PRESS RELEASE

+49 (0) 40 69 203 info@hsva.de hsva.de 2021-04-26

Damen contracts Hamburg Ship Model Basin for new frigate tests

Damen Shipyards Group and the Hamburg Ship Model Basin have concluded a contract for an extensive series of model tests for the hydrodynamic development of the F126 frigates for the German Navy.

Damen Naval and the Hamburg Ship Model Basin (HSVA) today signed the contract for comprehensive cooperation relating to hydrodynamic optimisation and the execution of an extensive series of model tests for the new 126-class (F126) frigates. The optimisation work and the tests constitute part of the early development stage during the ship design phase. As part of this process, the properties of the planned ship will be tested under real-life conditions. As such, a true-to-scale model of the F126, measuring several metres long, will be seen for the first time. At the request of the German Navy, together with its partners Blohm+Voss and Thales, Damen will build a total of four frigate class 126 ships after it was named the successful bidder in 2020 as part of a European tender spanning several years. The first ship is expected to be handed over to the German Navy in 2028 in Hamburg. The ships will be constructed in Germany with building taking place in Hamburg, Kiel and Wolgast.

By appointing HSVA, which boasts both a long history and impressive innovative prowess, Damen will be able to draw exclusively on German expertise for testing and trialling the ship's design. Over the next few months, the model ship will undergo a wide range of tests in various HSVA testing facilities in Hamburg. In addition to tests to evaluate ship resistance, propulsion and manoeuvring in smooth water, the ship's seakeeping will also be considered, and special attention will be paid to ensuring a high-quality propeller design. This extensive series of tests is the only way to ensure that the high demands that will be placed on the frigates in real-life scenarios will be met.

The upcoming tests will be the most significant milestone so far and an indicator of the success of the ship's development to date. More than 100 Damen employees have been working extremely hard over the last few months on the development of the design and the ship's functionality.

Upon the conclusion of the contract, Hein van Ameijden, Managing Director of Damen Naval, said: "I'm absolutely thrilled that the tank tests will provide us with initial practical results in terms of the ship's development. We have made huge progress despite Covid-19. Our employees are very enthusiastic about working on this project. I would therefore like to take this opportunity to thank our team and the engineers at HSVA who will now carry out extensive tests with us on the first model."

Further development work will be carried out and hundreds of sub-systems will be integrated following the test and simulation stage.

HSVA and Damen have worked together before HSVA, for instance, already contributed expertise to Damen's major project concerning the new Antarctic Research and Supply Vessel RSV *Nuyina* for the Australian environmental authorities with regard to some of the vessel's high-quality design features. In addition to working together on several other projects (including new Damen ferries), both companies are part of the European joint maritime research project entitled HOLISHIP (HOLIstic optimisation of SHIP design and operation for lifecycle). http://www.holiship.eu/

Damen Shipyards Group
Damen Shipyards Group has been in operation for over ninety years and offers maritime solutions worldwide, through design, shipbuilding, ship repair and related services. Damen operates 36 shipyards in 18 countries and offers direct employment to more than 13,000 people.

Damen's values are fellowship, craftsmanship, entrepreneurship and stewardship. The company aims to be the most sustainable shipbuilder in the world, via digitalisation and standardisation of its products. Damen's main

activities are the design and serial construction of innovative ships by integrating diverse components and subsystems into high-quality platforms. These activities are supported by a worldwide sales and service network.

Damen is also active in the repair and conversion of existing ships and the sale and production of components for the maritime industry.

Hamburg Ship Model Basin (HSVA)
The private and independent Hamburg Ship Model Basin (HSVA) is a globally active service provider and research center for maritime hydrodynamics, aerodynamics and arctic technology. The main business is advice to the maritime industry utilizing experimental hydrodynamics, numerical and data driven approaches as well as field measurements.

Based on pioneering contributions from its scientists and engineers HSVA developed a detailed understanding of the intricate problems in its fields of expertise. These cover the fields of resistance and propulsion, seakeeping, manoeuvring, cavitation, ice forces etc.

The main facilities at HSVA comprise a large towing tank, the large hydrodynamics and cavitation tunnel (HYKAT) and a large ice tank. With its two wave generators and a manoeuvring carriage (CPMC) the large towing tank is one of the largest facilities in the world.

About the F126 project
In June 2020, the German Federal Office of Bundeswehr Equipment, Information Technology and In-Service Support (BAAINBw) and Damen signed the contract for the design and construction of four MKS 180 multi-purpose combat ships for the German Navy. In December, the ship type was renamed Frigate Class 126 (“F126”).

Damen is fulfilling the order as the main contractor together with its partners Blohm+Voss and Thales, and many German suppliers. The ship design is to be provided by Damen in the Netherlands, Thales is responsible for the weapon control and command system, and the four initial ships will be built at Blohm+Voss in Hamburg as well as in Wolgast and Kiel. The first ship is scheduled to be handed over to the German Navy in 2028.

For further information please contact
Ben Littler
Communications Advisor
+31 (0) 183 65 5546
+31 (0) 610 46 5742
ben.littler@damen.com
damen.com
https://www.damen.com/en/f126