Compass Energy Pte Ltd

Marine/ Offshore

Singapore

Overview

Compass Energy was established in 2004 to provide engineering services for the offshore oil and gas industry in Southeast Asia. We are an international company based in Singapore, a country commonly respected for being the hub of shipping and offshore support activities in Asia Pacific.

Today, Compass Energy has positioned itself as a leader in 'Intelligent Engineering' with our outstanding service to the marine industry. We enjoy a high level of repeat business due to our clients' appreciation and confidence in our abilities to meet the deadlines, deliver quality and be cost effective. We are committed to our clients at all times.

Testimonial

ANSYS is excellent for designing structures for the marine/offshore industry. Compass Energy uses ANSYS to perform structural strength checks, structural buckling checks, structural fatigue checks and structural lifting designs on ships, jack ups and various other structures.

Modelling and meshing in ANSYS are very easy to perform. With the various element types for modelling and multiple mesh methods available, we are able to enjoy significant time savings.

ANSYS is undoubtedly superior to other FEM software in the market because of its easy-to-use interface and accurate simulation results.

Dr Xu Kai
Consultant

Barge lifting

TSS lifting

Process

Jack-ups, commonly used for oil and/or natural gas drilling, should be able to stand still on the sea floor. Currently, before we can perform any stress analysis, linear buckling analysis and fatigue analysis on jack-ups, we need to mesh the model.

The difficulties encountered in the pre-processing phase are that certain structural meshes cannot be obtained and that the mesh quality is low.

Solution

ANSYS enables us to model with shells and plates conveniently. Combining beam elements with shell elements dramatically reduces the time taken to model jack-ups.

In addition, the ANSYS' ability to generate different types of meshes greatly improves the mesh quality. All these lead to shorter simulation time and more accurate results.

Benefits

By using ANSYS, Compass Energy is able to optimize the design of offshore structures such as jack-ups.

ANSYS has been proven to be more powerful and more accurate than competitor software, translating into improved productivity, reduced time-to-market, and increased profits.

www.cadit.com.sg   **www.ansys.com**