


Fuad Muhammad HVAC Engineer

fm1101101@outlook.com | (+62) 878 0425 2266 | Bekasi, Indonesia | fm1101101.github.io
linkedin.com/in/fm1101101



EDUCATION

Politeknik Negeri Bandung,
BASc Heating, Ventilating, Air Conditioning and Refrigeration Engineering 
Grade: 3.28/4.00

Aug 2015 – Aug 2019

WORK EXPERIENCE

PT Catur Mitra Teknologi

Lead Engineer

Mar 2023 – present

Responsible for reviewing engineering documents, assessing material requests, and allocating engineering workloads

HVAC Engineer

Jul 2020 – Mar 2023

Responsible for developing Piping and Instrument Diagram (PNID), Duct and Instrument Diagram (DNID), airflow diagram, control narrative & philosophy, data sheet, general arrangement drawings, layout drawings, Factory Acceptance Test (FAT) Procedure, Site Acceptance Test (SAT) Procedure, spare part list and IOM

PT Eskimo Wieraperdana, Project Engineer

Sep 2019 – Jul 2020

Responsible for supervision, field inspection, material receiving, developing IOM and conducting FAT

PT Sigma Visualindo, Student Internship

Jul 2018 – Aug 2018

Supervision, project estimation, quotation, commissioning, duct design

PT United Refrigeration, Student Internship

Jan 2018 – Feb 2018

Cold room installation, preventive maintenance, corrective maintenance, commissioning, start up, site survey

PROJECTS

HVAC ISBL Ineos, Replacement HVAC ISBL PT Ineos Aromatics

2024 – present

Client / Owner: PT Ineos Aromatics

Replacement air cooled condensing units, evaporators and piping works for HVAC ISBL

Responsibilities:

Developing PNID, data sheets, general arrangement drawings and IOM

Maintenance HVAC RU IV Cilacap, TSA Perbaikan dan Pemeliharaan Rutin AC Central dengan Sistem Kontrol PLC di Gedung Control Room dan Sub Station PT Kilang Pertamina Internasional RU IV Cilacap

2024 – present

Client: PT Sumber Djadi Makmur

Owner: PT Kilang Pertamina Internasional RU IV Cilacap

- Preventive maintenance (PM) 183 sets HVAC Unit

- Corrective maintenance (CM) 183 sets HVAC Unit

Responsibilities:

- Provide technical support during PM and CM schedules

- Optimize and backup HVAC PLC Schneider program

Bekapai Project, Retrofit HVAC Switchgear Bekapai

2024 – present

Client / Owner: PT Pertamina Hulu Mahakam

Replacement HVAC Unit and Control Panel for Switchgear Room, Bekapai Platform from Relay System to PLC System

Responsibilities

Developing PNID, DNID, general arrangement drawings, data sheets, control narrative & philosophy, spare part list, IOM, SLD and electrical schematic

Peciko-1 Project, Retrofit HVAC Unit PLC for Chilled Water Unit Peciko-1

2024 – present

Client / Owner: PT Pertamina Hulu Mahakam

Improving HVAC PLC Logic Program for Chilled Water Unit Peciko-1 (9410-A and 9410-B)

Responsibilities:

- Developing control logic diagram, FAT Procedure, SAT Procedure
- Assembling PLC I/O Simulator

Rumah Pompa Ancol Sentiong, Engineering Design Rumah Pompa Ancol Sentiong

2024

Client: WIKA - Jaya Konstruksi KSO

Owner: Kementerian Pekerjaan Umum Direktorat Jenderal Sumber Daya Air BBWS Ciliwung Cisadane

- Investigating corrosion and inadequate cooling
- Designing 2 sets of enhanced HVAC System

Responsibilities:

Developing PNID, air flow diagram, data sheets and control philosophy

Jawa 9 & 10 Suralaya Project, HVAC for Power Block Area and BOP Area

2022 – present

Client: PT Hutama Karya (Persero)

Owner: PT Indo Raya Tenaga

- Installing HVAC PLC Unit, Split HVAC Unit, Exhaust Fan
- Installing Central HVAC PLC for Power Block Area

Responsibilities:

- Developing installation layout drawings, data sheets, system configuration drawings, control narrative & philosophy, SLD and interconnection block diagram
- Conducted FAT for HVAC Unit and Exhaust Fan

RDMP RU V Balikpapan Project, Engineering, Procurement and Construction (EPC)

2022 – present

Inside Battery Limits (ISBL) and Outside Battery Limits (OSBL) for the Refinery

Development Master Plan (RDMP) Project RU V Balikpapan

Client: PT Daikin Applied Solutions Indonesia

Owner: PT Pertamina (Persero)

Supplying Rooftop Unit, AHU-ACCU, FFU, CRAC, SAC, Exhaust Fan, CAV/VAV and EDH for Process and Utility Area

Responsibilities:

- Developing commissioning procedure, data sheets, general arrangement drawings, mechanical data and electrical data
- Conduct FAT for HVAC Unit

Jatibarang Project, Pemasangan Heating Ventilation and Air Conditioning (HVAC)

2021 – 2023

System di Switchgear Room XMA dan XAPF Area Operasi Anjungan X-Ray PT

Pertamina EP Regional 2 Zona 7 Jatibarang Field

Client: PT Caleb Technology

Owner: PT Pertamina EP Regional 2 Zona 7

Replacement HVAC System (Rooftop unit, ducting, dampers, PLC Panel) for XMA and XAPF from Relay System to PLC System

Responsibilities:

- Developing P&ID, D&ID, airflow diagram, data sheets, layout drawings, commissioning procedures, control narrative & philosophy, spare part list, IOM
- Conducted shop inspection for ducting and HVAC unit
- Conducted FAT for HVAC unit

Jambaran Tiung Biru Project,

2021 – 2023

Detail Engineering, Procurement, Construction and Commissioning of HVAC System

Client: PT Rekayasa Industri

Owner: PT Pertamina EP Cepu (PEPC)

Installing HVAC systems for GPF Area Substation, Jambaran Central Substation, Jambaran East Substation, Metering Substation, Control Building, Reception Building, Guard House, Public Toilet & E-House

Responsibilities:

- Developing P&ID, D&ID, airflow diagram, data sheets, layout drawings, commissioning procedures, control narrative & philosophy, spare part list, IOM
- Conducted FAT for HVAC unit, PFU, HVAC UCP and duct heater
- Conducted pre-commissioning, commissioning and start-up for SS1, SS4, SS5 & CB

Cakra Donya Project, HVAC System Package for VSD Units on ISBL Substation

2020 – 2021

Client: PT Jaya Multi Sarana Indonesia

Owner: PT BP Petrochemical Indonesia/PT INEOS Aromatics Indonesia

HVAC System for I-VSD301 & I-VSD401 (Rooftop unit, duct, dampers and control panel)

Responsibilities:

- Developed P&ID, D&ID, airflow diagram, data sheets, layout drawings, commissioning procedures, IOM, spare part list
- Conducted shop inspection for HVAC units, motorized dampers and LV cables
- Conducted field inspection for cables and ducts (leakage test)
- Conducted FAT for HVAC Units

Tangguh Expansion Project,

2019 – 2020

Tangguh Expansion Project - Local Control Room (LCR) Package

Client: PT Multipanel Intermitra Mandiri

Owner: BP Berau Ltd

Installing HVAC Systems for LCR 20, 21, 22, 23 (Rooftop unit, AHU-ACCU, dampers, EDH, Instrumentation, HVAC Control & Power Distribution Panel)

Responsibilities:

- Managed and supervised construction on site
- Conducted field inspection for material receiving and installation
- Finished Pre-Commissioning, Commissioning and Start-Up for LCR 21, 22 & 23

PHE ONWJ Project, HVAC for PHE ONWJ 2019

2019

Client / Owner: PT Pertamina Hulu Energi Offshore North West Java

Installing HVAC for PHE ONWJ Expense Plant Living Quarter (Arco Ardjuna, KLA, Central Plant 2nd, 3rd & 4th Floor)

Responsibilities:

- Developed IOM
- Conducted FAT for HVAC units

CERTIFICATES

Sertifikat Kompetensi Teknisi Tata Udara Sentral dan Chiller (Level 4) – BNSP |

Sertifikat Uji Kompetensi Pemeliharaan dan Perbaikan Pendingin dan Tata Udara AC Domestik – LSP P1

Politeknik Negeri Bandung | Sertifikat Kompetensi Teknisi Refrigerasi – BNSP

SKILLS & INTERESTS

HVAC — Hourly Analysis Program, Duct Sizer, control philosophy, data sheets, procedures, quality control, pre-commissioning, commissioning and start-up | **PLC** — Schneider, Siemens | **CAD** — 2D [AutoCAD] | **Computer Science** — Programming, Logic, Algorithm | **Front-End Web Development** — HTML, CSS | **Graphic Design** — GIMP, Krita

LANGUAGES

Indonesia | **English** — TOEIC Listening and Reading (ETS, 825/990) • EF SET English Certificate (EF SET, 62/100 [C1 Advanced]) 