

RECENT HIGHLIGHT PROJECTS

ELECTRICAL, INSTRUMENTION AND TELECOMMUNICATION WORKS

1. Project Detail

Re-engineering, Erection, Testing, Pre-commissioning and Commissioning for Electrical and Instrumentation works for **1 x 190MW Combined Cycle Conversion Power Project for Teluk Salut Power Plant – Sabah, Malaysia.**

Scope Work:

Electrical :

Re-engineering/Detailed Engineering of TG, Boiler and BOP's, Testing and commissioning of following electrical equipments

- Detailed and Interface Engineering for Balance of Plants instrumentation
- Review of Vendor drawings and documents
- 2 nos. of 11/132KV, 47/57MVA, ONAN/ONAF Generator Transformer
- Detailed and Interface Engineering for Balance of Plants instrumentation.
- Review of Vendor drawings and documents.
- 2 nos. of 11/6.9KV, 6.3 MVA Station Transformer
- 2 nos. of 11/6.9KV, 2 MVA Station Auxiliary Transformer
- 6 nos. of 6.6/0.433KV Dry type Unit Auxiliary Transformer
- 4 nos. of 6.6/0.433KV Dry type Unit Auxiliary Transformer
- 2 sets of 11KV 3150A, 40KA/3sec. SF6 Switchgear panel
- 1 set of 6.6KV, 1250A, 40KA/3sec. Doubtlt bus VCB Panel
- 5 set of 415V, ACB incomer and MCCB outgoing feeder fully Withdrawable type Switchgear panel c/w Interface with DCS system thro Profibus communication
- 6 nos. 6.6KV, 450KW HT motor with Auto transformer starter
- 80 nos. of LT 415V Motors upto 90KW capacity

- 1 no. of 1250KV, Diesel Generator c/w AMF and Auto synchronous and load sharing panel.
- 365 nos. of Street lighting, plant lighting, substation and control room lighting with 2 set of Main lighting panel, Main switch board, sub switch boards and Distribution boards
- Around 120,000 meters of 11KV, 6.6KV HT Power cable, 1.1/0.690KV LT Power and control cables
- Testing and commissioning of Earthing system for 11KV, 60MW Turbine Generator, 132KV Generator Transformer, 11/6.9KV Station Transformer, LT Unit auxiliary transformer, 11KV and 6.6KV HT Switchboard, 415V LT Switchboard, HT & LT Motors and other electrical equipment
- 80KW, 230V, 1ph AC UPS System with 8 hours back-up 2 x 100 % rated voltage battery charger with current limit and 2 x 100 % batteries of Ni-Cd cell c/w battery racks.
- 750 AH, 8 hours back-up, 110V, DC System 2X100 % rated voltage battery charger with current limit and 2 x 100 % batteries of Ni-Cd cell c/w battery racks.
- Installation, Testing and Commissioning of 11 / 132 KV Substation.

Instrumentation:

1. Detailed and Interface Engineering for Balance of Plants instrumentation.
2. Review of Vendor drawings and documents.
3. Preparation of Final I/O List.
4. Complete interface engineering in FOXPRO DCS for complete plant.
5. Review of third party interfacing details and hooking up to DCS.
6. Complete Logic & Interlock development.
7. Preparation of APS (Automatic Plant Startup & Shutdown Sequencing) schematics and implementation in DCS.
8. HRSG & Turbine control loops preparation as per manufacturer's specification.
9. Preparation of DCS Graphics template.
10. Preparation of DCS Faceplate for control groups (approx. 6 groups & 45 sub groups).

11. Installation, testing and commissioning of field instruments (approx. 450 nos.) –
Temperature, Pressure Gauges & Transmitter, various types of flow, level transmitters,
Control Valves, Motor Operated Valves, ESD valves, and Analyzers etc.,
12. Cable & Cable tray laying (approx. 65000mts), termination, loop checks, trial run,
charging and commissioning of complete Instrumentation package for both HRSG &
Turbine island.

2. Project Detail

Design, Detailed Engineering and Procurement support for Electrical, Instrumentation and Telecommunications for **CPF and FPF of Melut Basin Oil Development Project, Sudan.** (EPCC contractor Ranhill Petroneeds Joint Venture (Malaysia), Owner: Petrodar Operating Company (Sudan)).

Construction, Testing and commissioning of Electrical, Instrumentation & Telecommunications CPF and FPF of Melut Basin Oil Development Project, Sudan. (EPCC contractor Ranhill Petroneeds Joint Venture (Malaysia), Owner: Petrodar Operating Company (Sudan)).

Design, Supply, Installation, testing and commissioning of Telecommunication & SCADA systems for ADAR, Palogue sites, Sudan

Scope Work:

Electrical :

1. Installation, Testing and commissioning of following electrical equipments
 - 2nos. of 3.5 & 4MVA, 33KV/.42KV Transformer, ,
 - 2nos. of 2MVA, 11/6.6KV Transformer
 - 4nos. of 2MVA, 6.6/.42KV Transformer
 - 4 nos. of 33KV Disconnecter switch
 - 4 nos of 33KV Ring Main Unit with 2 incoming feeder and 2 Outgoing feeder
 - 6.6 KV M.V. Switchgear with VCB & VCU
 - 415V. 3500A and 4000A BusDuct
 - 415V, 3500A and 4000A LV Switchgear c/w each 120 feeders, Numerical relay controlled mod bus communication interface with Electrical integrated Master control system and DCS system.
 - 6.6KV M.V motors 24 nos.
 - 400V LV motors 3.7 to 160kw 250 motors
2. Installation, testing and commissioning of field devices – Local pushbuttons, Local control panels, Heaters, motors,
3. Installation, testing and commissioning of Lighting system c/w plant lighting, Building lighting, Street lighting poles and fixtures and Lighting JB's
4. Fabrication & Installation of supports for Lighting JB's Local pushbuttons.

5. Cable tray and ladders installation 8000 mtrs.
6. Installation of cables Electrical, lighting, Earthing & Heat tracing system power cables in trenches and on pipe racks around 785 kms.
7. Installation, testing and commissioning of Electrical Heat tracing system c/w Thyristor controlled panel, RTD and tracer cables for under ground and above ground oil lines
8. Installation, testing and commissioning of Cathodic protection system: impress current method for Tank bottom & Steel piling c/w with Transformer Rectifier Unit and CP control Panel and sacrificial method for under ground pipes and Tank internal CP system.
9. Installation, testing and commissioning of Earthing and Lightning protection system for building, tanks and towers.
10. Installation, Testing and commissioning of 120KVA DC UPS 2X100 % rated voltage battery charger with current limit and 2X100 % batteries of Ni-cd cell c/w battery racks. And 40 KVA DC UPS 2X100 % rated voltage battery charger with current limit and 2X100 % batteries of Ni-cd cell c/w battery racks.
11. Installation, Testing and commissioning of 1000 + 2000 KVA Diesel Generator c/w AMF and Auto synchronous and load sharing panel – 2 sets
12. Installation, Testing and commissioning of Main lighting panel, Main switch board, sub switch boards and Distribution boards for building and plants – 134 nos.
13. Installation, Testing and commissioning of 11/6.6KV and 6.6/420KV Substation c/w HT & LT Switchgears Interface with Substation control system & DCS system, Earthing & lighting protection system, lighting, Fire alarm & Public Address system and AC UPS

Instrumentation:

1. Installation, Testing and commissioning of DCS, ESD, Building fire alarm systems (smoke, heat, HSSD (high sensitivity smoke detectors)) which includes installation of system cabinets, Marshalling cabinets, consoles, etc.,
2. Installation, testing and commissioning of field instruments – Temperature, pressure gauges & transmitter, various types of flow, level transmitters, PSVs, control valves, motor operated valves and ESD valves, analyzers, RTU etc., total of 1700 instruments.
3. Installation, testing and commissioning of Fire and gas detectors, manual alarm call points etc.,
4. Fabrication & Installation of supports for instruments.
5. Cable tray and ladders installation.
6. Installation of cables for instruments, fire and gas detectors in trenches and on pipe racks around 400 kms.

Telecommunications:

PAGA:

1. Installation of PAGA system in ADAR FPF, Palogue FPF & OBC and Al-Jabalayn CPF & OBC.
2. Installation, testing and commissioning of Field instruments (Speakers, Beacons, Access stations etc).
3. Fabrication & Installation of supports for instruments.
4. Cable tray and ladders installation.
5. Installation of cables for instruments around 225 kms.

CCTV:

1. Installation, Testing and Commissioning of CCTV systems in 8 sites (Adar FPF & FSF, Palogue FPF, FSF & OBC, Al-Jabalayn CPF & OBC and Palogue Airport.
2. Installation, Testing and commissioning of CCTV cameras (80 nos).
3. Fabrication & Installation of supports for instruments.
4. Installation of Junction Boxes and cables around 10 kms.

Telecommunication:

1. Installation, testing and commissioning of Telecom panels around 24 panels in 8 sites, which includes Media converters, Video/Data fiber converter OSD, switches, E1 routers etc.
2. Installation, testing and commissioning of Master RTUs, IP Gateways, SCADA systems.
3. Installation, testing and commissioning of well head control panels (around 175 nos. of wells).
4. Installation, termination of fiber optic cable installation around 50 km.
5. Testing of fiber optic cables, which connect all the sites to control rooms of FPF.
6. Design of overall network for transferring the data, video (Transfer of data from all wellheads to OGMs of FSFs and Data, Video transfer from all OGMs to respective FPFs etc.).

3. Project Detail

Design, Detailed Engineering Supply, Erection, Testing, and Commissioning of Electrical and Instrumentation works for **M/s. National Electricity Corporation, Sudan for 10 MW El-Fasher DG Power Plant and 6 MW El-Genena DG Power Plant, Sudan.**

EL-FASHER 10 MW DG POWER PALNT

SCOPE OF WORK

ELECTRICAL

- ❖ 33/11 KV Switch Yard Materials (1 Lot)
- ❖ 3 Nos of Generator Transformer 11/33 KV, 5 MVA
- ❖ 2 Nos of Auxiliary Transformer 11/0.433 KV, 1600 KVA
- ❖ 3 Nos of Diesel Generator Control & Protection cum Supervision Panel & Synchronizing Panel

- ❖ 11 KV, 630 A, 25 KA VCB board (1 Set)
- ❖ Emergency Diesel Generator 380 KVA, 415 V, 3 PH, 50 Hz (1 Set)
- ❖ Electrical Heat tracing for Pipe line & Tank (1 Lot)
- ❖ HT & LT Cables (1 Lot)
- ❖ 1 No of 24 V DC Battery Charger Panels & Batteries
- ❖ 1 No of AC Back-up system for Switchgear Panels
- ❖ Light Fittings (1 Lot)
- ❖ Lighting Poles (1 Lot)
- ❖ Power Control Centre Panel 415V, 1600 A (1 Set)
- ❖ Engine MCC Panel LV 415 V, 400 A (1 Set)
- ❖ Tank Form MCC Panel LV 415 V, 400 A (1 Set)
- ❖ Emergency MCC Panel LV 415 V, 400 A (1 Set)
- ❖ Local Push Button Stations (1 Lot)
- ❖ 1 No of DC Distribution Board
- ❖ AC Distribution Board (1 Lot)
- ❖ Earthing & Lightning Protection System(1 Lot)

- ❖ Cable Trays (1 Lot)
- ❖ Erection Hardware (1 Lot)
- ❖ Safety Appliances (1 Lot)
- ❖ Stainless Steel Wire Grid Type Neutral Grounding Resistor in Sheet Steel Enclosure (3 Sets)

INSTRUMENTATION

- ❖ 2 Nos of PD Meter
- ❖ 3 Nos of DP Indicator with Switch (Diaphragm Seal)
- ❖ 13 Nos of Pressure Gauge (Diaphragm Seal)
- ❖ 20 Nos of Pressure Gauge
- ❖ 3 Nos of Pressure Switch
- ❖ 25 Nos of Temperature Gauge
- ❖ 32 Nos of Level Switch – LSHL & Level Gauges
- ❖ 7 Nos of Temperature Element (RTD)
- ❖ 5 Nos of Level Transmitter (Flush Flanged)
- ❖ Cables (1 Lot)
- ❖ Cable Glands (1 Lot)
- ❖ Junction Boxes (1 Lot)
- ❖ Perforated Cable Trays (1 Lot)
- ❖ Erection Hardware, Support Structural & Consumables (1 Lot)
- ❖ PLC / SCADA Panels with Mimic, Annunciation and Back-up power supply unit (1 Lot)

MECHANICAL

- ❖ 2 Nos of Diesel Unloading Pumps
- ❖ 2 Nos of Diesel Transfer Pumps
- ❖ 2 Nos of HFO Unloading Pumps
- ❖ 2 Nos of HFO Transfer Pumps
- ❖ 1 No of Sludge Pump
- ❖ 1 No of Leakage Oil Pump

- ❖ 2 Nos of Portable Water Pumps
- ❖ 2 Nos of DM Water Pumps
- ❖ 1 No of Maintenance Water Pump
- ❖ 1 No of Diesel Storage Tank (Cyl)
- ❖ 1 No of Diesel Service Tank (Cyl)
- ❖ 2 Nos of HFO Storage Tank (Cyl)
- ❖ 3 Nos of HFO Service tank (Cyl)
- ❖ 1 No of Nozzle Cooling Tank (Cyl)
- ❖ 1 No of HFO Settling Tank (Cyl)
- ❖ 1 No of Sludge Tank
- ❖ 1 No of Leakage Oil Tank (Rec)
- ❖ 1 No of Lube Oil Storage Tank (Cyl)
- ❖ 1 No of Portable Water Tank (Rec)
- ❖ 1 No of Maintenance Water Tank (Cyl)
- ❖ 1 No of DM Water Tank (Cyl)
- ❖ 6 Nos of HT & LT Tank
- ❖ Valves (1 Lot)
- ❖ Filters & Strainers (1 Lot)
- ❖ Pipes (1 Lot)
- ❖ 3 Nos of Chimney (OD 1000 mm)
- ❖ Supply of m³ /hr DM Plant (1 Set)
- ❖ Supports Structure for DG units, tanks, pipe rack and other (1 Lot)
- ❖ Flanges, Fasteners and other accessories (1 Lot)
- ❖ Manufacturing of pump skid assembly (1 Lot)
- ❖ 5 Ton EOT Crane in DG House (1 Set)
- ❖ 3 Ton Hot Crane in Pump House (1 Set)
- ❖ 3 Ton Hot Crane in Mechanical aux. bay (1 Set)
- ❖ Fire Extinguishers 22.5 Kg (5 Sets)

- ❖ Fire Extinguishers 50 Kg (7 Sets)
- ❖ Ventilation and Air Conditioning Units (1 Unit)
- ❖ Combustion Air Intake system including filter and necessary equipments (3 Sets)

EL-GENENA 6 MW DG POWER PALNT

ELECTRICAL

- ❖ 33/11 KV Switch Yard Materials (1 Lot)
- ❖ 2 Nos of Generator Transformer 11/33 KV, 5 MVA
- ❖ 2 Nos of Auxiliary Transformer 11/0.433 KV, 1600 KVA
- ❖ 2 Nos of Diesel Generator Control & Protection cum Supervision Panel & Synchronizing Panel

- ❖ 11 KV, 630 A, 25 KA VCB board (1 Set)
- ❖ Emergency Diesel Generator 250 KVA, 415 V, 3 PH, 50 Hz (1 Set)
- ❖ Electrical Heat tracing for Pipe line & Tank (1 Lot)
- ❖ HT & LT Cables (1 Lot)
- ❖ 1 No of 24 V DC Battery Charger Panels & Batteries
- ❖ 1 No of AC Back-up system for Switchgear Panels
- ❖ Light Fittings (1 Lot)
- ❖ Lighting Poles (1 Lot)
- ❖ Power Control Centre Panel 415V, 1600 A (1 Set)
- ❖ Engine MCC Panel LV 415 V, 400 A (2 Sets)
- ❖ Common Auxiliary MCC Panel LV 415 V, 400 A (1 Set)
- ❖ Tank Form MCC Panel LV 415 V, 400 A (1 Set)
- ❖ Emergency MCC Panel LV 415 V, 400 A (1 Set)
- ❖ Local Push Button Stations (1 Lot)
- ❖ DC Distribution Board (1 Lot)
- ❖ AC Distribution Board (1 Lot)
- ❖ Earthing & Lightning Protection System (1 Lot)
- ❖ Cable Trays (1 Lot)
- ❖ Erection Hardware (1 Lot)
- ❖ Safety Appliances (1 Lot)
- ❖ Stainless Steel Wire Grid Type Neutral Grounding Resistor in Sheet Steel Enclosure (2 Sets)

INSTRUMENTATION

- ❖ 2 Nos PD Meter
- ❖ 3 Nos of DP Indicator with Switch (Diaphragm Seal)
- ❖ 13 Nos of Pressure Gauge (Diaphragm Seal)
- ❖ 17 Nos of Pressure Gauge
- ❖ 3 Nos of Pressure Switch
- ❖ 18 Nos of Temperature Gauge
- ❖ 27 Nos of Level Switch – LSHL & Level Gauges
- ❖ 7 Nos of Temperature Element (RTD)
- ❖ 5 Nos of Level Transmitter (Flush Flanged)
- ❖ Cables (1 Lot)
- ❖ Cable Glands (1 Lot)
- ❖ Junction Boxes (1 Lot)
- ❖ Perforated Cable Trays (1 Lot)
- ❖ Erection Hardware, Support Structural & Consumables (1 Lot)
- ❖ PLC / SCADA Panels with Mimic, Annunciation and Back-up power supply unit (1 Lot)

MECHANICAL

- ❖ 2 Nos of Diesel Unloading Pumps
- ❖ 2 Nos of Diesel Transfer Pumps
- ❖ 2 Nos of HFO Unloading Pumps
- ❖ 2 Nos of HFO Transfer Pumps
- ❖ 1 No of Sludge Pump
- ❖ 1 No of Leakage Oil Pump
- ❖ 2 Nos of Portable Water Pumps
- ❖ 2 Nos of DM Water Pumps
- ❖ 1 No of Maintenance Water Pump
- ❖ 1 No of Diesel Oil Storage Tank (Cyl)

- ❖ 1 No of Diesel Oil Service Tank (Cyl)
- ❖ 2 Nos of HFO Storage Tank (Cyl)
- ❖ 2 Nos of HFO Service Tank (Cyl)
- ❖ 1 No of Nozzle Cooling Tank (Cyl)
- ❖ 1 No of HFO Settling Tank (Cyl)
- ❖ 1 No of Sludge Tank
- ❖ 1 No of Leakage Oil Tank (Rec)
- ❖ 1 No of Lube Oil Storage Tank (Cyl)
- ❖ 1 No of Portable Water Tank (Rec)
- ❖ 1 No of Maintenance Water Tank (Cyl)
- ❖ 1 No of DM Water Tank (Cyl)
- ❖ 4 Nos of HT & LT Tank
- ❖ Valves (1 Lot)
- ❖ Filters & Strainers (1 Lot)
- ❖ Pipes (1 Lot)
- ❖ 2 Nos of Chimney (OD 1000 mm)
- ❖ DM Plant (1 Set)
- ❖ Supports Structure for DG units, tanks, pipe rack and other (1 Lot)
- ❖ Flanges, Fasteners and other accessories (1 Lot)
- ❖ Pump skid assembly (1 Lot)
- ❖ 5 Ton EOT Crane in DG House (1 Set)
- ❖ 3 Ton HOT Crane in Pump House (1 Set)
- ❖ 3 Ton HOT Crane in Mechanical aux. bay (1 Set)
- ❖ Fire Extinguishers 22.5 Kg (5 Sets)
- ❖ Fire Extinguishers 50 Kg (7 Sets)
- ❖ Ventilation and Air Conditioning Units (1 Unit)
- ❖ Air Intake System (2 Sets)

4. Project Detail

Erection, Testing, and Commissioning of Electrical and Instrumentation works for **M/s. Almoayyed Electrical Equipment & Instrumentation Systems, Abu Dhabi for Steel Pellet Plant (6 MTY).**

ELECTRICAL

- ❖ 11 KV, 2500A Switchgear (1 Set)
- ❖ 11 KV, 1250A Switchgear (1 Set)
- ❖ 3.3 KV, 3150A Switchgear (2 Sets)
- ❖ 11 KV, 4000 KVAR Power Factor Controller (Outdoor Type) – 2 Sets
- ❖ 3.3 KV, 50 Hz Variable Motor Speed Control Device (VVVF Panel) – 1 Set
- ❖ LV 420V, 50 Hz Variable Motor Speed Control Device (LV VVVF Panel) – 1 Set
- ❖ 100V, 100 Ah/5h DC Battery and Battery Charger
- ❖ 11KV/3.3KV Power Transformer (4 Sets)
- ❖ 3.3KV/400V Power Transformer (9 Sets)
- ❖ LV Switchgear & Motor Control Centre (9 Sets)
- ❖ Remote I/O Panel (7 Sets)
- ❖ 15 KVA UPS (1 Set)
- ❖ 45 KVA UPS (1 Set)
- ❖ LV Auxiliary Panel (2 Sets)
- ❖ Lighting Distribution Panel (2 Sets)
- ❖ 11 KV, 1600 A Switchgear (1 Set)
- ❖ 3.3 KV, 1000 KVAR Power Factor Controller (Outdoor Type) – 1 Set
- ❖ 3.3 KV, 500 KVAR Power Factor Controller (Outdoor Type) – 1 Set
- ❖ 11 KV Variable Motor Speed Control Device (VVVF Panel) – 6 Sets
- ❖ 3.3 KV Variable Motor Speed Control Device (VVVF Panel) – 3 Sets
- ❖ LV Variable Motor Speed Control Device (VVVF Panel) – 1 Set

- ❖ 100V, 75 Ah/5h DC Battery and Battery Charger
- ❖ Diesel Generator 2500 KVA, 3300 V, 50Hz (1 Set)
- ❖ Process Control System (1 Lot)
- ❖ Management Information System (1 Lot)
- ❖ 11 KV Motor (1 Lot)
- ❖ 3.3 KV Motor (1 Lot)
- ❖ LV Motor (1 Lot)
- ❖ Rheostat Starter for WM Motor (8 Sets)
- ❖ Field Instrumentation (1 Lot)
- ❖ Local Control Box (1 Lot)
- ❖ Warning Devices (1 Lot)
- ❖ Emergency Stop Switch (1 Lot)
- ❖ Lighting System (1 Lot)
- ❖ Fire Alarm System (1 Lot)
- ❖ Telephone System (1 Lot)
- ❖ CCTV System (1 Lot)
- ❖ 11 KV, 3.3 KV Cables (1 Lot)
- ❖ Earthing and Lightning System (1 Lot)
- ❖ Medium Voltage Armored Cables (62,359 mts)
- ❖ Low Voltage Armored Cables (1,65,899 mts)
- ❖ 1000 Nos of Terminations works for the above low voltage cables
- ❖ Low Voltage VVVF Armored Cables (31,402 mts)
- ❖ 200 Nos of Termination works for Low Voltage VVVF Armored Cables
- ❖ LV Control Cables – Armored (35,963 mts)
- ❖ 240 Nos of Termination works for LV Control Cables
- ❖ Control & Measuring Cables (2,45,016 mts)
- ❖ 15000 Nos of Termination works for Control & Measuring Cables
- ❖ Fire Detection / Intercom Cables (26,314 mts)

- ❖ 210 Nos Termination works for Fire Detection / Intercom Cables
- ❖ Cable Trays (35,085 mts)
- ❖ Cover for Cable Trays (7,649 mts)
- ❖ Conduits (23,438 mts)
- ❖ MV Cable Terminations 12/20 KV Indoor (136 sets)
- ❖ MV Cable Terminations 6/10 KV Indoor (165 sets)
- ❖ MV Cable Joints (9 Sets)
- ❖ Optical Fiber Cables (9,941 mts)
- ❖ 50 mm² Copper Conductor, Standard Rigid Bare (702 mts)
- ❖ 120 mm² Copper Conductor, Standard Rigid Bare (4,386 mts)
- ❖ Instrument Piping (2,339 mts)

INSTRUMENTATION:

- ❖ 5 Nos of Alarm
- ❖ 208 Nos of Belt Skew Switches
- ❖ 3 Nos of CO Gas Analyzers
- ❖ 49 Nos of Control Valves
- ❖ 27 Nos of Controllers
- ❖ 152 Nos of Converters
- ❖ 68 Nos of Current Transformers
- ❖ 11 Nos of Cycle Stitch
- ❖ 2 Nos of Density Measurement
- ❖ 3 Nos of Detectors
- ❖ 12 Nos of Differential Pressure Switch
- ❖ 9 Nos of Differential Pressure Transmitter
- ❖ 5 Nos of Flame Detector
- ❖ 17 Nos of Flow Measurement
- ❖ 2 Nos of Flow Switch

- ❖ 28 Nos of Indicators
- ❖ 30 Nos of Level Measurement
- ❖ 45 Nos of Level Switch
- ❖ 276 Nos of Limit Switches
- ❖ 2 Nos of Metal Detector
- ❖ 1 No of Moisture Detector
- ❖ 65 Nos of Motion Switches
- ❖ 1 No of Gas Analyzer
- ❖ 49 Nos of On/Off Valves
- ❖ 59 Nos of Pressure Switch
- ❖ 38 Nos of Pressure Transmitter
- ❖ 158 Nos of Pull Cord Switch
- ❖ 4 Nos of Sampling Probe
- ❖ 2 Nos of Select Switch
- ❖ 74 Nos of Solenoid Valves
- ❖ 120 Nos of Temperature Detectors
- ❖ 12 Nos of Temperature Switch
- ❖ 2 Nos of Torque Detector
- ❖ 36 Nos of Torque Switches
- ❖ 12 Nos of Vibration Detectors