Implementation

From the extensive AVEVA Marine product portfolio, Deltamarin Poland’s selection included AVEVA Hull Structural Design™, AVEVA Hull Detailed Design™ and AVEVA Surface Manager™. For piping, cabling and equipment layout they are using AVEVA Outfitting™, with AVEVA Marine Drafting™ being used for the creation of deliverables.

Results and business benefits

Almost immediately, AVEVA Marine enabled closer and easier collaboration between designers in Deltamarin Poland’s hull and piping departments. And, as one of the first users of AVEVA Outfitting, the company was able to be a front runner in developing valuable expertise. AVEVA Marine also enables Deltamarin Poland to further develop its proprietary expertise through the easy development of custom macros to cater for specific project or user needs.

As hull and outfitting design are now tightly integrated, clashes can be quickly identified and eliminated, which streamlines the design process. AVEVA Marine also enables engineers from multiple locations to work on the same model; Deltamarin retains full control over the model as it develops.

Throughout the workflow, AVEVA Marine increases efficiency and quality. It can automatically generate an easy-to-understand error report that enables Deltamarin Poland’s engineers to eliminate design mistakes before the fabrication stage. Deltamarin Poland has benefitted from offering its customers higher quality production information in other ways as well: for example, they can now precisely define plate- and pipe-bending parameters according to the individual machines to be used.
Standard construction elements, such as brackets, cut-outs, notches and clips can be easily created, while AVEVA Marine’s powerful parts-nesting application ensures that they can be efficiently cut from the minimum quantity of raw plate. This has reduced costly post-fabrication rework and materials wastage for Deltamarin Poland customers; a strong selling point for the design firm.

In their daily work, engineers can readily optimise the on-screen layout of toolbars and icons to cater for specific tasks or personal preferences. Deltamarin Poland can now speed up its design work through the use of a batch system for modelling structures. But, as design is by nature an iterative process, AVEVA Marine also makes it easy to progressively refine a design by changing pipe sizes and specifications, and easily adjusting equipment positions and pipe routings.

**Key projects**

Deltamarin Poland has prepared, together with Deltamarin Finland, the 3D model of machinery, piping and outfitting for Arctech’s NBS10 icebreaker.

Due for delivery in 2016, the vessel will be operated by the Finnish Transport Agency in the Baltic and will be the first LNG-powered icebreaker ever built. The vessel will be able to move continuously through ice up to 1.6 m thick, and the service speed of the vessel in open water will be 16 knots.

Other important projects include:

- The B.Delta bulk carrier series project, in which Deltamarin Poland played an important role in both class and detail design phases
- Oldendorff B.Delta37 open hatch general cargo carrier vessel; Deltamarin Poland provided basic design with an extensive package of hull strength calculations.

**About Deltamarin**

Deltamarin Sp.z o.o. is a subsidiary of Deltamarin Ltd., Finland, a ship design, offshore engineering and construction group operating in the marine and offshore industries worldwide. The Group’s services include the full range of consulting, design and engineering, as well as procurement, construction and installation. All phases and all disciplines in new building and conversion projects are covered, as well as project management and operational support. Deltamarin’s customers include major international ship owners, offshore contractors, shipyards, and equipment and system suppliers.

**Find out more:**

[www.deltamarin.com](http://www.deltamarin.com)