



R/V Electra af Askö

– a new research vessel for the Baltic Sea

Baltic Sea Centre



Stockholm
University



Captain Thomas Strömsnäs on the bridge



Well equipped for geological research



Of course there is a CTD



Lots of screens in the instrument room

Packed with high-tech equipment

Useful for researchers from different disciplines

More than 24 metres long and packed with high-tech equipment, Stockholm University's new research vessel R/V Electra af Askö has been carefully designed to perform research in the Baltic Sea. The vessel will give researchers across an array of disciplines a more complete picture of the Baltic Sea.

– One major advantage is that we can see everything directly on our screens, says Christoph Humborg, Scientific Director of the Baltic Sea Centre.

– Before, we used to operate blindly and did not see our results until we came back from the expedition. Now, we can see exactly where there are higher concentrations of chlorophyll, where the thermocline is or where the oxygen runs out and take water samples right at that spot. It is like being able to see under water!

Equipped like a large research vessel

... and still small enough for coastal expeditions

The new ice-breaking vessel R/V Electra af Askö can manage to work in large geographical areas.

– The stabilizing gyros means offshore sampling can be done in rougher weather than expected from a vessel of this size. And she is still small enough to manage really shallow areas, says Thomas Strömsnäs, Captain of R/V Electra, formerly first mate on IB Oden with experience from many Polar expeditions.

The instruments include a multi-beam echo sounder for detailed mapping of the seabed; a penetrating echo sounder that can see into sediments more than 100 metres deep; an echo sounder for mapping biology in the water column; a CTD probe that measures conductivity, temperature and depth; and an acoustic Doppler sonar for measuring ocean currents.

– Together, these instruments provide information from the water's surface and down to well below the seabed.

About R/V Electra af Askö

The new ice-breaking vessel Electra is 24,3 metres long and 7 metres wide. She is designed for research work on the Baltic Sea and for transporting passengers from the mainland to the fieldstation at Asko island. Electra can accommodate up to 35 passengers plus crew. She is equipped with technical instruments for water- sediment- and geophysical sampling.

Basic information:

Draught: 2,3 m
Displacement: 179 t
Speed: ~12 knots
Operating range at full speed: 200 nm
Offshore durability: 3 days
Crew: 2-4 persons
Cabins: 4 passenger beds

Equipment for research:

Multibeam: max depth 600 m
RTK GPS: Seapath 330+
Motion sensor: heave/pitch/roll
Sub-bottom profiler
Midwater split-beam sonar
Acoustic Doppler Current Profiler (ADCP)
Fixed and portable Sound velocity sensors
CTD: O₂, turbidity, CDOM, ChlA sensors
Lab space: seawater intake, fume hood, lab space of 31 m²
Container space: 10 foot container on aft-deck
Device room: 14 switch displays
A-frame: 5 t
Cranes: 1 x 1,5 t, 1 x 0,5 t
Winches: On aft-deck for handling up to 1,5 ton.
Heave compensated winch for handling smaller gear.

In 2013 the Erling-Persson Family Foundation made a large donation to Stockholm University for a new much needed research vessel. Many scientists have been involved in the planning of the ships design, and the Vice-Chancellor has funded the high-tech equipment.

The new research vessel is named after a small bryozoa, *Electra crustulenta*, as an homage to Lars Silén, Professor in zoology, an international authority on these animals. He is also the founder of Askö Laboratory, the home port of R/V *Electra* af Askö.

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