

Oceanographic and Fisheries Research Vessel



Arni Friðriksson is built as a multi-purpose research vessel, designed for oceanographic and fisheries research in temperate and arctic waters (LR Ice Class 1B on the hull). The propulsion system is of diesel electric type to secure low noise levels. The vessel is equipped with sophisticated electronic equipment for stock assessment, bottom mapping and communication.

R/v Arni Friðriksson RE-200 / 2350

IMO No.: 9192404
 MMSI No.: 251507000
 Call Sign: TFNA
 ICES Shipcode: 46FR
 Flag: Icelandic
 Homeport: Reykjavik
 Classification: Multi-Purpose Research Vessel
 LR Ice Class 1B
 Building Year: 2000
 Yard: Asmar Shipyard, Chile

Main Dimension:

Length o.a.: 69,90 m
 Length p.p.: 60,00 m
 Breadth mld.: 14,00 m
 Depth to Trawl Deck: 10,30 m
 Max Mean Draft: 6,80 m
 Gross Tonnage: 2,233 tonnes
 Speed: Max 16,1 - Cruising 11-13 knots
 Bollard Pull: 62 tonnes
 Range: 9000 nautical miles at 12 knots
 Accommodation: 16 Crew/17 Scientists/Hospital

Propulsion:

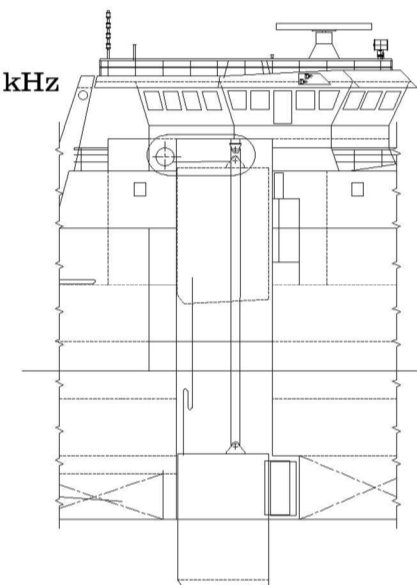
The diesel electric propulsion system is based on four diesel engines and one direct coupled AC propulsion motor.

Engines: Caterpillar 3512B, 1080 kW each
 Propulsion motor: Alstom 3300 kW AC, 150-172 rpm.
 Propeller: Kamewa 3600 mm Diameter in Nozzle, 150/172 rpm/min
 Thrusters: Two Pump Jets 400 kW each and a 250 kW Bow Thruster

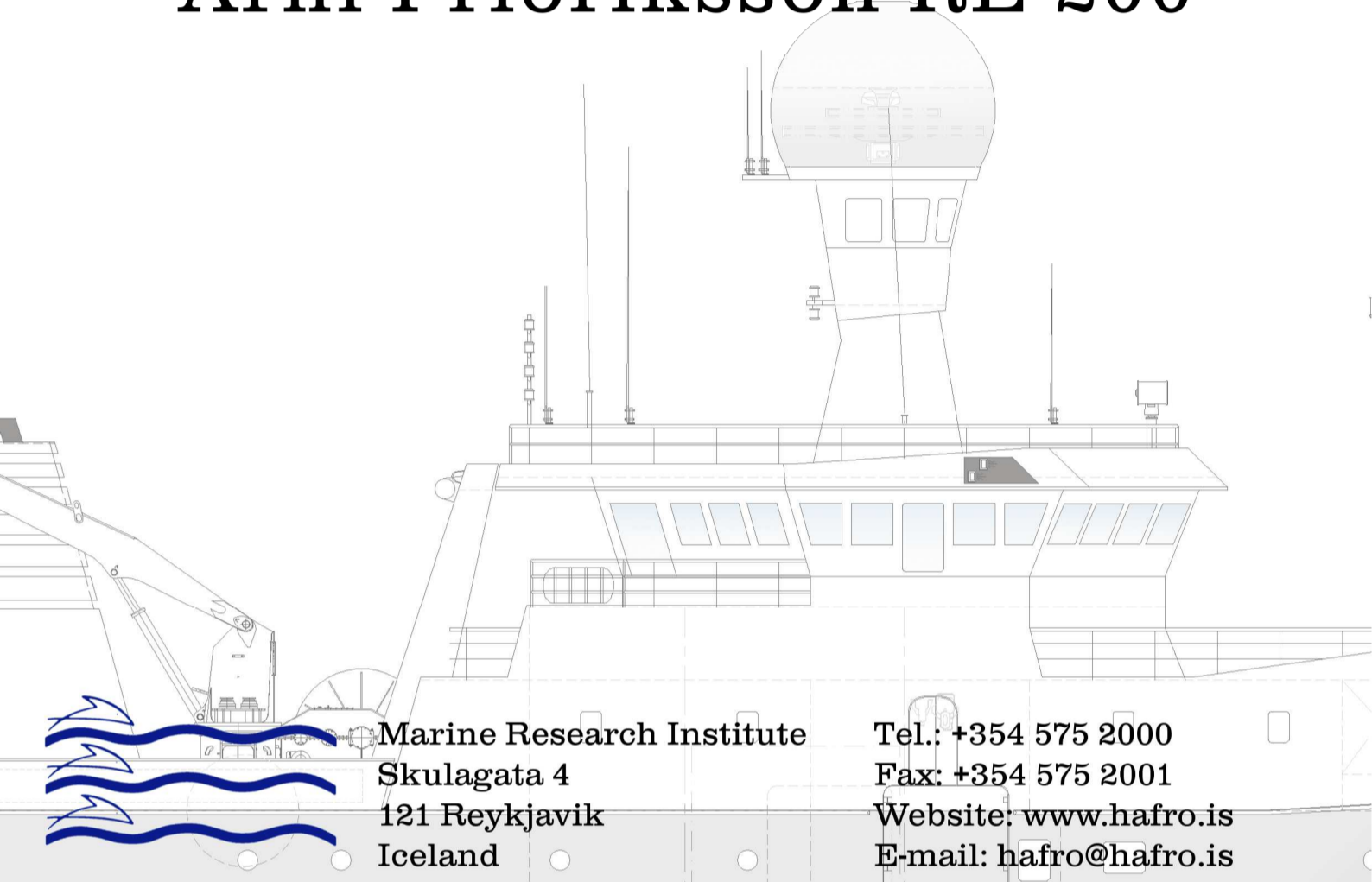
Electronics:

The vessel is equipped with a retractable keel for the echo sounders transducers. The keel can be lowered 3,5 m below the vessel hull, which greatly reduces noise due to wind and waves as well as flow noise from the vessel hull. The keel can be raised above lower decks which makes retrofitting other equipment a viable option.

Echo sounders: Simrad EK60 split beam echo sounders at 18, 38, 120 and 200 kHz
 Search Sonars: Kaijo Denki low and high frequency (24 and 163 kHz)
 Multibeam: Kongsberg Simrad EM300 (2*2 degree resolution), 30 kHz
 Sub-bottom prof.: SyQwest Bathy 2010, 3.5 kHz
 Current meter: Teledyne RDI Ocean Surveyor, 75 kHz
 Communication: GMDSS, Internet through satellite and 3G



Arni Friðriksson RE-200



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 121 Reykjavik
 Iceland

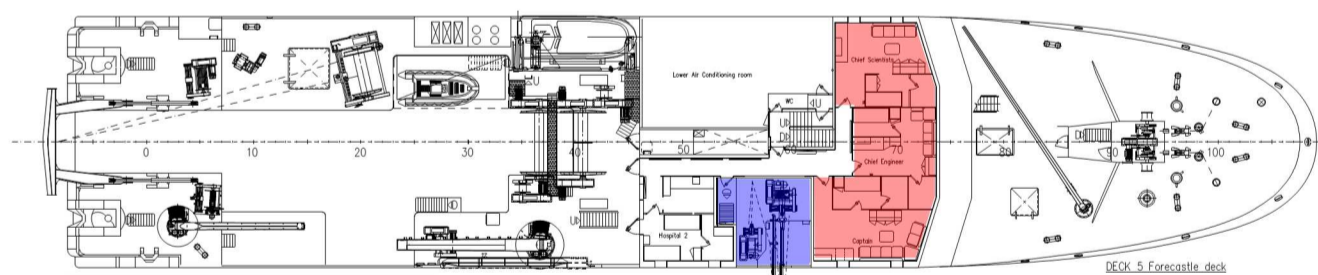
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Deck Equipment:

The vessel is equipped with numerous winches for towing and scientific purposes. Three main winches with a max pull of 32 t each, enable the vessel to operate two trawls simultaneously. The vessel has big drums for pelagic trawls or cables and a number of auxiliary winches. Scientific winches include CTD winch, hydrographic winch, a zooplankton winch, two electrical cable winches and a multi purpose winch for various use. On board are three hydraulic cranes, two on aft (70 and 36 tm with a 19 m working radius) and one located on the forecastle deck (24 tm with 12 m working radius). To operate gear at the stern an A-frame with an approximately 35 t lifting capacity is available. Shoe fittings for two containers are on the trawl deck and one connection utility box for a container (water, drain, electricity, communication etc.).

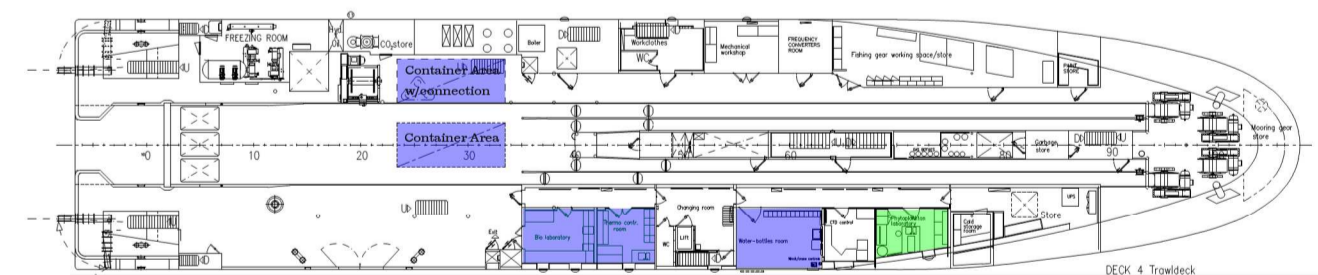
Laboratories and Living Quarters:

The vessel is equipped with sophisticated laboratories and research areas. Versatile research capabilities give it a leading edge in the marine research field. Living quarters include fitness room and sauna as well as a conference room for meetings.



Deck 5:
 Office
 Hospital
 Three Cabins

Scientific Areas / Wet Laboratories
 Scientific Areas / Dry Laboratories
 Living Quarters / Common Rooms



Deck 4:

Biological Laboratory Temperature Controlled Laboratory Water Bottle Room
 Phytoplankton Laboratory Cool Storage for Samples Storeroom for Scientific Gear/Samples
 Fishing Gear Operations Container Fittings/Connection



Deck 3:

Fisheries Laboratory Biological Laboratory Chemical Laboratory
 Salinity Laboratory Physical Laboratory/Instrument Workshop Messroom
 Day Room Conference Room



Deck 2:

24 of Single Cabins 3 of Double Cabins Laundry Room
 Sports Room w/Sauna



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