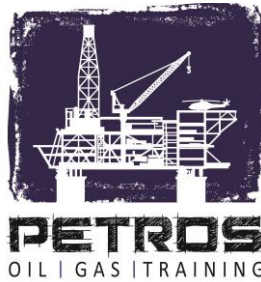


Certificate No : 2021-PTR-EC-LE-009  
Date : February 28<sup>th</sup>, 2021



# CERTIFICATE OF ACCOMPLISHMENT

This certificate granted to

**MUHAMMAD NURDIN MUCHLISH**

ID NUMBER : PTR-EC-LE-009

For its success for completing the training

**LIFTING/RIGGING ENGINEER**

And meet all requirements with score:

**82.4**

of 100 points

**Trainer :**

**TAUFIQURRAHMAN, ST**

*Certified Advanced Rigging Engineer - CA 90722 Wood Group*

Held by **Petros Oil Gas Training** – Jakarta  
February 25<sup>th</sup> & 26<sup>th</sup>, 2021, covering the subjects as listed on the back page



Valid Through : February, 28<sup>th</sup>, 2023



**Heru Prasadja, ST**

Director

# LIFTING/RIGGING ENGINEER TRAINING

## **BASIC RIGGING**

- Lifting/Rigging Principles
- Type of Slings
- Weight Calculation, SWL, Angle Factor & Sling Factor
- Lifting Gear/Accessories' (Shackle, Eyebolt, Clamp, Chain Block)
- Ascertain of general lifting procedure and related government regulation for lifting

## **SAFETY LIFTING**

- Lifting Hazard
- Personal Safety Equipment
- Commons Systemic Lapses Involving Lifting Activities
- Hand Signal

## **LIFTING PROCEDURE**

- Lifting Categories (light, heavy, critical)
- Lifting Team
- Risk Assessment & How to Control the Hazard
- Pre Lift Safety Check
- Statutory Inspection of Lifting Equipment
- Communication
- Rigging Plan Preparation Check List

## **ADVANCE RIGGING**

- Pre-use Inspection of Lifting Equipment
- Recommended Rigging, Slings Methods & Calculation
- Sling Factor, Angle Factor, Estimation Weight, Determine Weight & COG
- Roles & Responsibility of Lifting Teams
- Lifting Plan
- Multi Crane Lift
- Purchases System (pulley)
- Span Rope & Flying Fox

## **STUDY CASE : Lifting Operational Procedure for 61 Ton Structural Module**

- Set Up Crane Configuration
- Define Lifted Weight & CoG
- Select A Right Crane & Lifting Gear Selection
- Ground Bearing Pressure Verification

## **FINAL EXAMINATION : Develop Lifting Operational Procedure for 44.7 T Modular Structure**