Certificate No: 2025-EC-OFS-021-LO

Date: April 10<sup>th</sup> , 2025



# CERTIFICATE OF ACCOMPLISHMENT

This certificate is granted to

## CAESAR ADZA MAHENDRA

ID NUMBER: EC-OFS-021

For successfully completing 2 days of lesson & finished the Final Project of our e-Course

# OFFSHORE STRUCTURE DESIGN LOAD OUT ANALYSIS

Held by **Petros Oil Gas Training** – Jakarta covering the subjects as listed on the back page





### OFFSHORE STRUCTURE DESIGN - LOADOUT ANALYSIS

#### **BASIC THEORY**

#### **METHOD OF ANALYSIS**

A normal set of conditions:

- All support active.
- A vertical displacement of ± 30 mm is imposed on each of the 4 supports alternatively.

An extreme set of conditions:

- Each support is successively released:
- A maximum vertical displacement of ± 60 mm is imposed on each of support alternatively

#### STRUCTURAL ANALYSIS

Basic Load Case

- Elementary Load Cases
- Gravity Load
- Variation Of CoG Location
- Displacement Of Support
- Wind Load
- Friction Load

#### Load Combination

- Full skidway support + Shifting + Wind
- Loss support + Shifting
- Each Support preset 30 mm upward + Shifting+Wind
- Each Support preset 30 mm downward + Shifting + Wind
- Each Support preset 60 mm upward + Shifting+Wind
- Each Support preset 60 mm downward + Shifting + Wind

#### LOADOUT ANALYSIS COMPUTER MODELING

- Model and Input Data
- Create Loadout Input File
- Running The Analysis

#### **ANALYSIS OF RESULTS**

- Total Deck Weight, Centre Of Gravity, Support Reactions , Deflection
- API/AISC Member Stress Ratios
- API/AISC Joint Punching Shear Stress Ratios
- API/AISC Joint Minimum Required Strength Ratios

#### **REPORT PREPARATION**

FINAL PROJECT: LOADOUT ANALYSIS OF 1308 TONS DECK PLATFORM