

Construction RV Wim Wolff



Progress report #23: December 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 December. The RV Wim Wolff's hull sections, with the completed and assembled sections shown in orange. ©FH

According to the schedule, the aluminium welding should have been completed in late December, and the hull was planned to be launched for transport to Hall 4 at TSBY in Harlingen before the start of the new year. Between Christmas and New Year's Day, the shipyard was planning on working on the preservation of the hull, in preparation for construction of the superstructure in early 2023.

Unfortunately, this schedule proved to be too ambitious, and the shipyard was forced to choose between delaying the launch or completing the welding work at TSBY.

The aluminium welding work must be conducted at temperatures above 15 degrees Celsius, because the aluminium becomes too brittle at lower temperatures, which presents the chance of fractures.

So the decision was made to complete the welding work in the climate-controlled facility at N. Dijkstra. The launch and transport of the hull is now scheduled for 16 January 2023.

The extra month will be used to pressurise the various tanks and cooling ducts on board.

The final shape of the hull is becoming increasingly clear as the work progresses.









View of the bridge and wet lab from the work deck. ©FH



View of the work deck from the topside deck. ©PB









The stern tube for the drive shaft have been installed and aligned. The thickness of the stern tube is clearly visible in this photo. ©FH



The container feet are being aligned and installed on the work deck. This will give the crew several options for securing containers to the deck. ©FH







Finishing phase

The schedule for the finishing phase was drawn up while the hull was under construction. The finishing phase is scheduled to take six months, with a contractual delivery date in week 29.

The work includes the electrical installations, the engine room, carpentry, etc., based on the engineering blueprints. Following a tendering procedure and contract negotiations, contractors were selected and contracted to supply each of the components.

TBSY will select the necessary equipment and materials in consultation with the NIOZ and with their approval.

The technical specifications for the equipment are generally limited to a description of the desired functionality, but in some cases specific preferred suppliers have been designated for individual components.

TBSY will either purchase the equipment and materials on its own, or contract the work out to sub-contractors.

Several sub-contractors will be working on the same cabins at the same time during the finishing phase. This will require TBSY to follow a clear and detailed schedule to guide the process within the time available.

For more information, please visit: <u>www.NewResearchFleet.nl</u>.



