

Construction RV *Wim Wolff*



Progress report #24: January 2023

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 Zeeland 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 3rd quarter of 2023.

From hull to superstructure

On Thursday, 16 January, hull builder N. Dijkstra in Harlingen delivered the RV *Wim Wolff* for transport to the Thecla Bodewes Shipyards (TBSY) facility in Harlingen.



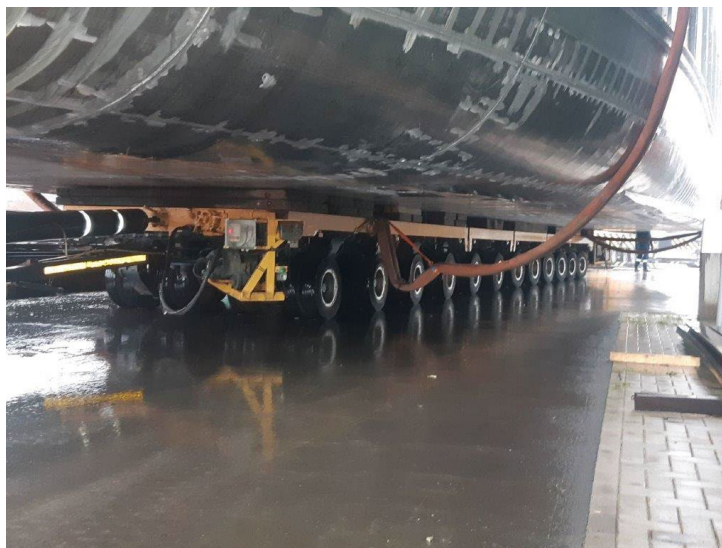
The hull of the RV Wim Wolff, showing preparations for transport. ©FH

With a beam of 10 meters and a displacement of around 90 tonnes, over-the-road transport was not an option. So the hull had to be transported to the final construction location over the water.

The transport consisted of several steps:

- first, the hull had to be placed on a trolley and rolled out of the Dijkstra production hall to the waterside;
- next, the vessel had to be launched into the water;
- then the hull had to be towed to the TBSY shipyard by tug;
- finally, a crane lifted the hull ashore at the TBSY production facility.

Kraanverhuur Transport Friesland B.V. (KTF) was contracted to transport and lift the hull. KTF drew up a detailed transport and lift plan in advance, based on the size and weight of the hull, to avoid unexpected obstacles during transport or problems with lifting the hull.



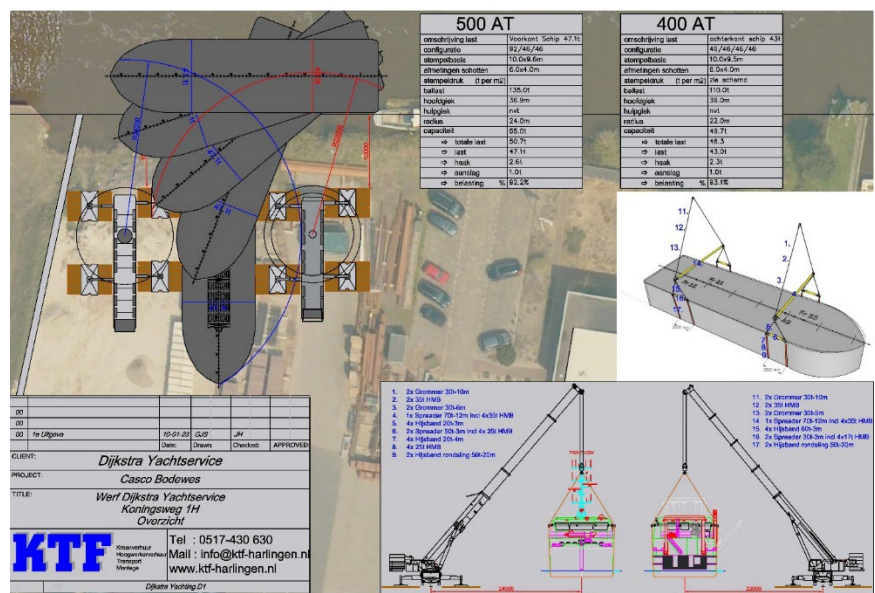
KTF trolley carrying the hull of the RV Wim Wolff. ©FH



Manoeuvring around the Dijkstra shipyard, with just a few centimetres leeway. ©FH



Detailed transport plan for moving the hull from the hall at Dijkstra shipyard, showing the limited range of movement. ©KTF



Detailed lift plan for launching the hull. ©KTF



Crane lifting the hull. ©FH

Once the trolley carrying the hull was placed perpendicular to the canal, two cranes were moved to either side of the hull. The hull was first lifted in tandem, before making a quarter turn to manoeuvre it above the water for launching.

As the hull is moved, its centre of gravity moves as well. So the farther away the cranes must reach, the heavier they must be to maintain control over the burden.

For the launch of the hull weighing around 90 tonnes, KTF had arranged two 400- and 500-tonne cranes.

A video impression of the launch event: <https://youtu.be/jTrm7mOJ4Ho>



The launch of the hull. ©FH

After the launch, two tugs towed the hull to the finishing location at TBSY, where the ship lift heaved it ashore for transport to the enclosed final construction facility.



Transport to the final construction location. ©FH



The hull when it arrived at the TSBY final construction facility. ©FH

The final construction work will include finishing the hull sections, the installation of various pipeline systems and cables, and the application of insulation material in preparation for the interior work.

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

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