

CUSTOMER CASE STUDY

AVEVA helps a well-established Canadian shipyard stay competitive in the field, and increase efficiency and meet deadlines easily.

Chantier Davie - www.davie.ca
Industry - Shipbuilding

Goals

- To increase traceability and improve processes.
- To consolidate methods in use.
- To meet design deadlines.

Challenges

- Information regarding schedule and material status was decentralized and spread across different tools.
- Looking up information was time-consuming and therefore held Davie back from the desired levels of efficiency.

AVEVA Solution

- ERM
- Marine
- Global

Results

- Better design processes allow people from multiple locations to work on the same model.
- Visibility of material status and progress plans allow Davie to reduce the number of tools used.
- Efficiency is increased.

Chantier Davie Shipyard – Demonstrating the Competitive Value of Integrated Shipbuilding Technology

Quebec, Canada – Established in 1825, Chantier Davie shipyard is Canada's oldest and largest shipbuilder, and one of the country's leading and most innovative shipyards.

Situated in Quebec, the yard has been continuously expanding in both working and production capacity, and its 1,300 workers now have the capability to handle 1,200 t/month of steel production, at their 570,000 m² facilities. Davie provides value-added, specialised products and services, making full use of its high-capacity fabrication capabilities to provide complex engineered solutions to meet its clients' needs.

The company's ability to provide end-to-end turnkey solutions, combined with its strategic location, makes Davie the partner of choice for clients across a broad range of industries from offshore oil & gas to defence.

Transforming the Shipyard

Chantier Davie (Davie), a diversified shipbuilder, produces various types of ships for both naval and commercial clients. The latest project, called 'Resolve', is the conversion of a 182.5-metre container ship into an auxiliary oil replenishment vessel for the Canadian Navy, to be completed in only 24 months, including design and delivery. To achieve the deadline for the complex rebuild, Davie had to evaluate existing tools and processes, to maximise efficiency across design, planning, supply chain and production.

The transformation process was initially started with the introduction of AVEVA ERM and AVEVA Marine, and also AVEVA Global, a tool which allows teams from multiple locations to work on the same model. This allowed Davie to optimise their concurrent design processes together with multiple European design agencies.

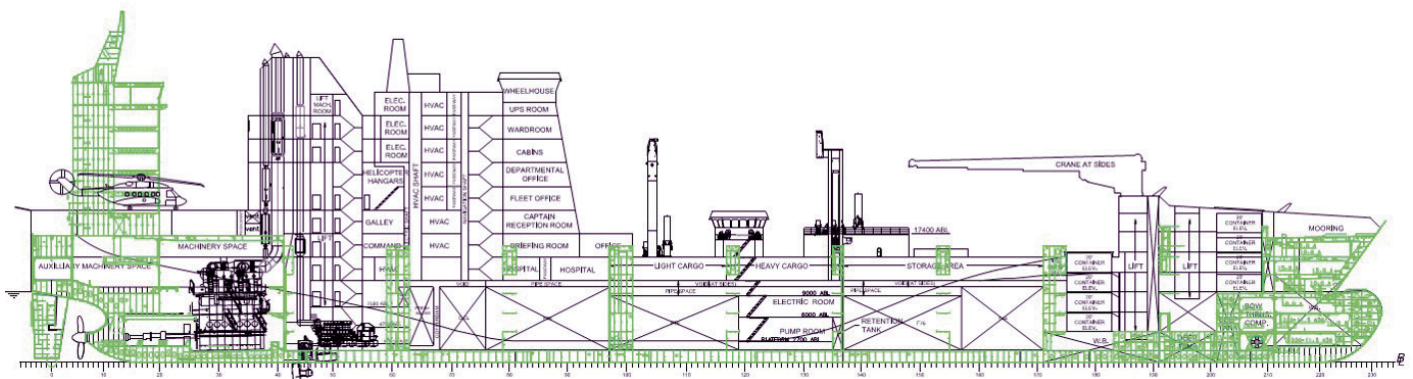
According to Lindsey Kettel, VP of Business Processes at Davie, such investments are vital for survival in the global shipbuilding industry, where competition is becoming ever fiercer.

“We invested in the AVEVA systems back in 2013. We were the first North American shipyard to implement AVEVA ERM. This meant that we were taking quite a risk, being one of the front runners for the AVEVA toolset. However, we felt that this was a necessary step towards modernising the IT infrastructure to allow us more efficiency, so we could focus more on the innovation required. The decision to select AVEVA Marine and AVEVA ERM was straightforward, as the applications are developed specifically to support shipbuilding processes. Furthermore, AVEVA ERM is developed by people with decades of shipbuilding know-how.”

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Lindsey Kettel,

Vice President of Business Processes at Chantier Davie



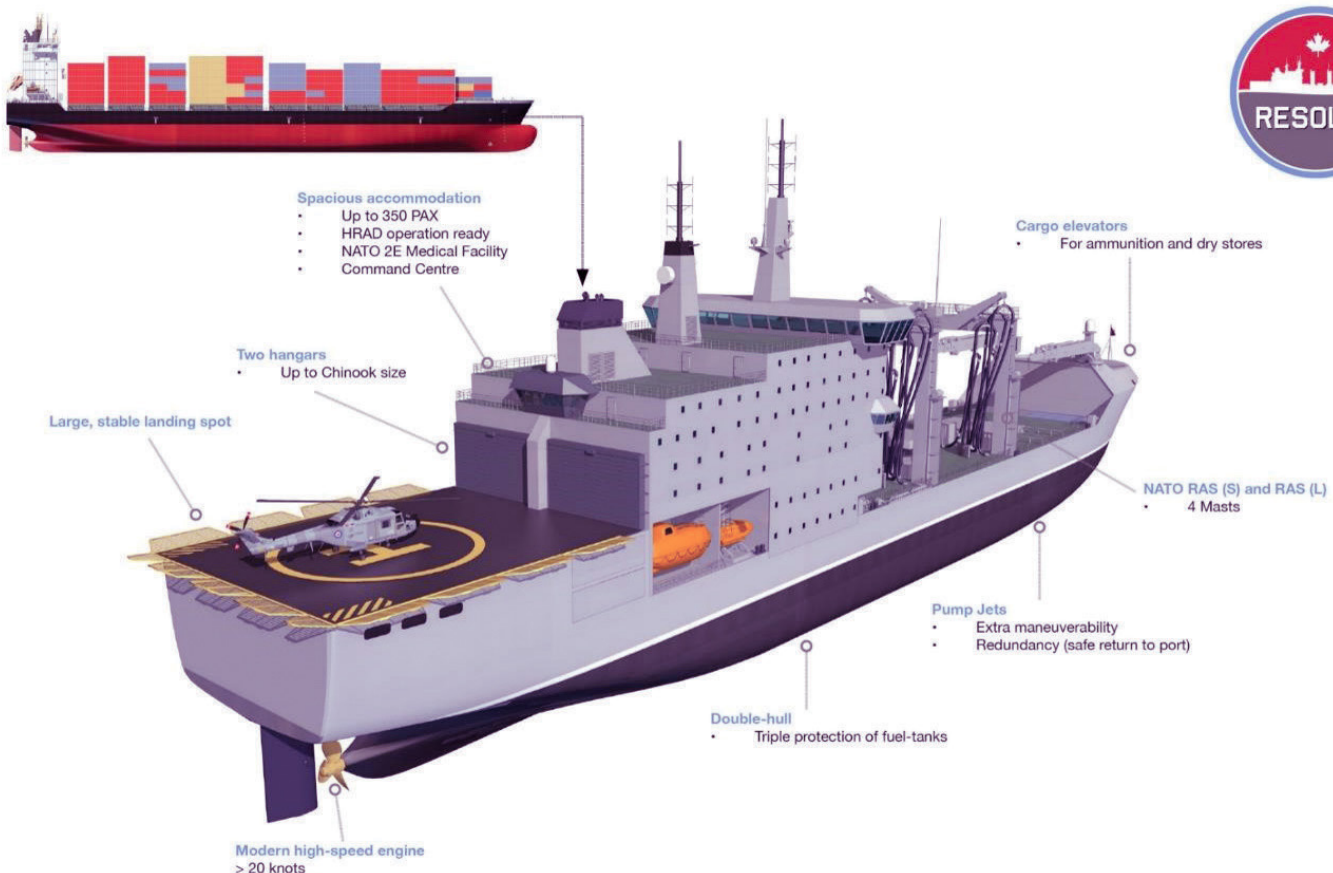
Challenges Overcome

Before engaging with AVEVA ERM, Davie was facing several challenges in the planning and supply-chain domains. The challenges revolved around missing visibility of materials for planning, and around planning for the supply chain. Most of the systems used for supply chain and planning management were home-grown and supplemented with various Microsoft Excel sheets and Access databases. Davie started its transition by purchasing SAP for financials and, shortly thereafter, AVEVA ERM for material management and planning.

“The ERM implementation process gave us a really good start on our continuous improvement journey. There has been quite a steep learning curve as we transitioned between systems. We have not been used to adapting to new business processes in such a rapid and overarching fashion. We are still not using AVEVA ERM to its full capability, but its integrated planning and materials management functions are helping us to identify and solve problems that no individual would be able to manage on their own with a project moving at this pace.”

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Lindsey Kettel,

Vice President of Business, Processes at Chantier Davie



One of the challenges which has been overcome is that of missing materials on the shop floor, where Davie, thanks to AVEVA ERM's integrated planning and materials management capabilities, can now see the status/ availability of materials before releasing jobs for production. This has minimised the requirement for suspending jobs due to missing materials which, in turn, has increased the efficiency of production teams. As a side effect, warehousing also has better visibility of priorities when critical items are received into inventory.

“The traffic-light system, both of the material status, and in the planning module is helping us to effectively manage the entire material stream, right from identifying early requirements to purchasing actual materials. We can then get those materials on site and out to production teams to do their jobs on time and following the project schedule, while minimising material wastage and over- or under-buying.”

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Lindsey Kettel,

Vice President of Business, Processes at Chantier Davie

Continuous Improvement

Davie has greatly improved the visibility of status on jobs and materials. Now they are looking to improve on several other areas as a part of their goal of continuous improvement. An example is the management of inhouse steel and outfit fabrication, a process which so far has been managed and updated in various spreadsheets and databases.

Davie handles most of the fabrications in-house, which makes planning and managing this a large task for supply chain, planning and production. The expectation is that, by adapting more of the AVEVA ERM functionality, and since internal fabrication status will become more easily visible downstream, efficiency will significantly increase.

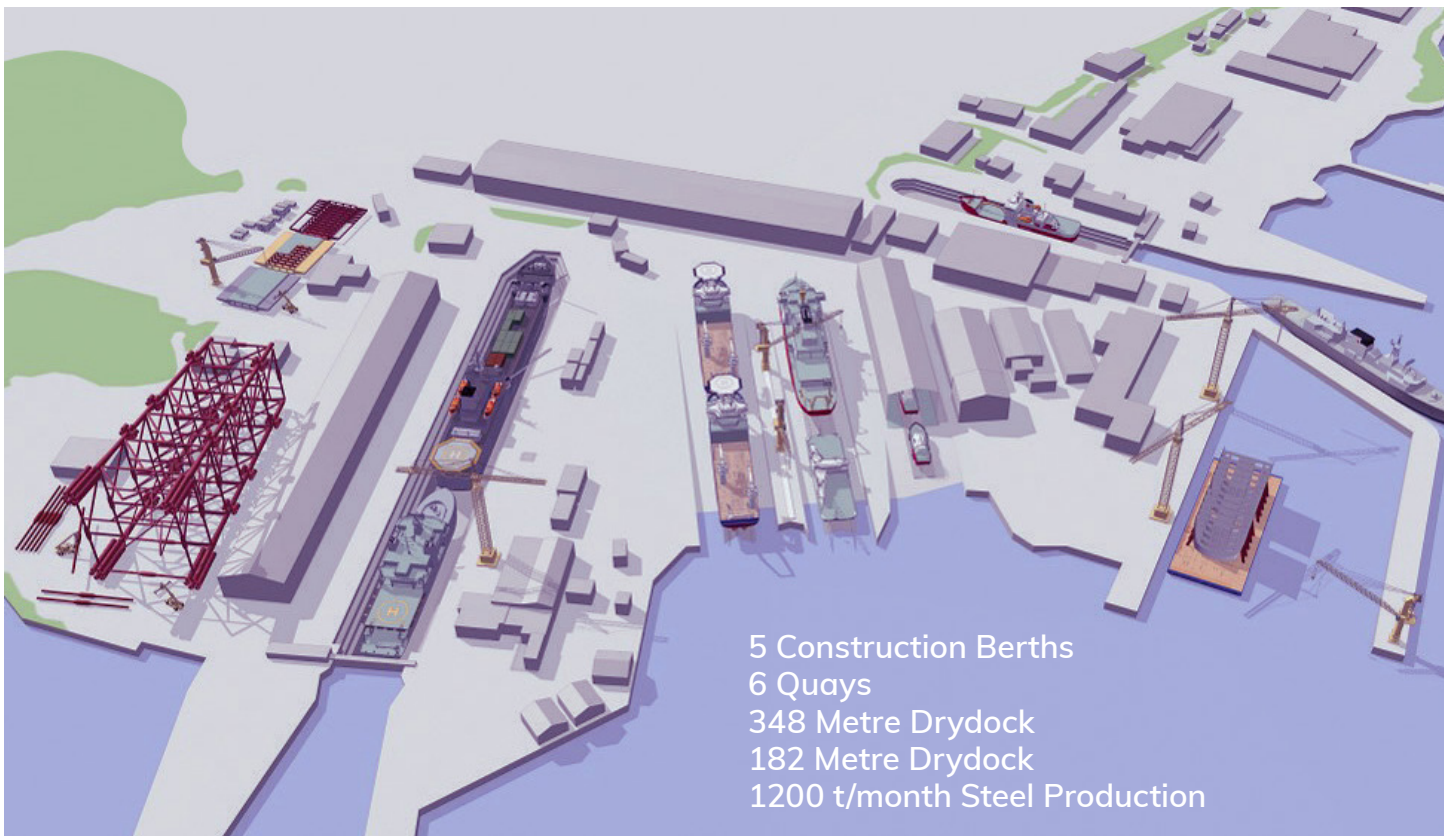


Facing Future Challenges with AVEVA Solutions

AVEVA ERM and AVEVA Marine are also seen as very important from a business management point of view. Jared Newcombe, CEO at Davie, agrees that, with these solutions, the shipyard is well-placed to face the many challenges which may lie ahead in the shipbuilding industry.

“In AVEVA ERM and AVEVA Marine, we have a dedicated and integrated IT environment. This, combined with the skills of our employees, has helped us to become a modern and competitive shipyard by reducing project cycles and so bringing down our total costs. Also, the excellent collaboration with AVEVA shows us that we are in safe hands, thanks to their expertise and their approach to shipbuilding.”

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Jared Newcombe,
CEO, Cantier Davie



5 Construction Berths
6 Quays
348 Metre Drydock
182 Metre Drydock
1200 t/month Steel Production