

CUSTOMER CASE STUDY

AVEVA ERM was selected by Oceana to reduce costs and waste of materials and man-hours while streamlining their ship-building process.

Oceana Estaleiro S.A. Industry - Shipbuilding

Goals

- To use less material and to waste fewer man hours.
- To release work orders closer to the execution date.
- To use one integrated system for simple access to information.

Challenges

- Accessing all information needed to streamline the ship production process was difficult.
- Planning across all disciplines was unreliable.
- Implementing efficient production was difficult because people and systems worked separately, not together.
- Production costs and assembly times needed reduction.
- Incorrect materials were being delivered, and deliveries were going to the wrong places and at the wrong times.

AVEVA Solution

• AVEVA ERM Integrated Suite

Results

- Man-hours are now monitored, resulting in less waste in both hours and materials.
- Work orders are now released closer to the execution date.
- One integrated system simplifies access to information.
- Deliveries became more accurate.
- Project status reports came in on time for updating plans.

Oceana Shipyard Gains Global Competitive Advantage by Streamlining Production Process with AVEVA Enterprise Resource Management

Itajai, Santa Catarina, Brazil - Oceana is a new, medium-sized shipyard specialising in the production of AHTS, PSV and offshore supply vessels. It employs the latest equipment and production processes in building high-technology vessels for the petroleum and gas sectors. The shipyard employs state-of-the-art construction processes and facilities. With more than 1,500 employees, it also has the capacity to build up to six ships per year. The shipyard itself was designed in accordance with strict sustainability standards; these include reuse of rainwater, natural ventilation and light and an adjacent green area of 55,000m2.

Challenges: Principles of Success

New companies coming into any market must always try harder than their established competitors. In shipbuilding, new companies need to secure credibility from new customers who may already have been working with competitor shipyards. They need all the advantages on their side; to demonstrate to customers a systematic approach to keeping on track with the

production schedule, while controlling costs and making sure that no unforeseen situation can delay delivery. When new Brazil-based shipyard, Oceana Estaleiro S.A., started operations in 2014 the company had established three core principles to form the basis of its competitive advantage. Oceana's Head of Planning, Juliano Pamplona, states that these principles were:

- Qualified people
- Streamlined, best-in-class production processes
- Proven and reliable planning and control systems

A critical aspect of bringing these three principles together is integration. A strong and integrated system for production-planning management and control is extremely important. People must also work closely together. The right systems make all this possible.

Solutions: Delivering on Expectations

Oceana's mission is to be recognised as one of the best shipyards in the world in the construction of offshore supply vessels, delivering projects on time and on budget. One such action, according to Pamplona, was the early selection of AVEVA ERM.



"We chose AVEVA ERM mainly because it was built for shipbuilders. This made it faster for us to implement since it required almost no customisation. It easily integrated with our SAP planning systems, offering all-round capabilities, where all our technologies were working towards the same goals and no specialist knowledge was required to switch from one to the other. Everybody shares the same view and the same information, so there is a strong link between all disciplines, both in the shipyard and in terms of collaboration with our supply chain partners."

Juliano Pamplona, Head of Planning, Oceana AVEVA ERM enables Oceana to conduct crossdepartmental planning between engineering, procurement, warehouse and planning to keep projects on schedule or even, as Oceana achieved with delivery of its second vessel, ahead of schedule. Costs are also a major issue. The daily rates for a PSV are around US\$8,500 per day. So, a ship delivered just three months late would incur extra costs of over US\$765,000.

Oceana can produce six ships per year. Delay in one project would immediately have a negative effect on schedules for other projects; a mounting financial impact that could be detrimental not just to the shipyard's profitability, but also to its reputation. The AVEVA ERM suite chosen by Oceana is made up of integrated applications, each of which can be configured, if necessary, to address specific standard operating procedures, although Pamplona has not yet found this necessary.

The applications not only drive greater planning efficiencies but, in doing so, make production a far smoother process; hence Oceana's initial gains in time against tight schedules.



A Reputation for on-time, on Budget Production

An independent study of the shipbuilding market, focused on anchor handling tug supply vessel and platform supply vessel production times in Brazil, has shown that Oceana now leads the market in production times; an achievement that the company says is largely due to the AVEVA solutions.

Up to 70% of the cost of a new-build (in some cases even more) relates to material costs. Overspend in material acquisition can have a major impact on the result. Oceana now avoids such major problems, hence the reputation it has rapidly gained in the shipbuilding industry.

"We are focused on bringing reliability to the processes to reduce rework, reduce loss of materials and reduce miscommunication between departments. The AVEVA ERM implementation processes were very smooth and well-planned. Within seven weeks we had the go-live and in weeks the complete implementation of the system."

Juliano Pamplona, Head of Planning, Oceana



Among the practical benefits for efficient planning and execution are:

- Releasing work orders closer to the execution date
- Using one integrated system to simplify access to information
- Accurate delivery of the right material, at the right time, to the right place
- · Continuous monitoring of man-hour usage
- Reporting project status on time to update the project plan

Oceana's adoption of AVEVA ERM has enabled it to drive strong collaboration between departments on production planning and control, generating and sharing reliable information from projects whenever required for shipyard directors, senior group management and shareholders.



