



Added Value for Your Environmental Retrofit

BWT ■ SO_x and NO_x ■ LNG ■ Energy Efficiency

phase 1

The most cost efficient solution

As an independent consultancy service provider we ensure that the most cost efficient and effective solution is proposed and that the most suitable supplier is selected. Through ship inspections, feasibility studies and technology evaluations we compare alternative solutions and their consequences, taking all technical, operational and economical aspects into account.



phase 2

Successful project execution

The key to a successful retrofit project is a custom made integration design. Our experienced naval architects and engineers tailor the design and handle classification approvals thereby ensuring efficient installation and avoiding costly surprises. If necessary, we use laser scanning to verify the exact input measures from the existing ship.



Added value environment



Four phases to success...

Emissions

The IMO ship pollution rules set limits for sulfur oxide and nitrogen oxide emissions from ship exhausts. Every ship is unique and requires a comprehensive evaluation when selecting and planning for the optimal solution for the reduction of SOx with Scrubbers and NOx with Selective Catalytic Reduction (SCR) plants.

Elomatic's experience gained from several projects makes us the ideal partner for your retrofit project.

Ballast Water

Impending regulations require treatment plants to be installed on most existing ships around the globe. There are several technical, operational and cost considerations that have to be taken into account when choosing the right ballast water management solution.

Elomatic's systematic retrofit approach ensures the selection of the most suitable technology, which can be integrated with existing systems and structures and installed in a cost efficient way.

Alternative fuels

Exhaust gas emissions can be reduced by using alternative fuels to Heavy Fuel Oil such as Marine Diesel Oil or LNG. Dual fuel operation may also be an alternative.

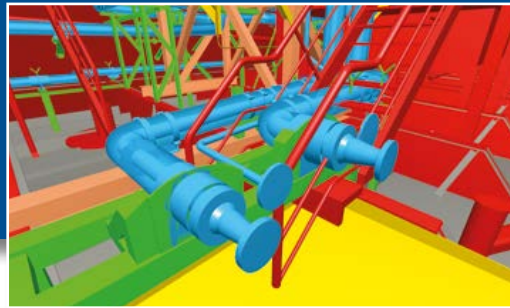
Changing to other fuels affects the equipment and arrangement onboard. A thorough study and cost evaluation are required to identify the most appropriate alternative. Elomatic is an ideal partner to provide this kind of service and to implement the selected solution.

phase 3

Securing optimized installation

Minimizing off-hire time is of the utmost importance in a retrofit project. This can be achieved with proven detail solutions and choice of materials. Regardless whether the installation is done by an experienced shipyard or a contractor, workshop drawings are needed on a case by case basis.

Value for your
environmental retrofit



Bit Viking Photo Source:
Tarbit Shipping AB

phase 4

Minimized off-hire

The successful implementation is ensured through the management and site supervision services carried out by our experienced personnel and the vessel returns to service as scheduled.



Efficiency

Saving energy means reducing both costs and emissions. There are a wide range of technical and operational measures that can be introduced on existing ships in order to achieve these goals.

With a thorough and systematic analysis Elomatic's experts can propose various tailor made and ship-specific solutions.

...with Elomatic

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Elomatic is a leading European consulting and engineering company. Our close to 900 professionals work in machinery and equipment manufacturing, pharmaceutical, process, energy, offshore and marine industry projects.

We offer consulting, engineering, product development and project management services as well as products and turnkey solutions to industrial and public sector customers.

The cornerstones of our success are customers that are leaders in their respective fields and professional, customer-oriented and motivated personnel.

- Technical Consulting
- Engineering
- Project Management
- Product and Service Development
- Products & Turnkey Solutions
- Software Development
- Design Software Solutions

Key customer segments

- Pharmaceuticals
- Process Industries
- Energy
- Foodstuffs industry
- Starch and Potato Processing
- Machinery and Equipment Manufacturing
- Marine & Offshore
- Oil & Gas

Contact information

We operate globally and have clients in over 80 countries. Our offices are located in Finland, China, India, Italy, the Netherlands, Poland, Serbia, Russia and the UAE.

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