



SOFTWARE - NAUTICUS™ MACHINERY

NAUTICUS MACHINERY FOR SHAFT ALIGNMENT

Customer story - Hyundai Heavy Industries

Hyundai Heavy Industries is the world's largest shipbuilder, and recently passed the 100 million tonnage mark in ships. Since 2001, HHI has used Nauticus Machinery for shaft alignment calculation.

"Nauticus Machinery is a very easy and convenient tool," says Senior Engineer K.M. Hwang at Hyundai Heavy Industries, who has been using the tool for shaft alignment for ships built at HHI since 2001.

Mr Hwang has been with HHI for 12 years, and is responsible at the ship outfitting design department for the shafting, rudder and steering gear systems. His team of 16 engineers are using Nauticus Machinery hands-on.

He points out that HHI has compared Nauticus Machinery with other software, and landed with the DNV GL products due to

several factors, including clear output, the ability to calculate several conditions at the same time, modelling by the drag and drop method, flexible combination of graphs, diagrams and drawings, and the helpful and timely support from the DNV GL - Software team.

Easy calculation of operating conditions

"The reports are easy and clean, and the results are reliable," he says. "These characteristics help us calculate many operating conditions very easily. And when we consider many operating conditions, we can prevent the future damage of the stern tube bearing.

"Nauticus Machinery is a very easy and convenient tool. The result of shaft alignment calculation by Nauticus Machinery is reliable. These characteristics help us calculate many operating conditions very easily."

Senior Engineer K.M. Hwang at Hyundai Heavy Industries

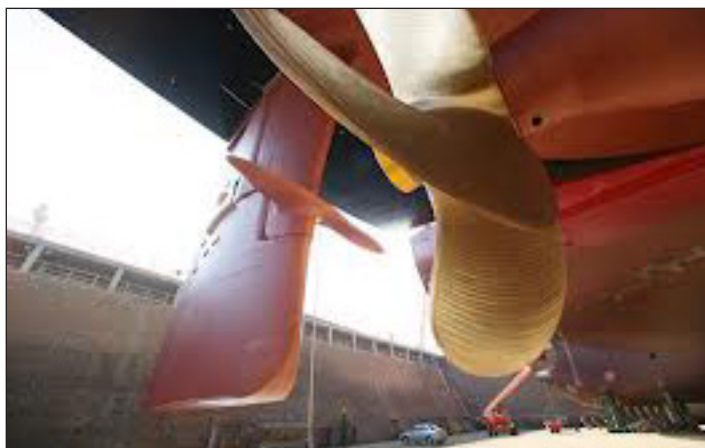
Even though other tools can calculate the shaft alignment, they are more difficult to use than Nauticus Machinery.

"We can consider many conditions including multi-supported bearing and bearing stiffness," says Mr Hwang. "It is very easy to correct the model, including the diameter, length and external load. We can also insert the graph of the shaft line and bending moment diagram right on the drawing."

"I'm satisfied with the DNV GL - Software's customer support, which offers quick responses to solve any problems. It is very helpful and convenient to report to the DNV GL Korea staff immediately by e-mail or by phone call," he says.

The HHI Shipbuilding group is the world's largest shipbuilder, with a 15 per cent share of the market. The Hyundai shipyard stretches across four kilometers along the coast of Mipo Bay in Ulsan, Korea. It has ten large-scale dry docks with nine 'Goliath cranes'. HHI has delivered more than 1740 ships to 272 ship-owners in 48 countries since 1972.

Tonnage includes LNG and LPG carriers, VLCCs, tankers, containerships, bulk carriers, ro-ro and ro-pax ships, drill ships, submarines, destroyers and frigates.



HYUNDAI HEAVY INDUSTRIES IN BRIEF

Hyundai Heavy Industries (HHI) is an integrated heavy industries company with headquarters in Ulsan, Korea. HHI aims to become the leading heavy industries company in the world, and the HHI Shipbuilding Division is the world's largest shipbuilder. HHI has seven business divisions: Shipbuilding, Offshore & Engineering, Industrial Plant & Engineering, Engine & Machinery, Electro & Electric Systems, Construction Equipment, and Green Energy.

PROFILE

- Customer name: Hyundai Heavy Industries
- Web address: www.hhi.co.kr/
www.hyundaiheavy.com
- Market: Offshore, maritime, engineering, construction, energy
- Employees: 23,500
- Solution/product: Nauticus Machinery

BRIEF ACCOUNT

Why we chose DNV GL - Software

- Preferred software over other solutions
- Working relations with DNV GL - Software are simple, easy and reliable
- DNV GL customer support offers quick responses to solve any problems

This is what we gained:

- Modelling by drag and drop
- Clear output
- Easy to correct the model
- Considers many conditions including multi-supported bearing and bearing stiffness