

# Alfa Laval PureSOx Energy Reduction Mode upgrade

# Energy-saving compliance through automatic water flow adjustment

A SOx scrubber system needs a sufficient flow of seawater to provide compliance, but you can save energy and money by pumping no more than necessary. PureSOx Energy Reduction Mode is an option that matches the water flow to current needs, adjusting it automatically based on real-time measurements. It is available as an upgrade for most PureSOx systems installed in recent years.

### What we do

Most of the energy that a scrubber consumes in open loop is related to pumping. The amount of water needed for compliance depends not only on the engine load and fuel sulphur content but also on the seawater alkalinity, seawater temperature and more. We upgrade the control system of your existing PureSOx system to enable Energy Reduction Mode, so that your scrubber responds automatically when these variables change.

Energy Reduction Mode adjusts the water flow with the help of real-time performance measurements, so no manual adjustment is needed. Without jeopardizing your compliance, it maximizes energy efficiency by minimizing pumping needs. This can cut your scrubber's energy use by up to 25% – which means greater sustainability and significant monetary savings.



#### **Benefits**

- Energy savings of up to 25% with no risk to your compliance
- Sustainable operation using no more water than necessary
- Automatic control over water flow no manual burden for the crew
- Extended pump and sprayer nozzle lifetime due to reduced usage
- Reduced risk of pump and sprayer nozzle deterioration, e.g. through cavitation damage resulting from poorly adjusted water flow

#### Scope of service

Energy Reduction Mode is enabled through an upgrade to your existing PureSOx control system. The upgrade, which will be performed at your convenience by an Alfa Laval Marine Service expert, takes less than four hours. It can easily be handled during a short stop in port, and it can even be performed during a voyage if desired.

#### Scope of supply

The Energy Reduction Mode upgrade is suitable for most PureSOx systems installed in recent years. The upgrade provides the following capabilities:

- Activation of Energy Reduction Mode upon steady engine load, ensuring compliance during manoeuvring
- Calculation of water flow needs based on real-time measurements of scrubber performance
- Automatic adjustment of water flow through control of:
  - The number of sprayer layers used
  - Sprayer pressure



## Other 360° Service Portfolio services for your equipment

- Alfa Laval PureSOx Condition Audit
- Alfa Laval PureSOx Connect
- Alfa Laval PureSOx Training
- Alfa Laval PureSOx Exchange Programme
- Alfa Laval PureSOx Sprayer Replacement Programme
- Alfa Laval PureSOx Spare Parts



#### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

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