Construction RV *Wim Wolff*

Progress report #22: November 2022

The RV *Wim Wolff* 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.

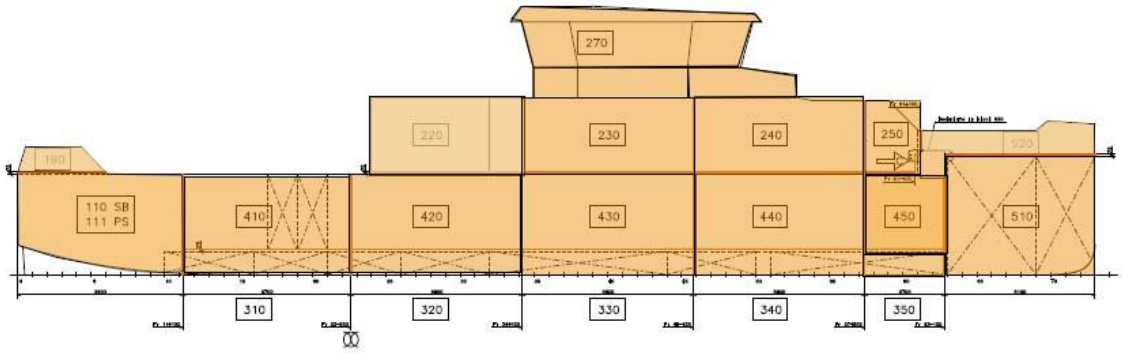
The RV *Wim Wolff* is intended to replace the Wadden Sea research vessel RV *Navicula*, and with its shallow draught of 1 meter it is specifically designed for overnight voyages for research in the Wadden Sea, the Zealand delta or the coastal zone.

With a permanent crew of four, the RV *Wim Wolff* will offer state-of-the-art facilities for a maximum of 12 passengers, and is equipped with onboard dry and wet lab facilities. The vessel also has room for two customised lab containers on the working deck.

The RV *Wim Wolff* will be built by Thecla Bodewes Shipyards (TBSY) in Harlingen, and is scheduled for delivery in the 2nd quarter of 2023.

Hull construction

The hull of the RV *Wim Wolff* is composed of several sections, which are being built at different locations by three Frisian shipbuilders. The individual sections will then be joined together by N. Dijkstra in Harlingen.



State of affairs in late November. The RV Wim Wolff's hull sections, with the completed and assembled sections shown in orange. ©FH

Builders are now concentrating on joining the aft sections 110/111 to the hull. These sections require extra time and attention because the bushings for rudders and drive shafts must be installed with a high degree of precision.

To make room in the production hall for the installation of the aft accommodations sections and for a new project, N. Dijkstra has moved the hull forward, so part of the forecastle extends outside the hall. See also this short video: https://youtu.be/jnYa3LayHnI

The priority now is to finish the hull and install the pipelines, so that the hull can be transported to TBSY in Harlingen for de further construction in December 2022.

The piping installation may be complete before the hull is transported to TBSY.

A lorry pulls the hull of the RV Wim Wolff a few meters outside the production hall at N. Dijkstra. ©FH

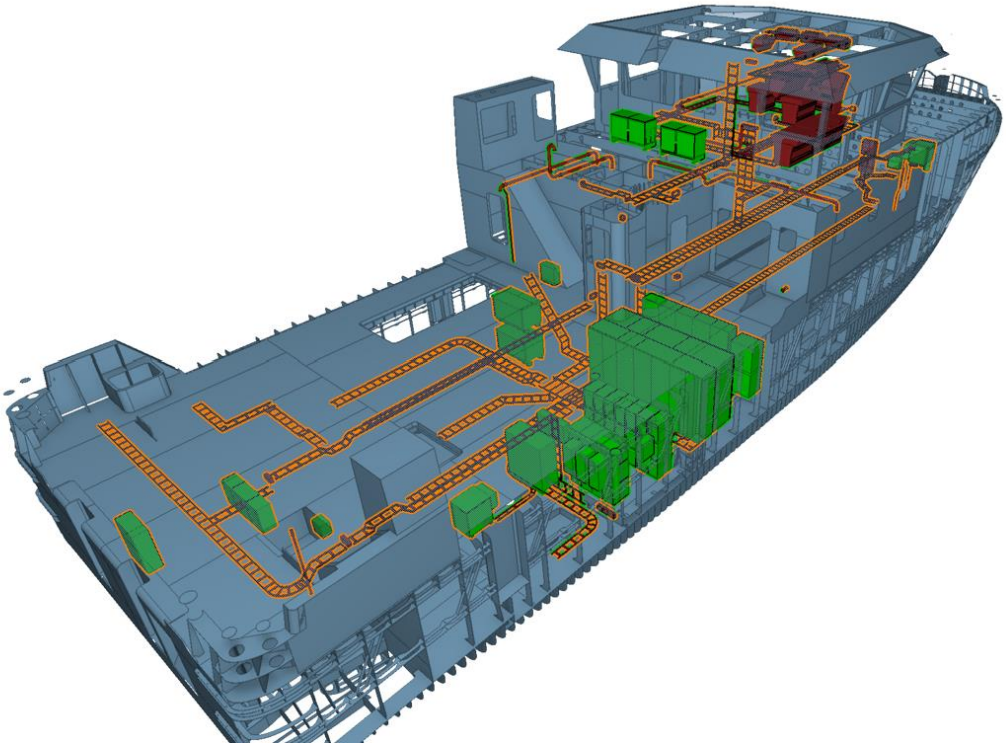
Moving the hull outside the production hall creates space for the installation and completion of the aft accommodation sections. ©FH

The hull extends beyond the production hall, so the door opening around the hull has been sealed off to provide optimal climate control for the work inside. ©FH

Once the hull had been moved forwards, work could begin on the installation and alignment of the drive shafts. ©FH

Connecting and integrating the components

In addition to the vessel's fluid systems, which include the fuel system, the drinking water system and the heating system, the RV Wim Wolff is also equipped with 'dry' systems, such as:
- the electrical system
- part of the air ventilation system
- the information or computer system. (ICT network)



The main components of the electrical system ©TBSY

The electrical system starts in the engine room, where the main power supply is generated by the generators. The central control station with the circuit breakers (the switchgear room) is located on the starboard side of the engine room, and distributes electricity to the various components aboard the vessel. The adjacent battery room holds the batteries that can provide power if the main engines and generators do not provide enough electricity, or are shut off. For example, when the vessel is beached on a sand bar, or for brief extra power requirements (peak load).

Electricity consumption throughout the vessel can be monitored from the wheelhouse and the switchgear room, and the various systems can be controlled and operated (starting and stopping the engines, operating the pumps, etc.) via the AMCS (Alarm, Monitoring and Control System).

For more information, please visit: www.NewResearchFleet.nl