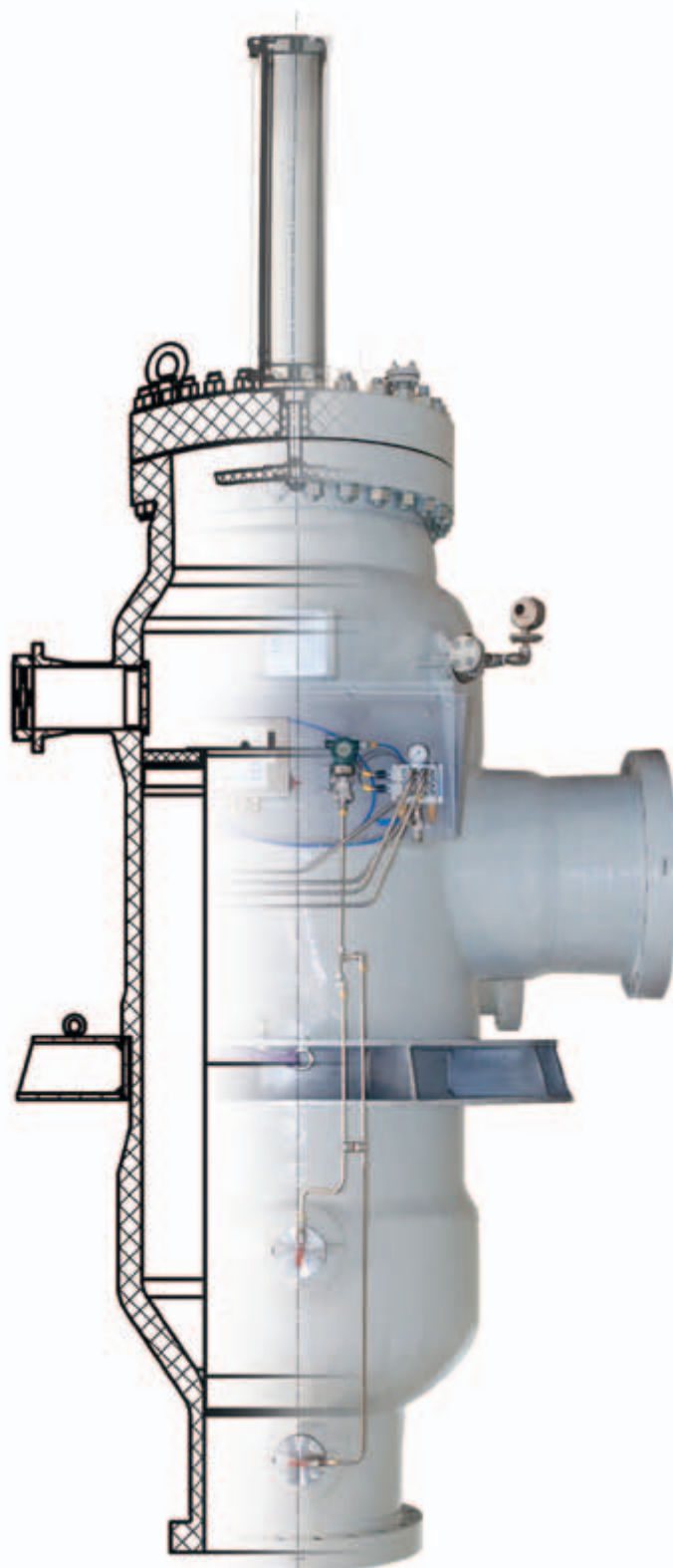


# Automatic Filter F450

## The long-distance runner

With its innovative application of the Bernoulli principle, the self-cleaning F450 automatic filter has set the worldwide standard for continuous filtration.



# Continuous filtration without process interruption

SAB's F450 Self Cleaning Filter automatically cleans all low viscosity fluids at high output flow rates.

No matter if it is during filtration of aggressive fluids, desalination, industrial process or power station cooling water the F450 will meet the need. This system reliably protects heat exchangers and other downstream components from clogging and fouling. It likewise dependably prevents the negative effects of the EPS phenomenon (extra polymeric substances). The intelligent use of the Bernoulli principle for the automatic self-cleaning of the filter units enables significantly longer service life of the system.

## Made to order solutions

SAB's F450 filter can be purpose built using various materials for the housing and internal wet parts which serve the basis behind SAB's solutions. Nominal diameters up to DN 800 are possible, and the positioning and number of connections are possible in accordance with the particular facility. Special design of installation size allows continuous filtration without process interruption, up to 8,000 m<sup>3</sup> / h, with filter mesh size beginning at 150 µm. The customer can select between pneumatic or electrical drives, also with ATEX approval.

## Intelligent control and monitoring



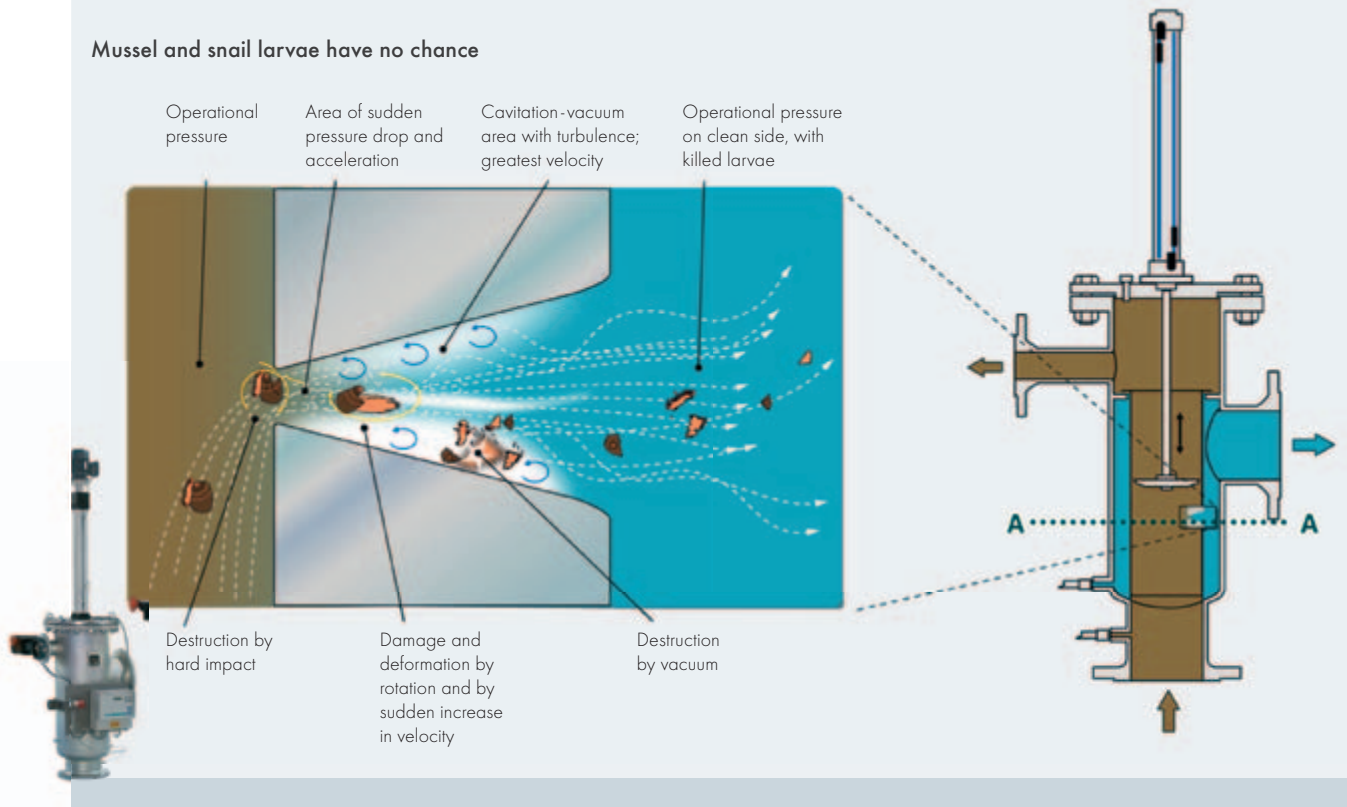
Schünemann offers a control unit that is exactly matched to the parameters of the filter, and that can be simply integrated into higher-level control and monitoring systems operated by the customer (DLCs). The option of condition-based monitoring

for maintenance allows the possibility of state-oriented servicing and repair. This prevents unexpected down times.



F450 areas of use: – chemical industry – petrochemicals – plastics industry – automotive industry – power stations – cooling-water circuits – industrial processes – food industry – reverse-osmosis plant protection – demineralised water filtration – desalination-plant

## Mussel and snail larvae have no chance



## Automatic Self Cleaning



SAB's F450 filter operates on the law of physics of liquid velocity as discovered by Daniel Bernoulli. This principle has been adopted by SAB and designed into the operation of the F450 to ensure reliable destruction of mussel and snail larvae plus the continuous cleaning of the element preventing wear and keeping a constant high level of filter performance.

## The success of the F450 at a glance

- Working pressures as low as 0.6 bar during filtration and back flushing
- Destruction of larvae ensures no clogging or fouling
- Intelligent electrical controls and remote monitoring
- Standard mesh sizes from 150  $\mu\text{m}$  to 10 mm (finer on request)
- Housing material in steel, stainless steel, glass fibre reinforced plastic, marine bronze, super duplex, monel.
- Low maintenance and minimum downtime
- Back-flushing process controlled by time and differential-pressure parameters
- Nominal sizes up to DN 800
- Flow rates up to 8,000  $\text{m}^3/\text{m}$



protection – Sewage treatment plants – surface-water filtration – cement factories – steel foundries – aluminium industry – mineral oil filtration – shipbuilding – protection against mussel larvae in cooling-water circuits – ballast water filtration – marine applications



Directive 97 / 23 / EG  
for pressurized  
equipment

**At a glance: functions of the F450 automatic filter:**

- Protection of large cooling-water systems, plants, and processes from contaminants
- Minimisation of maintenance resource requirements for filters
- Prevention of damage to heat exchangers and other plant facilities
- Avoidance of production downtimes and malfunction

**Service – fast and available throughout the world**

- Speedy customer service available worldwide
- SAB is your working partner from filter design to in life support
- SAB engineers available on short notice for installation, commissioning, maintenance and staff training. The optimal support system worldwide
- Service parts available on short lead times

