



DURAIRAJ THANGAPRABU
Mobile phone +918610310083

KOTHAPATTI – PO,
ANDIPATTI – TALUK,
THENI DISTRICT,
TAMILNADU

INDIA-625512

Phone: +91 8610310083

Email: duraiprabu80@yahoo.com.sg, thangavasantha@gmail.com

Summary

- **Over 25 years of experience in the project Construction management of electrical, instrumentation and control systems for oil & gas and Textile mills. Experience includes design review, construction activities, commissioning and QA/QC relating to E&IC.**
- **Familiar with DCS and PLC-based control systems, ESD and FGS, electronic and pneumatic instrumentation and control system i.e., Transformers, compressors, pumps, generators, heat exchangers, heaters, switchgear and motor control and HVAC Systems. Total 25 years of experience in Basic Engineering, Installation, Inspection and Commissioning and maintenance of Electrical & Instrumentation, Automation for Oil & Gas (FPSO, FSO, LNG, Platforms and Rigs) and Textile industries.**

Job Profile

- Strong knowledge and Experience for Electrical & Instrumentation and Communication of Installation, Inspection, Pre-commissioning and Commissioning as per international standard such as IEC, IEEE, NEC, ATEX, ANS, ABS and DNV
- Installation, Inspection, Witness, Testing and Commissioning of Electrical & Instrumentation and Communication Equipment's as per Client and DNV& ABS requirement for FPSO, Jack up Rig and Platforms for Marine and Process Inspection. Specialized inspection at Top Side, Drilling of DNV& ABS Class for Hazardous Zone Area for Zone 0, Zone 1, Zone 2 Area.
- Review Construction Drawing, Installation, Testing and Commissioning, Excellent Reporting, Quality of work and performance of assigned duties.
- Installation & Testing of Instrument, Perform Function check, Cold check and hot check activity from MCC, DCS to field.
- Mesh Earthing and Lightning System, Lighting and Power System General Maintenance
- Timers, Counters, Pneumatic valves & Cylinders, Inductive, Capacitive & Ultrasonic Sensors, Photo sensor, Relays Installation & Development works
- Review and prepare brownfield project EIT work packs

Professional Qualification

- **Skill Evaluation Test Level 2 in Electrical Technology, (Institute of Technical Education – Singapore) MAY 2008**
- **Electrical Supervisor Competency Certificate Course with Electrical Utilization - (State Board of Technical Education and training) - 2005.**
- **National Trade Certificate Electrician (National Council for Vocational Training) 1995 – 1997.**

Other Certificates

- Basic Electrical Competency Skills Conducted by Singapore technologies marine Singapore – Dec-2006
- Kaizen Workshop by Singapore Technologies marine Singapore – Aug -2007
- Shipyard Safety Supervisor Course by NTUC Learning Hub Singapore – May – 2008
- Certificate of user Training by Crowcon Detection Instruments Singapore – Feb 2009
- Certificate of Attendance for Fixed gas detectors and System Setup and Maintenance by Crowcon Detection Instruments Singapore – Sep 2009
- Fire Safety and Casualty Evacuation Training by Singapore Civil Defense Force Singapore – Jan – 2010

HAZ Area certificate

- **Hazardous Areas Equipment Inspection (ATEX/CompEx) Competence Based Course Certificate No: 48180**
(Assets Training & Technical Services Pte Ltd (International EX Hazardous Training Certificate)
VALID BY - 10/02/2020.
- ATEX/DSEAR TRAINING COURSE – 18 SEP 2014

Projects worked:

GTL PROCESS.	:	SHELL GTL QATAR
PLATFORM	:	KGD-6 CRP RELIANCE, SWHE PHYU PROJECT PHASE 2
LNG	:	BAHRAIN LNG IMPORT TERMINAL
FPSO's	:	ARMADA PERDANA, ARMADA TGT1, ARMADA STERLING 1 ARMADA CLAIRE, ARMADA STERLING 2, ARMADA KRAKEN, RUBICON VANTAGE, RUBICON INTREPID.
FSO	:	SEPAT FSO.
RIG	:	SEA DRILL
DREDGER VESSEL	:	QUEENS OF NETHERLAND, PHOENIX.
SEISMIC VESSEL	:	BGP PIONEER, GEOWAVE VOYAGER.

Clients Worked with:

- Shell – Qatar shell
- Shwe phase 2 – POSCO Myanmar
- KGD-6 CRP – Reliance India
- Bahrain LNG IT - Bahrain
- Eni S.P – Nigeria
- Norfeild - Norway
- Hoang Long, Vietsov Petra – Vietnam.
- PETRONAS, Petrofac – Malaysia.
- ONGC - India
- Boskalis – NL

- Rubicon Offshore – Australia
- Apache – Australia
- ENQUEST – UK

Experience in construction

- Installation of HV, MV, LV MCC and Control Panels
- Installation of HV, MV and LV Transformers
- Installations of Cable Ladder, Cable Tray, Trunking, conduit, Casing Capping
- Motor Termination and MCC, Bus Bar Torque Testing
- Switch Gear & Control Panel Installations
- Lighting Installation
- All kind of Cable Laying, Cable Glanding, Cable Termination
- Continuity and Insulation Resistance Checking
- Installation of ICSS system panels, cabling and communication cables
- Installation of All Kind of Instruments
- Installation of Fire Alarm System
- Installation of BMS & EMS system
- Installation of Public Address System
- Installation of Data and Telephone System
- Installation of Vesda System and Card Access System
- Installation of Instruments tubing such as Stainless Steel and Copper

Electrical and Instrumentation Inspection/Ex Inspection

Conduct –E&I Pre Commissioning (mechanical completion) and commissioning activities of Electrical and Instrumentation Systems & QA/QC, EX Inspection for Hazardous area certified. , Third party inspection and expediting & FAT inspection.

- Inspection and testing of Electrical and instrumentation, Communication Equipment's s per clients requirements for FPSO/LNG Project and specialized inspection DNV, ABS Class for hazardous Zone area for Zone0, Zone and Zone2.
- Inspection of Electrical Equipment's Installation for Atmospheric Explosion proof for Turret, Upper deck and Modules Inspection. Cable Termination and Mechanical Completion as per the ATEX Standard.
- Inspection (Visual, close, detail& Random, sample) of E&I equipment installation for Atmospheric Explosion Proof as per ATEX standard checklist.
- Monitor and Sign off for Electrical and mechanical completion of ITR and ITP.
- Raising Punch list For against ITR
- Monitor and Ensure Electrical Contractor work done incompliance with PPE
- Certified ATEX compliance after inspection carried out.
- Review Technical drawings and support with Engineering for thru technical issues.
- Attend FAT to outsource Electrical Equipment and Instrument
- Monitor, Inspection and follow up of Cable Termination, cable tray and supports, instrument tubing, cable pulling glanding testing, loop check, insulation test, functional test, earthling system, material inspection & verification, calibration, tagging, and Mechanical Completion inspections as per project specification.
- Familiar with the implementation of inspection and test plans (ITP or ITR check lists). Raising and clearing punch list & drawing as built (Red line) for meet the project quality standards.
- Familiar and experience in the application of relevant codes and standards. Ability to interpret and apply the requirements of technical specifications and test acceptance criteria.
- Perform inspection for acceptance project specifications and follow the Check lists for installation and coordination with all departments

Experience of Testing and Commissioning

- **Pre-commissioning**, Testing and commissioning, Pre and start-up operation and maintenance
- On the system and modules such as: Fire & gas (**F&G**), Safety instrumented System (**SIS**),
- Emergency shutdown (ESD), Process shutdown (**PSD**), Process control system (**PCS**).
- Performing, **Testing** and commissioning of hydraulic valves with the coordination of
- Boardman on **DCS** console to obtained and confirmed of those **I/O signals**.
- **ESD** system and **functional checks** / with process equipment vendors and duly witnessed by client on the field side in the workstation.
- Trouble shoot, and loop check of Gas detectors (line of sight, Flammable & toxic) Heat / flame and smoke Detectors for the fire and gas system and calibration if necessary.
- Power up all DCS and ESD marshaling panels in **control room** and energize process
- Cold loop check / continuity check of power and instrument cables from system marshaling cabinet in **CCR** interface junction boxes and Instrument cables.
- Modification, implementation, testing and commissioning on power Management system
- Using **PLC** particular in the confirmation of those I/O Signals.
- Involves in troubleshooting of process field instrumentation and automation faults, logic Interlocks (intermediate & ESD system).
- Performing of various maintenance activities on instrumentation and control system.
- **MC and PC inspections** of analog and digital signal junction boxes, process and Fire and gas instrument installations on all decks as per location drawing, P&ID, wiring
- Termination details and forward punch list reports to **construction for rectification**.
- **Vibration Transmitter** troubleshooting due to excessive vibration in Turbine generator UCP.
- Hot loop checking of the DCS and ESD system for the Gas In priorities with clients on both sides, troubleshoot and corrections of requested loops.
- Installation, commissioning, calibration of gas detection system at field
- Servicing maintenance and calibration of gas detection system & Gas control cards.
- Maintenance of flame detectors and smoke detectors
- Supervise installation work for **E & I projects**.
- Conduct inspection and commissioning activities for different systems like **HVAC, Co2, VFD, MCC, etc.**
- Compiling all completed ITR and file in MC Dossier & Commissioning Dossier.
- Maintain all tri-Party Line walk for **G-03** (Discipline acceptance certificate), **G-05** (Sub-Subsystem acceptance Certificate), **G-06** System Handover certificate and then handing over to Operation team for production.
- Involve in Preservation activities allocate preservation check sheet
- Preparing a work pack for **Mechanical Completion** and Pre-Commissioning
- Maintain Inspection test record
- Preparation of weekly progress reports for Commissioning Engineer. Preparation and monitoring of work schedule as per list of deliverables.
- Preparing Various **Graphical Reports** by System.
- **Installation and commissioning of Additional Gas detectors** includes loop checking and calibration of CH4 Honeywell Gas detectors.
- **Troubleshooting** and Function test of Thorn security S241+ flame detectors.
- **Calibration** of HART based field Rosemount smart Transmitters with HART communicator.
- Insulation tests all motors of the vessel and also the 6.6KV crane slip ring.
- Installation and Troubleshooting of **DOL** and **STAR DELTA** starters.
- Auto Calibration of all type of control valve like fisher, ABB, Samsung positioners using HART communicator.
- Anode replacement and current adjustment in MGPS (Marine growth protection system) system.
- Loop checking and troubleshooting of instruments connected to **Siemens Quad log** PLC system with ICONICS Genesis32 software.

- Familiar in operation and troubleshooting of Alborg Boilers, Installation and calibration of boiler instruments.
- Having good experience on **Cargo control system**, overflow alarms and level measurement.
- Verify between design and production team, IOS standard & requirements.
- Provide coverage for electrical & instrumentation inspection duties when required for or as directly by QA/QC supervisor and E&I engineers.
- To ensure the E&I work is done in compliance with applicable rules and standards
- Including ABS rules with company and company standards with project safety policies and procedures.
- Supervises trouble shooting and loop checking of electrical signal from LV/HV
- **Substation to control room** connected to DCS system.
- **Supervision** of E&I construction installation work. Submit all necessary documents upon completion for operation staff references.
- To monitor the weekly work schedules and expeditious progress in E&I tasks
- Recognizing the **critical path** of the **master schedule** Support planning and execution of pre-commissioning and commissioning

Experience History

Name of the Company.	: Shell GTL Qatar
Designation.	: QA/QC Inspector E&I
CLIENT	: Shell GTL Qatar
Duration.	: Oct 2020 to Mar 2022
Name of the Company	: J RAY MCDERMOTT SA LTD
Designation	: Completion Engineer/Work pack Engineer
Duration	: Nov 2019 to Dec 2020
CLIENT (Project Title)	: KGD-6 CRP Reliance India/Shwe Project Phase 2 Myanmar
Name of the Company	: Bahrain LNG (PMC)
Designation	: Senior Comp Ex Inspector (Electrical, Instrument and communication)
Duration	: Feb 2019 to Aug 2019
Name of the Company	: Bumi Armada Singapore Pte Ltd
Designation	: Construction and Commissioning Lead Engineer (Electrical, Instrument and communication)
Duration	: June 2016 to Nov 2018
CLIENT (Project Title)	: ARMADA KRAKEN FPSO Project (Keppel Tuas Shipyard) ENQUEST UK
Name of the Company	: Bumi Armada Berhad
Designation	: Construction and Commissioning Engineer (Electrical, Instrument and communication)
Duration	: Jan 2015 to June 2016
CLIENT (Project Title)	: ARMADA STERLING II FPSO Project (Keppel Tuas Shipyard) ONGC India.
Name of the Company	: Bumi Armada Berhad
Designation	: Construction Engineer (Electrical, Instrument and communication)
Duration	: Apr 2013 to Jan 2015
CLIENT (Project Title)	: ARMADA CLAIRE FPSO Project (Keppel Tuas Shipyard) APACHE Australia.
Name of the Company	: Bumi Armada Berhad
Designation	: Instrument Supervisor (Construction and Commissioning)
Duration	: Dec 2012 to Apr 2013
CLIENT (Project Title)	: ARMADA SEPAT FSO Project (Keppel Tuas Shipyard) PETRONAS, Malaysia.

Name of the Company : Bumi Armada Berhad
Designation : **Electrical and Instrument Supervisor (Construction and Commissioning)**
Duration : Oct 2011 to Dec 2012
CLIENT (Project Title) : ARMADA SERLING 1 FPSO Project (Keppel Tuas Shipyard)
ONGC India.

Name of the Company : Bumi Armada Berhad
Designation : **Instrument Supervisor (Construction and Commissioning)**
Duration : April 2010 to Oct 2011
CLIENT (Project Title) : ARMADA TGT 1 FPSO Project (Keppel Tuas Shipyard)
Hoang Long, Vietsov Petra – Vietnam.

Name of the Company : Bumi Armada Berhad
Designation : **E&I Inspector (QC Inspector)**
Duration : Jan 2009 to April 2010
CLIENT (Project Title) : ARMADA PERDANA FPSO Project (Keppel Tuas Shipyard)
Eni S.P – Nigeria.

Name of the Company : Singapore Technologies marine
Designation : **E&I Technician (Inspection, Construction and Commissioning)**
Duration : Oct 2006 to Dec 2008
CLIENT (Project Title) : BGP PIONEER, SEA DRILL RIG
GEOWAVE VOYAGER - Norfeild - Norway
QUEEN OF NETHERLAND, PHOENIX DREDGER – Boskalis
Netherlands
RUBICON VANTAGE, RUBICON INTEROID FPSO Project -
Rubicon offshore Australia.

April 1998 TO Oct 2006

Company : Shri Sarvesh Cotton Mills Pte Ltd and Amarjothi Spinning Mills Pte Ptd,
Designation : Electrical Technician / Electrical Supervisor (Electrical & Control).
Period : From April 1999 TO Oct 2006

Responsibilities

- Lead a team of Technicians for the Electrical and instrumentation part of the Plant.
- Planning and work scheduling to be carried out daily maintenance.
- Quality Check to the all the procured Instruments and electrical Components.
- Attend weekly production meeting to discuss production progress and problem encountered During Production time and make corrective Measurement.
- Attend Trouble shooting of all Textile Industries electrical and Instruments equipments.
- Handled calibration of various Process Control Instruments (Transmitters, Gauges, Valves etc) Commissioning & Calibration of Transmitters, Control valves, Solenoid valves, Actuators, Pressure Switches, Thermocouples, RTD and Vibration Sensors.

PERSONAL DETAILS:

Fathers Name : Durairaj.
Date of Birth : 04-04-1980
Sex : Male
Age : 42
Languages Known : English, Tamil, and Kannada.
Nationality : Indian
Passport Details : M6466378 (Valid up to 24-02-2025)
Permanent Address : Kothapatti -Po, Andipatti - TK,
Theni District
TamilNadu – 625512.
Ph: +91 8610310083