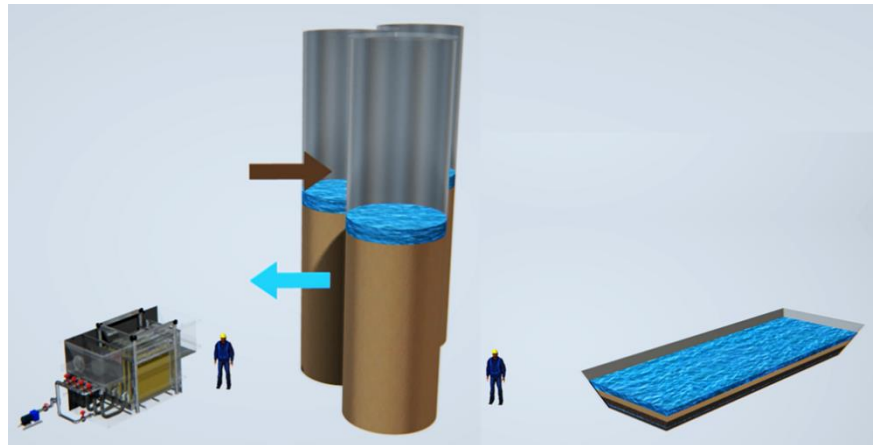
Alfa Laval's products are also used in power plants, aboard ships, in the mechanical engineering industry, in the mining industry and for wastewater treatment, as well as for comfort climate and refrigeration applications. Alfa Laval's worldwide organization works closely with customers in nearly 100 countries to help them stay ahead in the global arena.

Alfa Laval is listed on Nasdaq OMX, and, in 2015, posted annual sales of about SEK 39.7 billion (approx. 4.25 billion Euros). The company has about 17,500 employees.

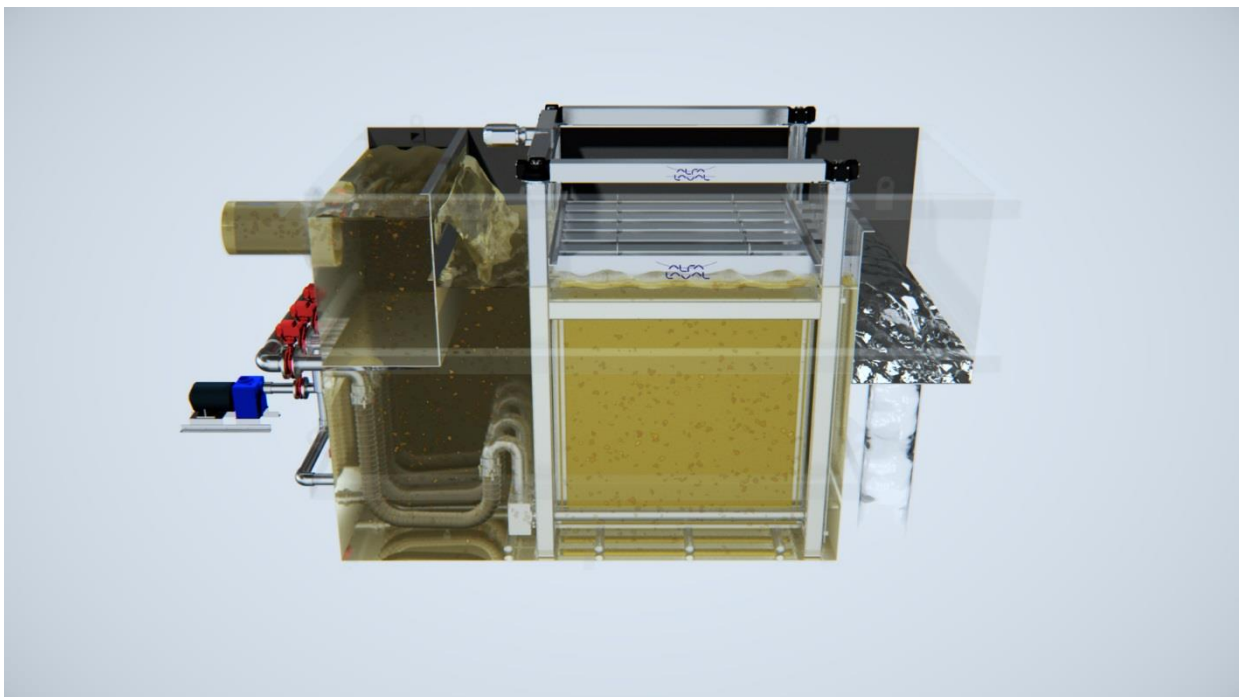
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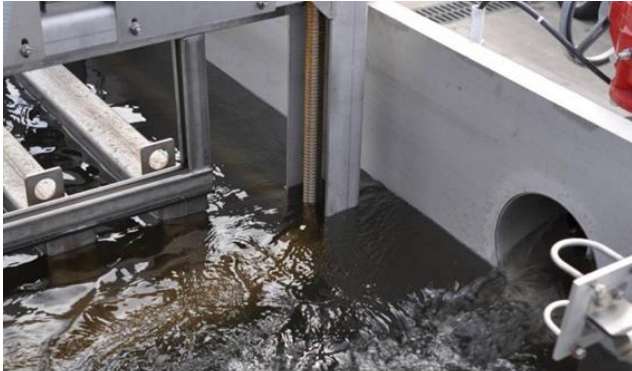
For high resolution images, please visit <http://www.alfalaval.com/media/news/>



The compact Alfa Laval AS-H Iso-Disc® Cloth Media Filter is a space saving and cost-efficient alternative to traditional sand filters for final polishing.



The gravity driven Alfa Laval AS-H Iso-Disc® Cloth Media Filter delivers very high process efficiency, provided by the completely submerged filter elements that offer 100% filtration area plus the possibility for individual filter element monitoring, sample taking and maintenance with continued operation.



The two photos show wastewater effluent before (top) and after (below) tertiary filtration with the Alfa Laval AS-H Iso-Disc® Cloth Media Filter.



Wastewater is an untapped water resource. Water reclaimed using the Alfa Laval AS-H Iso-Disc® Cloth Media Filter can be reused for process water, cleaning, cooling towers, irrigation of crops, golf courses and much more.



The City of Meadows Place Municipal Wastewater Treatment Plant in Texas, US, saves \$ 25,000/year in fresh water fees using reclaimed wastewater filtered with the Alfa Laval Iso-Disc Cloth Media Filter in their new lake for recreational purposes.