

Bumi Armada

Oil & Gas

Malaysia



www.bumiarmada.com

ANSYS®



Overview

Bumi Armada Berhad is a Malaysia based international offshore oilfield services provider with a presence in over 18 countries spread across five continents, underpinned by its access to over 3,000 people from over 39 nationalities.

Bumi Armada provides these offshore services via five strategic business units :- Floating, Production, Storage and Offloading ("FPSO"), Offshore Support Vessels ("OSV"), Transport and Installation ("T&I"), Oilfield Services ("OFS") and Gas Development and Technology ("GDT").

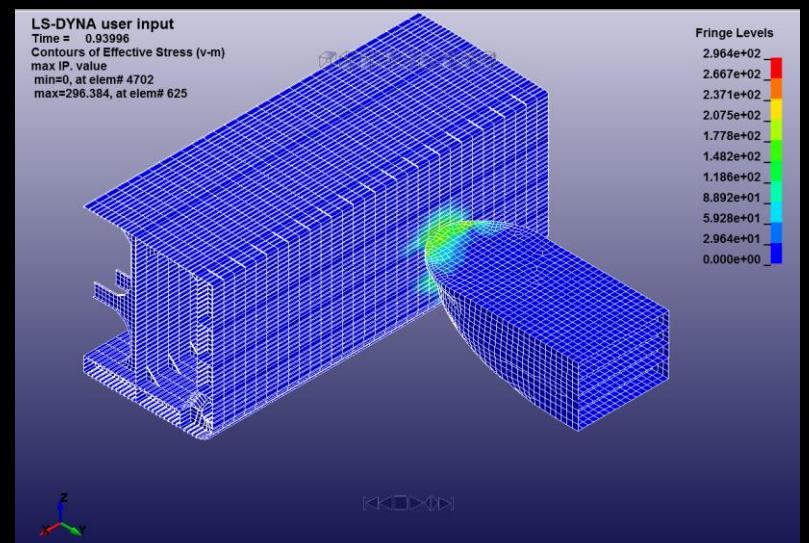
These are complemented by three support units which are Asset Management & Operations ("AMO"), Engineering and Technology ("E&T") and Major Projects ("MP").



Testimonial

With suggestions and help from CAD-IT, and coupled with the strong pre/post processing capacity of ANSYS, the LS-DYNA explicit FEA software provides us with much more impressive and reliable results.

Guiming Li
Structural Engineer
Bumi Armada Berhad



Current Process/Challenges

Bumi Armada have been requested by their clients to run multiple impact and collision analyses scenarios of their Floating Production Storage and Offloading (FPSO) vessels with other operation vessels.

Their normal practice of using hand calculation or simplified non-linear analysis could not be used for such cases.

Solution

ANSYS LS-DYNA, which handles large deformations, sophisticated material models, complex contact conditions among multiple components, and short-duration impact dynamics problems is utilised to simulate these impact scenarios.

Benefits

With experimental study not a feasible option, explicit dynamics collision analysis is a cost effective solution which yields valuable information.

Bumi Armada are able to study multiple impact scenarios, and validate the integrity of their structural design, within the given design time frame.