

NEWS IN BRIEF

Argentina designs a new polar ship with Finland

The Argentine government has formally approved a contract between the Ministry of Defense and the shipyard Tandanor to proceed with developing the basic engineering design and the creation of production design facilities for the construction of a new polar vessel.

In 2014, Aker Arctic provided the concept design, after which the project went on hold (see Arctic Passion News 1/2015). Now Aker Arctic and Tandanor will work together on a new and more complex stage.

The project's goal is to provide the Argentine Navy with a Polar Class 4 large-capacity, cargo and fuel, shore facility support vessel, specifically fit to navigate far into the Weddell Sea's Antarctic waters. During the early design phase, IMO's Polar Code, in work at the time, was considered by both Aker Arctic and Argentina.

The new vessel will articulate the entire Argentine Antarctic logistics programme, jointly with icebreaker A.R.A. *Almirante Irizar*, in supplying the thirteen summer-only and winter-over Argentine Antarctic stations. *Almirante Irizar* underwent successful repairs and upgrades at Tandanor after surviving a devastating fire in 2007. Based on that experience, the shipyard realised that building a next generation polar vessel locally was possible.

The new ship continues a long-standing relation between Argentina and Finland within the maritime business that started with the construction of *Almirante Irizar* at Wärtsilä Helsinki shipyard almost half a century ago.

The Finnish Engineering award to ABB's Azipod®

The award, worth 30,000 euros, is handed out annually in honour of significant contributions to engineering or architecture. This year, the sum was offered to ABB Marine & Ports Division, the owner of the technology, who in turn decided to donate the entire sum to the John Nurminen Foundation for the protection of the Baltic Sea.

Development of the Azipod propulsion system began in the late 1980s as a cooperative project between a shipyard, an equipment supplier and the public sector when, namely, Wärtsilä Helsinki Shipyard, Strömberg and the National Board of Navigation began developing a more efficient and agile icebreaker.

The pilot project resulted in a new kind of electric azimuthing propulsion unit that was named Azipod. Aker Arctic's head of equipment business Kari Laukia was responsible for the shipyard's side of the development, and design of the Azipod system at Masa-Yards and ABB in the 1990s when the first units were delivered to icebreakers and cruise liners.

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Intelligent steel applications project

In 2019, four Finnish universities, VTT Technical Research Centre, and nine companies began a joint project with the aim of developing new sustainably produced steel products and production machines in order to lower emissions.

The Intelligent Steel Applications (ISA) project has focused on high-strength steel and steel applications, engines and modelling tools. For Aker Arctic, the main target has been to develop solutions that improve the energy-efficiency of vessels in Arctic conditions. This has been achieved by studying the possibility of using high-strength steel in ship designs, testing various steel qualities together with LUT University, and developing methods to utilise the higher yield strength in structural dimensioning in order to reduce weight.

Mangystau 2 arrives in Canada

One of the five Mangystau-class shallow draught icebreaking tugs has arrived in Canada. The Canadian Coast Guard has acquired the vessel and will convert it into a light icebreaker for the Great Lakes, St. Lawrence River and Atlantic Canada. The shallow-draught icebreaking tug was built according to Aker Arctic's ARC 104 design and was originally developed for supporting oil drilling platforms at the Kashagan oil field in the north Caspian Sea. ■



Clockwise from the top: Argentine vessel, Kari Laukia and Azipod, Mangystau 2.