Meganathan M
Process Engineer

wood.

Summary

Years of Experience
5+

Office of Employment
Chennai, India

Industries
- Oil and Gas
- Refinery
- Automation & Control

Types of Facilities
- Refinery

Areas of Expertise
- Dynamic Simulation
- Process Plant start-up and shutdown in OTS with DCS & SIS control system
- Investigation & Testing of Control logics in Greenfield projects

Professional Summary

Meganathan M has 5+ years of experience in carrying out Process Modelling and Simulation, Operator Training Simulation (OTS) with DCS & SIS control system in the field of Oil & Gas.

Qualifications

Education
Bachelor's in Petrochemical Technology, Anna University, Tiruchirappalli.

Software / Skills
- ASPEN HYSYS - Dynamics
- Petrosim - Dynamics
- Omegaland
- VPLink
- CHEMCAD
- PIPESIM
- Yokogawa Centum VP (DCS), Pro-Safe (ESD)

Languages
- English
- Tamil

Experience

DUQM REFINERY PROJECT, Oman – Hydrogen Production Unit

Worked as OTS simulation Engineer to develop dynamic simulation of refinery units using Omegaland simulation tool and integration of simulation model with plant DCS & ESD systems

- Review of PFD, UFD, P&ID, HMB, Equipment drawings, Process / Instrument data sheets, Process Operating manuals, Process control Narratives, Cause & Effect Diagrams, Control &Safety logics.
- Dynamic simulation of Hydrogen Production unit
- Modelling of Pressure Swing Adsorption in Hydrogen Production unit
- Dynamic simulation model & DCS integration, plant startup, shutdown testing.
- Malfunction analysis of HPU Dynamic Model

YIBAL KHUFF PROJECT, Oman – Off Plot & Primary Processing Unit

Worked as OTS simulation Engineer to develop dynamic simulation of refinery units using Omegaland simulation tool and integration of simulation model with plant DCS & ESD systems

- Review of PFD, UFD, P&ID, HMB, Equipment drawings, Process / Instrument data sheets, Process Operating manuals, Process control Narratives, Cause & Effect Diagrams, Control &Safety logics.
- Modelling & Execution of Off Plot & Primary Processing Unit
- Integration of Dynamic Model with Yokogawa DCS.
- Testing the Dynamic Model with client

FADHILI GAS PROGRAM, SAUDI ARAMCO, Saudi Arabia – Inlet Facilities

Worked as OTS simulation Engineer to develop dynamic simulation of refinery units using Omegaland simulation tool and integration of simulation model with plant DCS & ESD systems

- Dynamic simulation model integration with Real plant DCS & ESD (Yokogawa Centum VP & ProSafe)
- System Design Document preparation
- Testing of plant startup, shutdown and various plant malfunctions configurations
- Executed Factory Acceptance Test & Site Acceptance Test.

KHURAIS AREA FACILITIES EXPANSION, SAUDI ARAMCO, Saudi Arabia

Worked as OTS simulation Engineer Trainee to develop dynamic simulation of refinery units using Omegaland simulation tool and integration of simulation model with plant DCS & ESD systems

- P&ID markup for dynamic simulation
- Data Analysis & Extraction of all kind of equipment data from design data sheets.
- Centrifugal Pump and compressor curve extraction from design data sheets.

- Dynamic simulation Modelling of TEG Dehydration section.
- Emulation of Schneider ESD logics.

Professional History

- Wood , Chennai, India (May 2022 - Present)
- Yokogawa India LTD (Sep 2016 – April 2022)