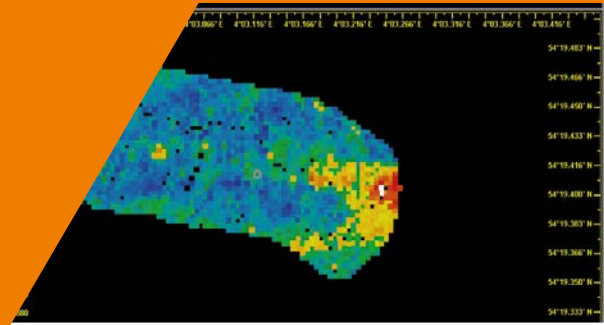
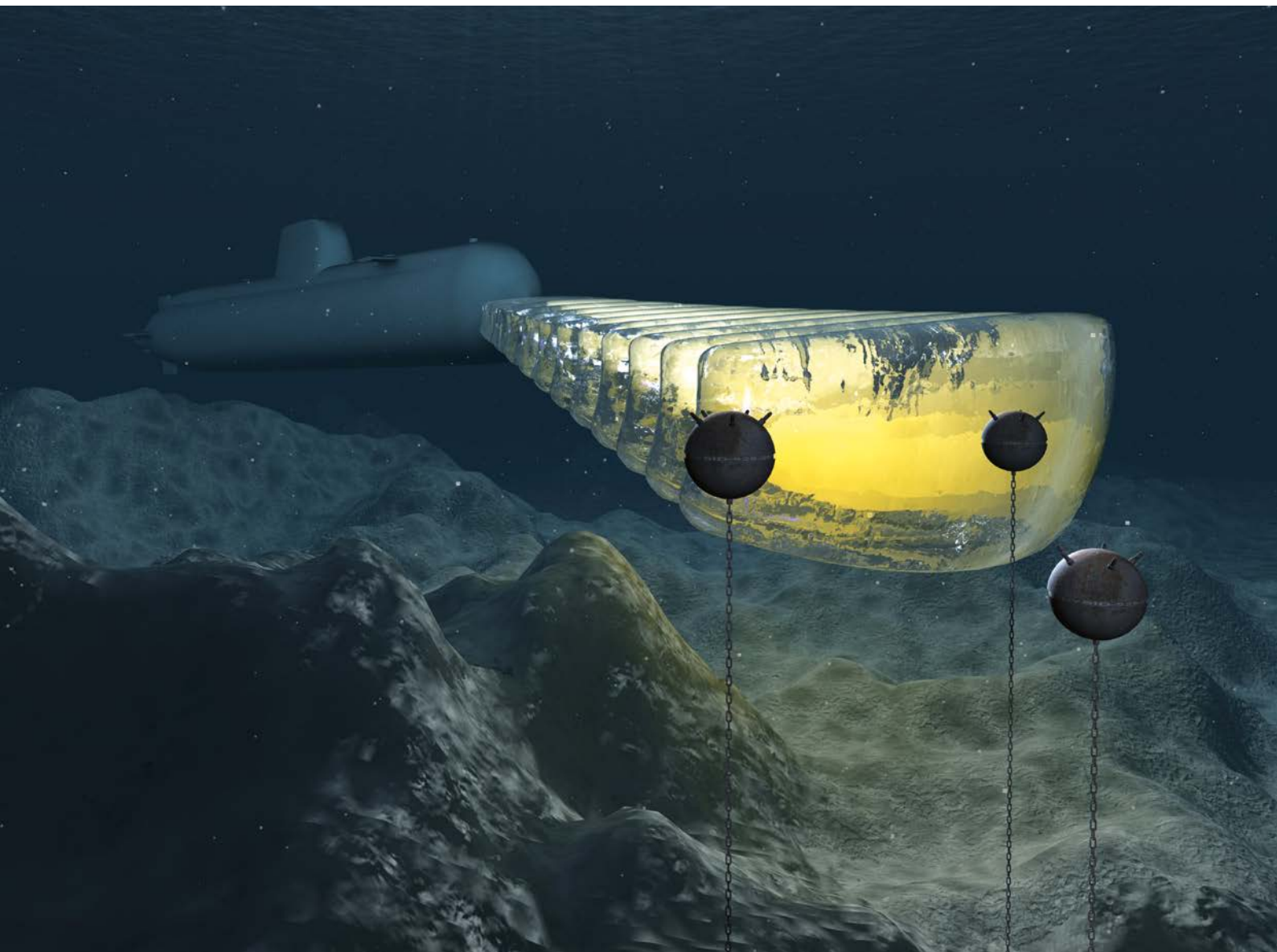


Wärtsilä ELAC SCOUT

Mine avoidance sonar for submarines



ELAC SCOUT is the most flexible solution for obstacle and mine detection on board of a submarine. The split transmitter and receiver arrays allow integration in virtually any bow design. The outstanding performance against moored mines and MLOs makes ELAC SCOUT the first choice.





Wärtsilä ELAC SCOUT

Optimum protection and safe navigation in hazardous areas

ELAC SCOUT makes submarine operations in dangerous areas safer. This forward looking Mine and Obstacle Avoidance Sonar (MOAS) offers high-performance detection of objects in the water column with sufficient range to avoid hazardous outcomes. Numerous navies currently operate the system in different configurations.

Flexibility is the key

ELAC SCOUT is operated on newly built submarines as well as on modernised ones. The modular design of components allows a flexible integration of the transmitter and receiver array as well as the inboard electronics. Control and display may be integrated in a dedicated console or multi-function control consoles already on board. In addition to MLO detection, ELAC SCOUT offers optional features such as bottom mapping for forward looking terrain charting and a surfacing mode to avoid collision with silent objects during the submarine's surfacing.



Key features

- Detection of MLOs in the water column
- 3D forward looking sonar
- Meets military standards
- For refits and new designs
- Stand-alone or fully-integrated
- Safety distance to MLO
- Interfaces with existing systems
- Bottom mapping mode (optional)
- Surfacing aid (optional)

Wärtsilä ELAC Nautik's experience in design and production of highly specialised transducers supports the integration process of the arrays in the submarine's bow. Depending on the space available between the torpedo tubes and other sensors, the arrays may be adapted for the best possible fit.

Like all navy systems offered by Wärtsilä ELAC Nautik, ELAC SCOUT has been designed, built and certified in accordance to military standards, ensuring the highest possible availability and reliability of the system.

System overview

For all refits and new designs

Conformal array design for a perfect fit

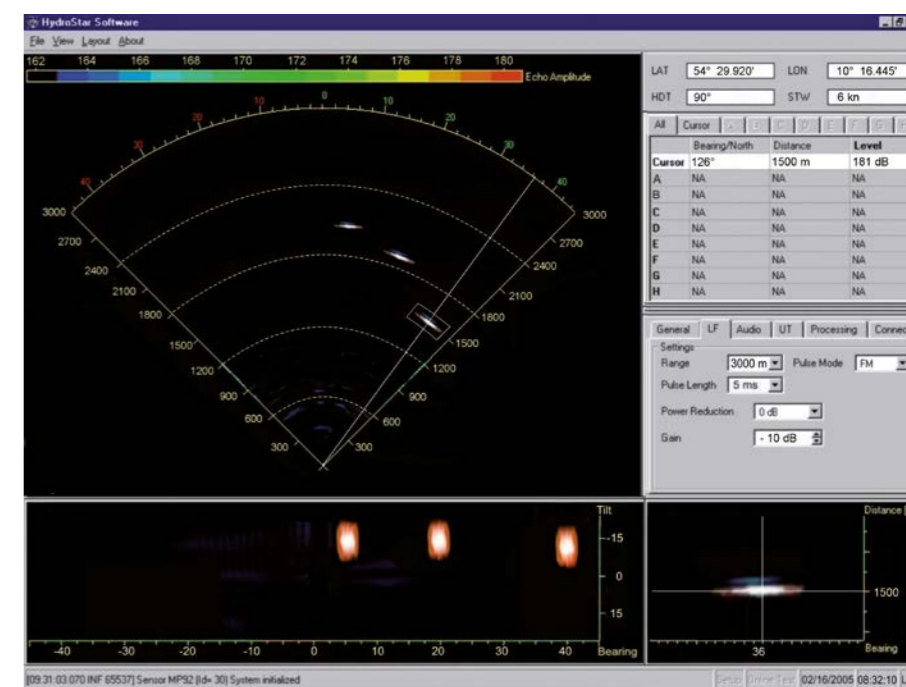
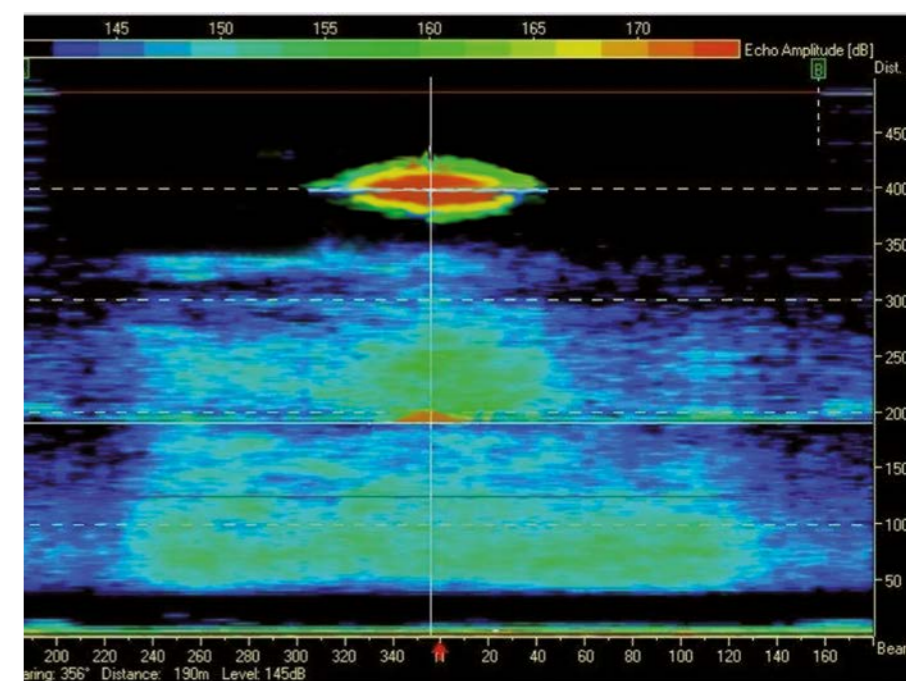
The transmitter and receiver arrays are the core components of ELAC SCOUT. Their shape may be adapted to the position in the bow, giving the maximum performance and minimum flow noise. The arrays are designed to withstand extreme shock loads without any shock mounts. The advantage is a perfect integration without the necessity for acoustic windows with a negative influence on the performance.

The transmitting, receiving and processing units are two separate electronic boxes that may be installed in the electronics room. These units include all electronics for the system's operation.

Special attention has been paid to limit the size of the two cabinets. This eases the integration on board of existing submarines compared to one bulky rack. Fast maintenance and repair is supported by easy access to the PCBs inside the cabinets and a clear, well-structured layout.



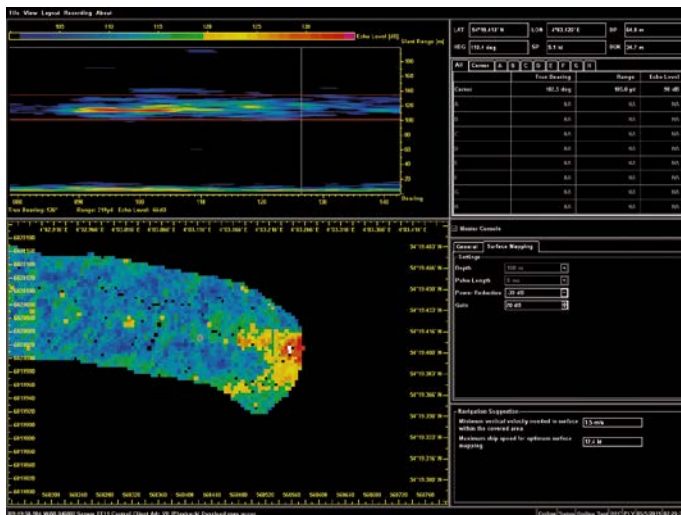
ELAC SCOUT transducers for receiving (WB 62, above) and transmitting (WB 63, bottom)



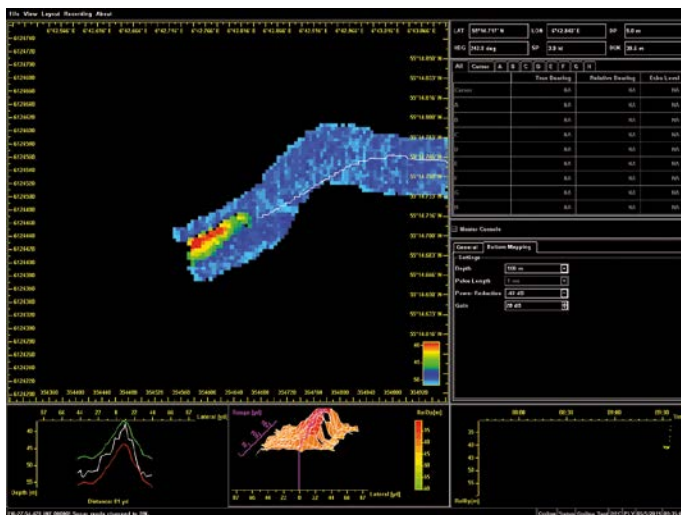
Examples of ELAC SCOUT's HMI

Specifications and technical data

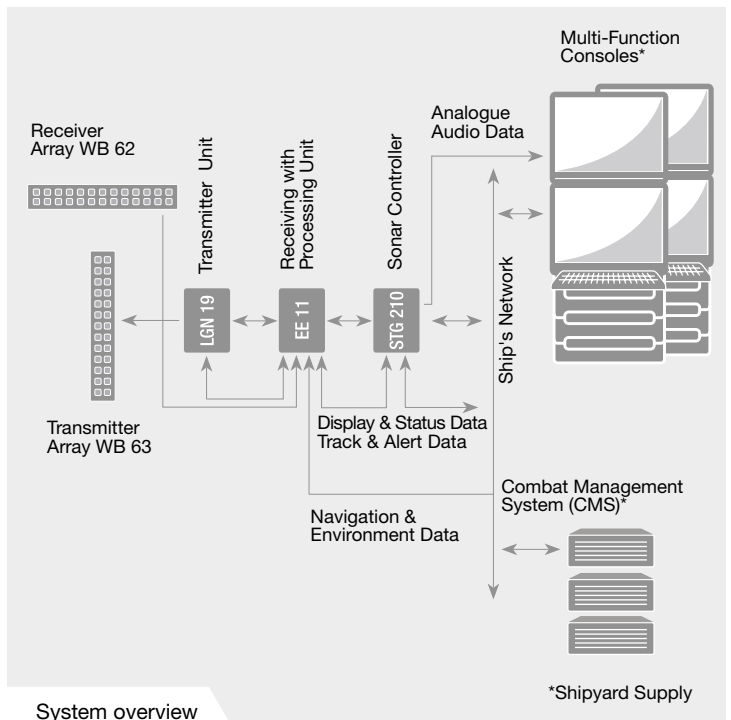
Wärtsilä ELAC SCOUT at a glance



Display of ELAC SCOUT's surface mapping mode



Display of ELAC SCOUT's bottom mapping mode



System overview

*Shipyards Supply



Compact electronics

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