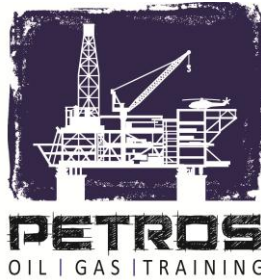


Certificate No : 2026-PTR-EC-LE-219
Date : September 24th , 2026



CERTIFICATE OF ACCOMPLISHMENT

This certificate is granted to

EFRAT IMANUEL LINTING

ID NUMBER : PTR-EC-LE-219

For successfully completing the training

LIFTING/RIGGING ENGINEER

Has completed all task and passed the Final Exams with a score:

83.40

of 100 points

This training is held by **Petros Oil Gas Training**
covering the subjects as listed on the back page



Valid Through :
September 24th , 2028


Heru Prasadja, ST
Director

LIFTING/RIGGING ENGINEER TRAINING

Subject

1. Law & Regulation
2. Lifting Team Member
3. Lifting Category & Approval Hierarchy
4. Site Survey, Load & Hazard Identification
5. Lifting Equipment Category
 - *Lifted Equipment*
 - *Lifting Appliance*
 - *Lifting Accessory*
6. Typical Rigging Arrangement
 - *Define lifting point location*
 - *Type of hitch (vertical hitch, choker hitch, basket hitch, and bridle hitch)*
 - *Angle factor*
 - *Reeve factor*
 - *Multi stage rigging arrangement*
 - *Tandem Lift*
 - *Tailing Lift*
7. Lifting Gear, Inspection & Rejection Criteria
 - *MBL, WLL & SWL*
 - *Wire Rope Sling*
 - *Chain*
 - *Webbing Sling*
 - *Round Webbing Sling*
 - *Shackle*
 - *Other lifting accessories*
8. Center of Gravity
 - *The importance of COG data*
 - *The Impact of COG Inaccuracy*
 - *COG data resources*
9. Load Factor (DNVGL-ST-N001)
 - *Wc*
 - *DAF*
 - *SKL*
 - *CoG*
 - *Consequence Factor*
 - *Yaw*
 - *Tilt*
10. Dynamic Sling Load (DSL)
11. Lifting Calculation using Trigonometry Method
 - *Basic Load Distribution*
 - *Load Path*
 - *Load sharing at 2 lifting point*
 - *Load sharing 4 Lifting point*
 - *Multi level rigging arrangement*
12. Dynamic Hook Load (DHL)
13. Crane
 - *Type of Crane*
 - *Crane Components*
 - *Reading Crane Manufacture Data*
 - *Crane Selection*
 - *Crane Setting*
 - *Working Radius, Loading Chart & SWL*
 - *Crane Utilization & SF*
 - *Ground Bearing Pressure*
 - *Crane Inspection*
14. Safety Lifting
 - *Lifting Hazard*
 - *Risk Assessment & How to Control the Hazard*
 - *Job Safety Analysis*
 - *Tool Box Talk*
 - *Communication*

FINAL PROJECT :

Lifting Plan for 23 ton E-House using KATO NK500

which consists :

- *Detail engineering calculation for of multi level rigging arrangement*
- *Prepare Lifting Plan Drawing*
- *Develop Lifting Method*
- *Develop Lifting Operational Procedure*
- *Develop Job Safety Analysis (JSA)*

