

PRESS RELEASE

The new generation of seawater-resistant filter elements

Series-ready Avesta 254 SMO mesh laminates for demanding seawater applications

In seawater desalination, filter elements are exposed to extreme conditions: high salt concentrations, mechanical loads and fouling require materials that remain efficient in the long term. Sintered mesh laminates have proven their worth both technically and economically. With the series production of mesh laminates made from Avesta 254 SMO, Haver & Boecker is now setting a new standard for seawater-resistant filter elements.

Mesh laminates consist of several process-specific mesh layers – such as filter, protective, and support layers. In the case of sintered POROSTAR® mesh laminates from Haver & Boecker, these layers are metallurgically bonded. This significantly increases mechanical stability: burst pressure resistance rises by up to 25% compared to multilayer, non-sintered filter elements. Additional support elements such as wedge wire bodies are no longer necessary.

Mesh laminates are particularly effective when combined with seawater-resistant materials like Avesta 254 SMO. This high-alloy stainless steel achieves an exceptionally high corrosion resistance with a PREN value of 43 – ideal for use in saline media. Haver & Boecker has further developed the complex sintering process to enable reliable and series-ready processing of Avesta mesh into laminates.

“So far, efficient sintering of Avesta 254 SMO was not available on the market due to potential delamination,” explains Tim Gerdes, Business Development at Haver & Boecker. “Our solution closes this gap – we are currently the only provider on the market.”

Plant manufacturers benefit from optimized filtration, reduced maintenance costs, and increased operational safety. Another advantage: the sintered mesh laminates combine the strengths of surface and depth filters. Particles are precisely retained on the surface, while the multilayer structure enables high dirt-holding capacity. This ensures

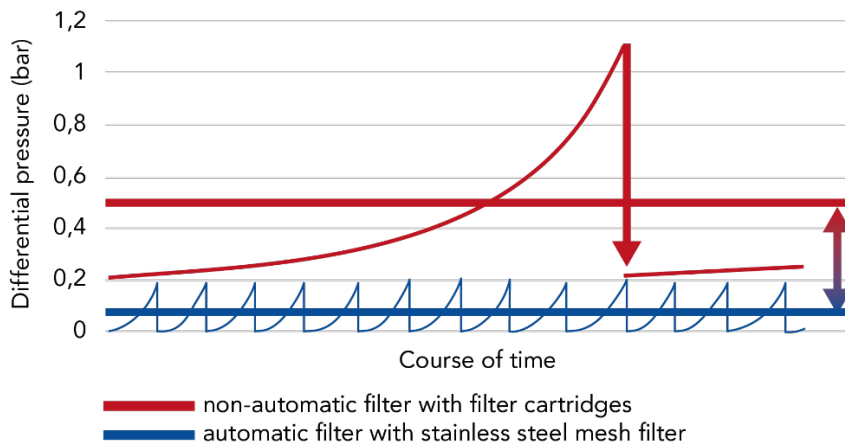
PRESS RELEASE

uniform flow, long service life, and reduces downstream filtration stages and maintenance effort.

Further information – including applications in automatic filters – can be found on [our website](#).



Caption: Water treatment plants



Caption: Schematic diagram of the average differential pressure of different filter types.

PRESS RELEASE

About Haver & Boecker OHG

Haver & Boecker is a family-managed, midsize company with headquarters in Oelde, Westphalia, Germany. Haver & Boecker OHG comprises the Wire Weaving and Machinery Divisions. Together with more than 50 subsidiaries and 150 representatives on all five continents, Haver & Boecker operates worldwide with about 3,000 employees.

The product range of the **Wire Weaving Division** includes thousands of different mesh types, which can be processed into technical wire mesh products. These are used for screening and filtration in industries such as chemicals, plastics, automotive, aerospace, electronics, industrial and analytical screening, food production, water treatment as well as for architectural applications.

With many years of experience in the development of wire mesh filter elements for the water industry, Haver & Boecker offers customized solutions for demanding filtration applications.

Contact for water filtration:

Tim Gerdes – Business Development

E-Mail: t.gerdes@haverboecker.com

Contact for the editorial team:

Bentja Witte – Marketing Wire Weaving Division

E-Mail: press-DW@haverboecker.com

HAYER & BOECKER OHG

Ennigerloher Straße 64 · 59302 Oelde, Germany

www.haverboecker.com