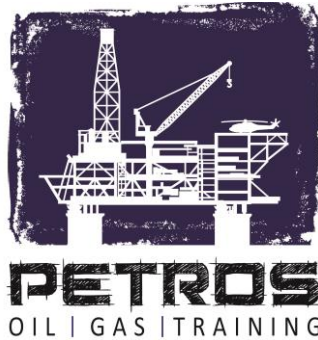


Certificate No : 2022- OFS-063-05-LO

Date : July 20th , 2022



CERTIFICATE OF ACCOMPLISHMENT

This is to certify that

MARTHINUS TONNY PANGEMANAN

ID NUMBER : OFS-063-05

has completed

**OFFSHORE STRUCTURE DESIGN
LOAD OUT ANALYSIS**

Held by **PETROS Oil Gas Training** – Jakarta,
June 30th , 2022, covering the subjects as listed on the back page



Certificate Validation

A handwritten signature in black ink, appearing to read "Heru Prasaaja", written in a cursive style.

Heru Prasaaja, ST
Director

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 103 TONS DIESEL STORAGE PLATFORM