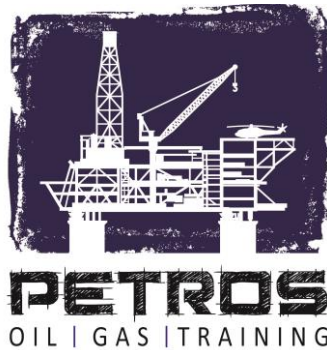


Certificate No : 2021-PTR-MDF-018
Date : November 18th , 2021



CERTIFICATE OF ACCOMPLISHMENT

This is to certify that

YOGI AL FADEL
ID NUMBER : PTR-MDF-018

has completed

2D & 3D CAD MECHANICAL DRAFTING TRAINING

Held by **PETROS Oil Gas Training** – Jakarta,
November 14th to 17th , 2021 , covering the subjects as listed on the back page



Certificate Validation

A handwritten signature in black ink, appearing to read "Heru Prasadja". The signature is fluid and cursive, written over a light blue horizontal line.

Heru Prasadja, ST
Director

2D & 3D CAD MECHANICAL DRAFTING TRAINING

SUBJECTS :

BASIC ENGINEERING DRAWING

- Standard Drawing Sheet Size (ISO)
- Lettering Standard
- Lines Type
- Projection
 - Pictorial
 - Orthogonal
 - Europa Projection
 - American Projection
- Sections
- Details
- Dimension Rules
- Scale
- Tolerance
- Welding Symbol
- Mechanical Drawing Practice (manual)

AUTOCAD 2D

- Basic Drawing Tools
- Basic Modify Tool
- Managing Object Properties
- Organizing Drawing Geometry
- Dimensions & Annotation
- Creating Drawing Sheets

CASE STUDY : PRESSURE VESSEL DESIGN DRAWING

AUTOCAD 3D

- Introduction to 3D Drawing
- Coordinate Systems
- Basic Construction Techniques; USC & Model Space Viewports
- Surface Modeling Techniques
- Dimensioning 3D Models; Viewing and Displaying 3D Models
- Solid Models
- External References and Assembly Drawings; Detail Drawings
- Drawing Packages

CASE STUDY : MECHANICAL PART 3D MODELLING

FINAL PROJECT DRAWING : CLOSE DRAIN PKMB-V-920