



## Construction RV *Adriaen Coenen*



### Progress report #2: April 2021

The RV *Adriaen Coenen* is a new shipbuilding project for the Dutch national research fleet. The fleet is owned and operated by the National Marine Facilities (NMF), a department of the Royal Netherlands Institute for Sea Research (NIOZ). The NMF fleet consists of three vessels capable of conducting research from the shallow coastal waters out into the open ocean.

The RV *Adriaen Coenen* is intended to replace the Wadden Sea research vessel RV *Stern*, and with its shallow draught of 1 meter it is specifically designed for day trips for research in the Wadden Sea or the Zeeland delta.

With a permanent crew of one, the RV *Adriaen Coenen* will offer state-of-the-art daytime facilities for a maximum of 12 passengers, and is equipped with basic dry and wet lab facilities. The deck will also facilitate all of the research activities that an A- and a J-frame can offer.

The RV *Adriaen Coenen* is being built by Next Generation Shipyards in Lauwersoog, and will be completed in May 2022.

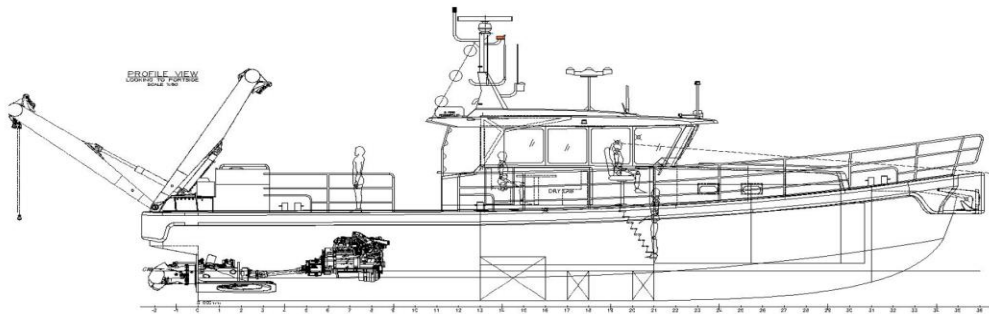
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## De shipyard

Next Generation Shipyards (NGS) is a shipbuilding firm founded in Lauwersoog by the Keizer family in 2015. Albert Keizer serves as its General Director, and other Keizer family members include Head of Finances and Administration Lina Keizer and Technical Director and Project Leader Dirk Keizer.

NG Shipyards currently employs an enthusiastic team of 25 skilled staff, with millions of euros in revenue each year. Before founding NGS, Director Albert Keizer was a co-founder of the NoLimits yard in Groningen, where he was involved in the construction of the Ecolution, the extremely sustainable sailing yacht commissioned by astronaut Wubbo Ockels.



*Blueprints of the RV Adriaen Coenen, drawn up by Marimecs on commission by NIOZ*

NG Shipyards has four departments:

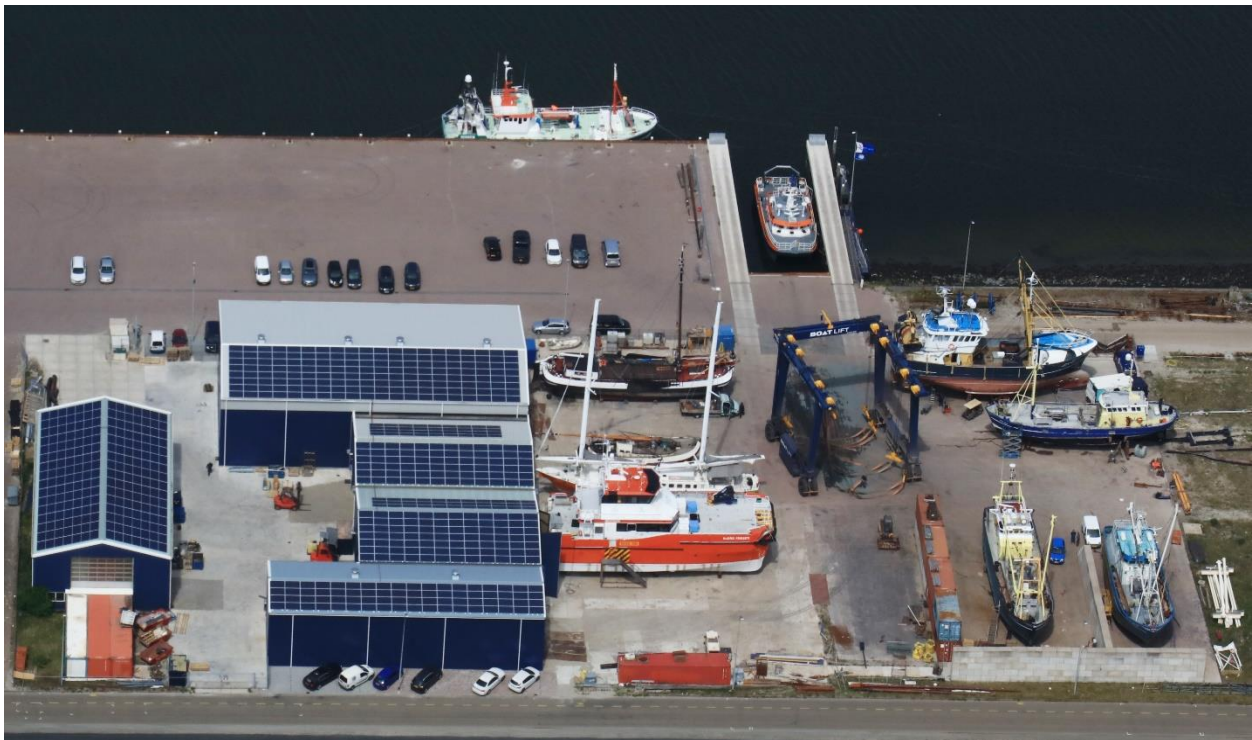
- shipbuilding
- repairs
- shiplift
- marine engineering

Director Albert Keizer summarises NGS' activities: "We're a full-service shipyard, and we work for dredgers, shipping companies, wind farms and private clients." In passing Keizer notes that the NGS facilities has several thousand square meters available for storing vessels, goods or materials. His teams are also available for project management, engineering and special designs.

Keizer emphasises not only NG Shipyards' possibilities, innovations and unique services, but also how he aims to contribute to society through the company.



*Keizer: "We want to be pioneering, but above all we want to be socially responsible. We follow fixed norms and values, strive to keep our operations healthy and transparent, and seize opportunities to improve the environment and our employees' well-being. People-driven and climate-conscious: that's how we want to do business!"*



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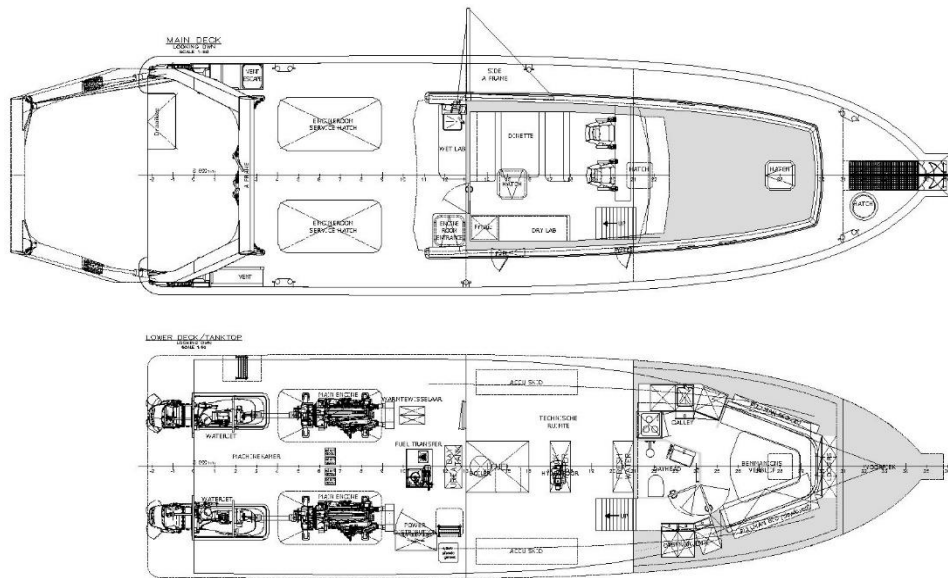
In addition to its own line of working ships for commercial shipping, the company in Lauwersoog also has a global service and maintenance branch. NGS has also earned acclaim with the largest shiplift in the Netherlands, which can raise vessels of up to 240 tonnes. Together with their contribution to the zero-CO2 sailing yacht Ecolution, the shiplift has quickly given NG Shipyards a reputation for innovation in the shipbuilding industry.

NGS has formed a project team specifically for the management of the project, which meets with the client (NWO-NIOZ-NMF) every two weeks.

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## The short construction process



The construction of the RV Adriaen Coenen will take only around 14 months to complete after the contract is signed. Three factors influence this relatively short construction time:

1. The size of the ship, because 'the larger the ship, the longer it takes to build'. with a length of 19 meters and a displacement of 25 tonnes, the RV Adriaen Coenen is a relatively small and simple vessel. That means relatively short construction times for both the hull and the superstructure.
2. From detailed blueprints to definitive design: rather than bringing a basic design to market and then having the shipyard adapt it for the specific vessel, the construction of the RV Adriaen Coenen will use detailed blueprints from the very beginning. Last year, a detailed design for the RV Adriaen Coenen was drawn up with support from Marimecs Marine Design and Engineering in Steenwijk. That means Next Generation Shipyards will only need to review the design by @ResearchFleetNL and perhaps optimise a few details.



3. Hull construction: Next Generation Shipyards is specialised in building with aluminium. Each year, NGS estimates and reserves its aluminium material needs for the coming year. That means they always have the aluminium supplies they need for their construction capacity. So even with the shortage of aluminium in today's market, the construction of the hull will not be delayed by long delivery times (and higher prices); the construction can simply begin according to schedule and under the shipyard's own management.

#### **Schedule for the near future**

The following activities were scheduled for the month of May:

- start purchasing items with long delivery times (incl. motors);
- optimising the structure and finalising details of the power generation system;
- prepare production process and submit blueprints for approval.

For June:

- start construction on the aluminium hull in Lauwersoog;
- finalise the interior details.

For more information, please visit: [www.NewResearchFleet.nl](http://www.NewResearchFleet.nl)

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