

**Senthil**

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**Sr.Electrical Engineer**

**Summary**

* Over 12years of Professional experience this includes, 3 years of effective experience as an Interior Project Manager, 4 years of effective experience as a Sr. Electrical Engineer, & 4 years of progressive experience as an Electrical Erection & Maintenance Engineer and over 2 years of effective experience as Testing & Commissioning Engineer.
* Onsite Experience.
* Experienced in the Site Survey, Site visit of project requirement and execution procurement engineering works in Erection & Maintenance field.
* Experienced as a Testing & Commissioning Engineer in various sectors like Petrochemical Plant, Industrial Sub Stations, Commercial Buildingswitch Rooms and other Public Sectors.
* Hands-on experience in designing electrical circuits and logics, selection and preparation of specification of electrical components like switch-gears, connectors, cables  preparation of Bills of Material, preparation of electrical schematics and wire-lists.
* Excellent Communications, effective leadership and interpersonal skills.
* Develops cost estimates and time schedules, reviews, analyses preliminary and final designs, plans and specifications for technical efficiency and adequacy.
* Proficient and working knowledge in software such as, AUTOCAD.
* Certified in
	+ PLC with SCADA programming languages
	+ Auto CAD 2D & 3D modeling & Electrical single Line diagram designing.
* Analyzing of Electrical Power system Drawing for
	+ Equipments
	+ Power & Control Structural
	+ Interlock
	+ Single Line.
* Extensive worked on Relays like,
	+ Over Current / Earth Fault relay
	+ Earth Leakage relay
	+ Under Voltage / Over Voltage relay
	+ Protection relay
	+ Auxiliary relay
	+ Differential relay
	+ Synchronization check Relays.
* Well versed in Testing & Commissioning of HT & LT Switch gears, Transformers.
* Knowledge of Generator protection, Transformer protection, Transformer differential commissioning, REF commissioning, Pilot-wire commissioning, & motor commissioning.
* Troubleshooting of all Electrical system circuits, controls & protection circuits. Scheme checking & problem analyzing in control wiring circuits & Interlock checking.
* Well versed in knowledge of Auto Transfer Switch (ATS) testing procedure based on GE Multilin SR750 Transformer protection relay.
* Extensive working on Testing of CT, VT, Circuit breaker, Switchgears, Relays, Distribution Transformers, Capacitance power Transformers, & Potential Transformers.
* Excellent verbal and written communication skills.
* Service attitude with customers and team.
* Well organized and a decision maker.
* Knowledge of PLC programming using Timers relay, Counters relay, Latching relay, & Ladder diagram. PLC software used, Siemens, Omron, Allen Bradley, Mitsubishi, S7-200 micro PLC, Analog I/P & O/P & Discrete I/P & O/P.
* Well versed in EM installations such as panels, components, field wiring & its calculations.
* Well versed Knowledge in industrial networks such as Ethernet.
* Capable of undertaking general technical administration, operational facility management, testing & commissioning management.
* Highly motivated and able to work in multitask, dynamic team environment, forward thinking, resourceful and challenging the status quo.
* Ensure effective communication and coordination on assigned tasks with in discipline.

**Experience Snapshots**

* **Interior Project Manager,**

**(Dhavich Interior Cocktaills (P) Ltd, Rajapalayam May 2016 to Feb 2019**

* **Senior Electrical Engineer**

**(Aeronics pte ltd), Chennai Aug 2012 to Mar 2016**

* **Testing & Commissioning Engineer,**

**Sixty Six Switchgears Co Pte Ltd, Singapore. May 2010 to May 2012**

* **Electrical Erection & Maintenance Engineer,**

**MV Power Consultant& Engineers (P) Ltd, Chennai. Jun 2006 to Mar 2010**

**Experience Summary**

**Job Profile : Interior Project Manager,**

**Dhavich Interior Cocktaills,Rajapalayam May 2016 to Feb 2019**

**Responsibilities**

* Planning, scoping, tracking & implementing project plans within preset budgets and deadlines; supervising the project execution with accountability for strategic utilization of available resources; participating in project review meetings for evaluating project progress.
* Coordinate design development and/or assist in providing technical direction regarding the scope of projects, technical approach, and design criteria
* Develops project scope and fee quotation, and assists in the preparation of proposals and contracts
* Assist with the development of pursuit and delivery strategies
* Work with clients to resolve challenges around the development of project planning and documents
* Liaising with Project Coordination and Project Management to ensure that design intent and Brands design directives are properly channeled throughout the project team
* Ability to provide excellent client service and assure project profitability
* Knowledge and experience in all phases of interior design / architectural projects
* of Design Management experience in an Architecture firm, working on corporate interior projects
* To design homes, offices, and restaurants for customers who want to improve the aesthetic quality of their spaces and to work for an interior design firm that can provide me with projects that yield the most lucrative returns and wherein I can showcase my skills and expertise.
* Expertise in creating aesthetic yet functional spaces for homes, offices, restaurants, boutiques, etc.
* Expertise in sketching preliminary design blueprints
* Skill in ensuring that the project meets the client’s budget and timeframe
* Adeptness in installing design installations
* Proficiency in using computer applications for Interior Design
* Creativity and impressive artistic ability
* Superb visualization skills
* Attention to detail
* Good supervisory skills
* Excellent communication skills
* Consults with clients and considered their interior design preferences in the project
* Creates interior design sketches as per the customer’s requests and requirements
* Suggests additions or modifications for certain projects as needed
* Supervises interior design projects to ensure that the client needs are met
* Met with clients and designed interiors in accordance with the client’s requirements
* Considered the over-all space of the area in the designing process
* Oversaw the designing projects from start to finish
* Ensured that the planned design is met with the consideration of the client’s budget and deadlines
* Used computer applications in creating blueprints and designs for clients
* Purchased design elements for the project
* Created space designs according to client request and design aesthetics
* Assisted senior Interior Designers in supervising projects from beginning to end
* Installed design elements as needed
* Hired the laborers needed for the project
* Purchased the necessary design elements for the project
* Ensured that the project equipment and laborer cost meet the client’s budget
* Ensured that the project is completed ahead of time, or on time

COMMERCIAL PROJECTS:

1) A.K.FURNITURE,rajapalayam.2) Marry brown, rajapalayam. 3) Rajapalyam mills,T.P mills, Ramaraj surgical , Ramco Institute of Technology, Ramco Hospital,Hero Honda showroom, Srinivasa Tiles and Granites showroom, Ramco hospital Rajapalayam.3) Anson chits , KMC Theni 4) Ramco Cements Ltd, R.R.nagar, Virudhunagar, 5) Color Tree, Chennai, 6) V.S Jewellery, sivakasi, 7) Jai Santham Lodge, Rajapalaym. Etc.

**Experience Summary**

**Job Profile Sr.Electrical Engineer**

**Aeronics Pte Ltd, chennai Aug 2012 to Mar 2016**

**Responsibilities**

* Provide Electrical Engineering Services to design, specify and approve power distribution required.
* Interface with utility companies, construction supervisors and vendors.
* Facilitate power quality studies, capacity studies, remediation, UPS and emergency power strategy ,short circuit and load coordination studies and control system strategies.
* Function as the Lead Electrical Engineer in the design and preparation of construction documents.
* Responsible for the quality and delivery of schematic and detailed designs
* Preparation of front end pacakages for their expansion projects
* Wok involved preparation of one line diagrams, area and scope of work, selection of of electrical equipment consisting of unit substation, medium voltage cables, motor controls centres
* Responsible for for all the electrical engineering work, present projects include design and engineering works.
* Responsibilities included client meetings, man-hour estimates, organizing design group,design supervision and engineering support for electrical equipment
* Participates in decision making with all the relevant disciplines regarding the electrical components and interfaces to be used& Supervised designers and CAD operators to meet project schedule and client requirements.
* High Exposure in electrical design for industrial installations and low voltage installations.
* Apply design knowledge in in power distribution, grounding, lighting, control systems,and equipment specification and selection.analyze complex engineering problems and offer effective resolutions.
* Day to day site supervision Assist Sr.Project Manager in the supervision and responsibility of the total project effort in accordance with design, budget , quality and schedule
* Well versed Knowledge in Autocad and Eplan.
* Preparation of single line diagram of various substations & support construction of electrical installations.Design, specify and calculate the complete electrical controls installation.
* Assist with providing technical assistance (interpretation of drawings)as required
* Maintain good relationships with inyterrnal and external clients.
* Develop and maintain site logistics plan, in coordination with Sr.Project Manager.
* Monitor site activities including installation, commissioning & testing of electrical equipment, cable laying etc.
* Instruct the contactors about the working principles of the hardware controls design (drawings and documentation).
* Carry out job hazard analysis and ensure compliance to safety requirements.
* Experience of working with major consultants for handling medium and large scale projects.
* Experience of project execution including making specifications, understanding design aspects, review offers, review technical drawings, pre commissioning checks, commissioning trouble shoots.
* Well conversant with relevant electrical codes, other statutory safety requirements/guidelines.
* Provide technical direction and on the job training to the juniors.
* Develop schematic and detailed designs for large projects and develop concept for small projects.
* Hands-on experience in designing electrical circuits and logics, selection and preparation of specification of electrical components like switch-gears, connectors, cables  preparation of Bills of Material, preparation of electrical schematics and wire-lists.

**Job Profile (Testing & Commissioning Engineer)**

**Sixty Six Switchgears Co Pte Ltd, Singapore. May 2010 to Mar 2012**

**Responsibilities**

* Testing & commissioning of all power systems Equipments from 415V – 132KV Switchgear
* Experience in repair/maintenance/ troubleshooting of HT and LT power distribution systems, substation equipments, HT/LT, relay settings and relay co-ordination,GIS, earthing, lighting etc.
* Testing & commissioning of HT, LT Switchgear systems, Breakers, Relays, and Cables.
* Testing & commissioning of control & Relay Panels for Generators, Transformers, Bus couplers, Bus transfer, Bus duct & Line feeder.
* Maintenance of various Industries & Plant Sub-stations, testing equipments& calibration reports.
* Testing & commissioning of all Transformers of ratings, 500KVA, 1000KVA, 2000KVA, 15000KVA, 8000KVA, 2500KVA, 5/6MVA, 25000/25000MVA, 5000KVA, 25MVA, 11000KVA, 300MVA, 150MVA.
* Testing & commissioning of Switchgears of ratings 132KV, 66KV, 33KV, 22KV, 15KV,11.5KV, 6.6KV, 6.3KV, 3.3KV.
* Power systems Circuit breakers like OCB, SF6, VCB, ACB, GIS etc, handled.
* cable calculations for the cable layout drawings and selectivity calculations.
* Supervision of pre-commissioning and commissioning activities.
* Understanding Engineering drawing and effectively communicating it.
* Supervises the operation of power generation and interconnection systems in assigned field. Covering 33KV, 11KV, 415 V switch gear, reactors and transformers.
* Creating and carrying out test procedures.
* Ensuring that the testing equipment works to its specification.
* Manages Risk Assessment and Mitigation Plan,
* **Testing’s performed** ,
	+ ***Transformers*** (Insulation resistance, voltage resistance, Magnetizing current ,Vector group, short circuit, bucholz relay, Function test, OTI, WTI, Pressure gauge, Tangent delta, Winding resistance, Ratio test).
	+ ***Switchgears*** (Contact resistance for bus bars, bus duct & breakers, High voltage power frequency test, Function test,Insulation resistance).
	+ ***Relays*** (Secondary injection test).
	+ ***CT*** ratio & Polarity check (Primary injection test).
	+ ***Cables*** (HI-Pot, Polarity Index test,Insulation resistance).
	+ ***Motors*** (Polarity Index test, Tangent Delta test,Insulation resistance)

**Project Profile**

**Customer: Exxon-Mobil Chemicals**

* Testing & commissioning of HT panel 6.3KV Switchgear of Transformer 26/33MVA (33/6.3KV) & 5000KVA Transformer at MES Exxon-Mobil SPT project (SME).
* Testing & commissioning of HT panel 11.5KV Switchgear of Transformer 25MVA (33/11.5KV) & at MES Exxon-Mobil SPT project (SME).
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 2500/2875KVA (6/0.433KV) Transformer at MES Exxon-Mobil SPT project (SME).
* Testing & commissioning of LT panel 0.690KV Switchgear of Transformer 1600KVA (6/0.690KV) at MES Exxon-Mobil SPT project (SME).
* Testing & commissioning of HT panel 6.3KV Switchgear of Transformer 26/33MVA (33/6.3KV) at MES Exxon-Mobil SPT project (SME).
* Testing & commissioning of HT panel 6.3KV Switchgear of Transformer 5/6MVA (33/6.3KV) at MES Exxon-Mobil SPT project (SPP2).
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 1.5/1725MVA (33/0.433KV) at MES Exxon-Mobil SPT project (SPP2).
* Testing & commissioning of HT panel 132KV Switchgear of Transformer 300MVA (230/132KV) at Exxon-Mobil Chemical.
* Testing & commissioning of HT panel 11.5KV Switchgear of Transformer 25000/25000MVA (33/11.5KV) at Exxon-Mobil Chemical.
* Testing & commissioning of HT panel 6.3KV Switchgear of Transformer 25/30MVA (33/6.3KV) at Exxon-Mobil chemical.
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 2.5/3MVA (33/0.433KV) at MHI – Exxon-Mobil SPOX project.
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 1000KVA (6.3/0.433KV) at MHI – Exxon-Mobil SPOX project.
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 2500KVA (33/0.433KV) at MHI – Exxon-Mobil SPOX project.
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 2.875MVA (6.0/-2\*2.5%KV/433V) at MHI – Exxon-Mobil SME / B & S project.
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 100/133/143MVA (132KV/34.5KV) at Exxon-Mobil Chemical.
* Testing & commissioning of HT panel 6.3KV Switchgear of Transformer 12/16MVA (33/6.3KV) at MHI – Exxon-Mobil SPOX project.
* Testing & commissioning of HT panel 15KV Switchgear of Transformer 150KVA (137/15KV) at Exxon-Mobil SPT Olefins Recovery project.
* Testing & commissioning of LT panel 0.433KV Switchgear of Transformer 750KVA & 1500KVA (63/0.433KV) at Exxon-Mobil SPT Olefins Recovery project.

**Testing & commissioning of electrical Equipments**

***Shutdown Maintenance Jobs:***

* 66KV, 11KV HT sub-station switchgear testing in Hyflux sea water plant, Singapore.
* 6.3KV, Transformer 1000KVA (6.3/0.433KV) sub-station in SUT, Singapore.
* 6.6KV, 22KV, Transformer 8000KVA (22/6.6KV) & 2500KVA (22/0.433KV) sub-station in UMC (P) ltd, Singapore.
* 22KV, Transformer 15000KVA (22/6900KV), 6.6KV, Transformer 2000KVA (6600V/242/420V) & 1000KVA (6600V/210V) sub-station in SMAG, Singapore.
* 6.6KV, Transformer 500KVA (6.6KV/230/400V) sub-station in Perstorp, Singapore.
* 6.6KV, HT sub-station switchgear testing in MELS in, Singapore.
* 6.6KV, 22KV, HT sub-station switchgear testing in AFPD (p) ltd, Singapore.
* 6.6KV & 22KV sub-station switchgear testing in MES (p) ltd, Singapore.
* 6.6KV, 66K, 22KV, Transformers 6300KVA (22/6930v), 200KVA (66/415/240V) sub-station in MPS (p) ltd, Singapore.
* 22KV, HT sub-station switchgear testing in Chemical specialist, Singapore.

**Different makes & types of relays tested**

* ***Over current & Earth fault relays ,***
	+ **Merlin Gerin** (sepam2000,sepam1000,sepam1000+)
	+ **Kasuga**(RAS70-3B O/C,RASP18NB E/F)
	+ **Hager**(HR 422) E/F
	+ **MH**(REA 200) O/C & E/F
	+ **Alstom** *(*micom p120,p631,p122,p631,mcgg52H,mcgg62F,mcgg82)O/C & E/F
	+ **ABB** *(REF 610,SPAJ 140C)*
	+ **Toshiba***(*T1029S-MU1k,N1012P-02AK2,N1011P-02AK2,N1012P-03ABK52*,* N1011P-01AK52,CBR 24) O/C & E/F
	+ **Cooper** (IM30-A) O/C & E/F
	+ **GE Multilin**(369 motor protection,SR750 transformer protection) O/C & E/F
* ***Earth Leakage relays ,***
	+ **Merlin Gerin** (RH328A,RH84EX)
* ***Over voltage & Under voltage relays*** *,*
	+ **Toshiba** (NVU11P-01AK52,NVU11P-01A) U/V & O/V
	+ **GE Multilin** (SR750) U/V & O/V
	+ **Alstom** (micom P922,P921) U/V & O/V
	+ **GEC** (MVTU11,MUTV12)
* ***Reyrolle*** (Solkor R/Rf)

**Different makes of switchgears & Transformers tested**

* **Switchgears** (Merlin Gerin, Toshiba, ABB, Hitachi, TAMCO, Powell, S&I, Areva, Siemens).
* **Transformers** (ABB, Toshiba, Tirathai, Meiden, Areva, Siemens, Trafindo, Niagara, Special transfo, KEL, Indotech).

**Testing equipments handled**

* + Megger(1,5,10KV).
	+ Multimeters&Clampmeters(20mA-2000A).
	+ Phase sequence meter & phase angle meter.
	+ Contact resistance kit(10-600A).
	+ Transformer oil kit(60-100KV).
	+ Single & Three phase transformer ratio, winding resistance, tangent delta set
	+ Primary injection set.
	+ Secondary injection set(15-150A:1phase), (12-50A:3phase).
	+ Omicron set.
	+ HI-Pot set, **AC** (5-140KV), **DC** (60,70KV),**AC/DC** (70,80KV).

**Job Profile (Electrical Maintenance & Installation Engineer)**

**MV Power Consultant& Engineers (P) Ltd, Chennai. Jun 2006 to Mar 2010**

**Responsibilities**

* Well versed in High-rise commercial buildings, Shopping malls, Transformer Erection, Diesel generator Erection, Panel Board Erection (VCB, ACB & MCCB),Substation structure Erection, Cable lying, Civil work, & Testing & commissioning*.*
* Review of Tender documents, scope of works, drawings, specification, B.O.Q, raise technical queries, clarification & attend pretender site surveys & site visit of project requirements.
* Check the tender drawings, manufacturer’s list, bill of quantities received from the main contractor.
* Taking off quantities from the drawing & making breakdown B.O.Q for wiring accessories, cables, light fittings, & Low current systems.
* Arranging the B.O.Q & related documents to the suppliers for quotations evaluation of supplier’s quotations.
* Preparing the price comparison between the suppliers & analysis suitable to the project. knowledge of cable installations and its instructions based on quality.
* Lead the Technical officers in performing power projects works and/or preventive and corrective maintenance works systems that include 22kv DC traction UPS system.
* Review method statements and risk assessments.
* Prepare work instructions and conduct training.
* Carry out engineering studies, recommend and implement enhancement modifications.
* Reporting to the senior engineer & making quantity comparison between tender & IFC drawings & filling the price in B.O.Q

**Project Profile**

***Substation Erection***

* 11KV/433V Sub-station structure Erection in Aranthangi chemicals factory for Activated calcium carbonate 25Ton/D.

***Transformer Erection***

160KVA Transformer erected for 11KV sub-station in Nungambakkam railway quarters, Chennai.

* 160KVA Transformer erected for 110KV sub-station in korrukupet railway pump house, Chennai.
* 160KVA Transformererected for 110/22/11KV sub-station in Annananur, Chennai.
* 2500KVA Transformer erected for 11KV substation in Egmore CMDA, Chennai.
* 1000KVA Transformer erected for 11KV substation in Perambur loco works(southern railways), Chennai.
* 750KVA Transformer erected for 11KV substation in Perambur loco works(southern railways), Chennai.

***DG set Erection***

* 500KVA Generator set Erected for 11KV substation incentral NGO annexes, Chennai.

***LT projects***

* Ramco cements in Adyar&Sify in Tidel Park, Chennai.

**EDUCATION**

Bachelor’s of Engineering in**Electrical & Electronics Engineering**, (**B.E**).

Anna University, Chennai. **2002 – 2006**

**TECHNICAL EXPOSURE**

**Programming Languages**C, C++, VB, C#.

**Microsoft Net Technologies**Dot Net, ASP Dot Net.

**Operating Systems**Windows 2000 & XP.

**Software Tools**MS-office, Visual studio Dot Net, AutoCAD.

**RDBMS / DBMS**MS-SQL server, MS-Access.

**PERSONAL DOSSIER**

Date of Birth 18th October 1983.

Nationality India.

Language Fluency Tamil, English, Hindi, French.