



A-3, Shivasmit, Adarsh Nagar,
State Bank Colony, Ratnagiri.
Pin - 415 612
Maharashtra, INDIA.
datta@dhruvashippingconsultants.com
ninad@dhruvashippingconsultants.com
Mobile : 9970151283, 9673378124



MISSION

Our mission is to design best possible, trustworthy electrical solutions for our clients. We strive to develop superior and cost effective design for our users. We are here to design high quality, cost efficient, user friendly systems, which create simplicity in life.

VISION

Our vision is to be the company that understands and satisfies the requirements of our clients to the best and to grow our business by providing efficient electrical design and services to our clients, as well as build positive, transparent and friendly relationship with them.

QUALITY POLICY

Dhruva Shipping Consultants and services are the Pioneers in Electrical Design field because we decided to work as a mediator in between Shipyard and Original Equipment Manufacturer.

" We here by commit ourselves to world class quality and 24X7 customer support and we will achieve the same by continuously monitoring client's requirements and their feedback. We will constantly improve our Work Standards and assure to give timely delivery of our services as per the client's demands. Hence we at Dhruva Shipping Consultants and services will assure you full customer satisfaction."

Dhruva
Shipping Consultants & Services
leading the way in sea

ABOUT COMPANY

We offer a unique and wide range of Electrical Design solutions. Our offering includes simple, cost effective, proven standard designs and advanced customized designs based on client-specific requirements.

Our main aim is to provide consultancy, expert services, advises, designs, drawings, technical specifications in relation to Classification Society requirements, preventive maintenance schedule, Third party inspection at all stages of ship building & overall supervision.

We offer Electrical Design solutions as per the customer's requirements. We can supply technical solutions for offshore vessels engaged in every stage of field development. We also offer technical support for complete electrical and automation systems of the vessel. Our design solutions ensure maximum efficiency, reliability and cost effectiveness.

We are mainly concentrating to play intermediate role in between Shipyards and Original Equipment Manufacturer (OEM) of various equipments/ machineries on board. Usually Shipyard faces number of problems while dealing with various OEM's simultaneously, which results in overall time delay in ship building project. Every OEM only provides drawings, cable schedules and termination details of the given machineries, irrespective of the client's needs. Most of the time they are not aware of the other equipments they are going to be interfaced with their machinery. In such cases Shipyards faces SIGNAL INTERFACING problem of various machineries. In such situations we can provide effective solutions regarding various equipments/machineries and their best possible interfaces with other machineries.

We are expertise in producing various Signal Interfacing drawings, cable schedules, termination details of various systems like Dynamic Positioning, Vessel Automation system, Central Alarm System, Main Engines, various types of Propulsions, Main Generators. Our aim is to give complete Electrical drawing inclusive of interfaces to Shipyards.

Based upon the manufacturers' drawings of various machineries we can produce cable schedule and check wire schedule with proper selection of cables and preparation of working drawings which are required for the ground level working. Cable schedules as well as check wire schedules with all termination details are very helpful in cable laying phase of ship buildings. Ground level drawings, especially for electrician, are very much important to speed up the electrical cables' termination work. We are expertise in producing such kind of drawings as per the shipyard requirements as well as simplified drawings for shipyard's electrician.

We can help shipyards by preparing trial protocol for proving various equipments/machineries to various classification societies. The classification society's laws keep changing and we always update ourselves with them. Considering the classification society rules for the respective Vessel, Shipyard has to prepare sets of Sea Trial Protocol. We offer these sets of trial protocol as per the Shipyard's requirements. Every shipyard has its own Quality Assurance and Quality Control department. We can help them out in such cases of Vessels. As per the shipyards ISO manuals and Working STANDARDS we will prepare Quality Assurance trial protocol.

Now a days many clients are insisting Dynamic Positioning Ships. These ships are very advanced ships. Dynamic Positioning (DP) is a computer-controlled system that automatically maintains a vessel's position and heading. We can assure shipyards the consultancy regarding Failure Mode and Effects Analyses (FMEA), how to achieve Redundancy in various systems. We can help shipyards in interpreting the FMEA reports by various classifications societies. As well as we can help them to clear out the Class comments.

Today Power Management System (PMS) and Vessel Management System (VMS) are heart of the ships. The development of these systems in shipping field made seafarers' life much better. But to install and commission such highly automated system on ship is very tedious job. It requires very deep study of PMS/VMS system as well as all other machineries which are interfaced with this system. Sometimes small modification is required in signal processing to interface other machineries with automation system. Shipyard always faces interfacing problem of the machineries and automation system. We assure that we can give complete solutions in such interfacing problems to shipyard.

Dhruva Shipping Consulting is your assurance for a professional partner that constantly ensures that your projects/designs always comply with existing regulations and requirements.



DIRECTORS

Dattaprasad A Sawant
Director

DHRUVA SHIPPING CONSULTANTS AND SERVICES PRIVATE LIMITED

He is director as well as founder of the company.

He mainly deals with all Technical Issues. He provides technical direction on various project and technical support in the execution of specific projects as per client's requirement. He also keeps close contact with every client and keeps them informed regarding the work status. He also provides technical direction to business development. He reviews the work involved and follows the project through testing and production deployment phases.

He is accountable for technical leadership and quality control over the technical work in the project's activities. He is providing technical depth, vision and guidance for technical staff and ensures high quality technical approaches throughout the project.

After getting Bachelor's Degree in Electrical he started his first job in new ship building field. About 4 and half year he was working in New Ship Building field. During this period he worked on three mother vessel of different classification societies. Following jobs were mainly undertaken during this period

1. Fabrication of Tray, Hanger routes and conduits layout for required cable laying in complete ship. Positioning of various electrical panels and cable penetrations.
2. Pre-commissioning checks. Testing & trial of Electrical Equipment & systems. Proving the performance of the equipment to ship's Owner & Classification.
3. Proving the various electrical systems prior to final sea trials (All the alarm, monitoring & safety functions as per trial protocol)
4. Sea trial as per the trial protocol.
5. Especially worked on **Power Management System (PMS) & Vessel Automation System (VMS)** installation commissioning and testing.
6. Commissioning and testing of all PMS mode including DP II mode.
7. Especially worked on DP II Commissioning and testing of DP II system, proving of FMEA trial.
8. Specialization in operation of Diesel Generator, its trouble shooting and its synchronizing parameter setting.

After New Ship Building Field, he joined onboard Sailing. Initially he sailed on Suez max Crude Oil Tanker and later he continued sailing on offshore ships. In this period he acquired good operational experience of equipments/machineries. In addition to this he came across various processes in ship operation. Following jobs were mainly undertaken during this period.

- 1) Plant preventive maintenance for all electrical equipments as per Schedule
- 2) On Main Fleet vessel, cleared Vetting Inspection by Vela authority, Annual survey By ABS, FSI Inspection at various ports.
- 3) In NCV class ship, undergo Annual survey by ABS class and routine ONGC shore survey in every Voyage.

He also worked as an **Owner Representative** for one PSV DP II FIFI (UT 755) vessel. All Electrical Equipments trials including all generators and sea trials were witnessed with Surveyor (DNV Class) as per trial protocol. He has taken over the vessel from the Shipyard and Delivery Voyage sailed.

He also worked in Dry-Dock phase for two ships. At that time he supervised complete overhauling of all heavy machineries as well as underwater work related to electrical.

Ninad V. Behere
Director

DHRUVA SHIPPING CONSULTANTS AND SERVICES PRIVATE LIMITED

He is director as well as founder of the company. He is responsible for deploying the Company's strategic vision and developing business alliances as well as building the management team. He also looks after Finance Department of the organization. He deals with strategy, business planning, setting relevant financial and commercial goals and objectives.

After getting Bachelor's Degree in Electrical he started his first job in Motor Marketing field. During this period he acquired adequate knowledge of marketing field as well as he visited many reputed electrical companies and exposed him to a large spectrum. He gathered very good experience in advertising & marketing field.

Secondly he joined New Ship Building field. About 3 and half year he was working in this field. During this period he worked on four mother vessel of different classification societies. Among those four vessels, he was Electrical Project In charge for two vessels from the beginning of the project up to the delivery of the ship.

Mainly following tasks were performed in this period

1. Pre-commissioning checks. Testing & trial of electrical equipment & systems. Proving the performance of the equipment to owner & classification.
2. Proving the various electrical systems prior to final sea trials (All the alarm, monitoring & safety functions as per trial protocol)
3. Sea trial as per the trial protocol.
4. Specialization in operation of **Power Management System and Vessel Automation System**. Worked on the vessel having Power Management System with Dynamic Position 2 Mode, as well as FIFI mode and **UMS Class**. Power Management System fault finding and its rectification.
5. Adequate experience of manual and automatic synchronizing of Aux. DG's. Worked on the vessel having 4 nos of Aux. DG. Experience of Aux DG synchronizing with Shaft Generator for electrical load transfer
6. Operation and fault finding of Main Switch Board, Emergency Switch Board and all kind of Local Starter Panel (i.e. DOL, Star-Delta, Soft Starter)
7. Installation and commissioning of Dynamic Positioning System, hard wire troubleshooting done at site. (i.e. error like Pitch feedback problem, Pitch Order problem). Failure Mode Effect and Analysis done. Worked on the system of Converteam, Kongsberg, Rolls Royce.
8. Especially worked on Main Engines (ABC, Mak, Wartsila, Caterpillar, Rolls Royce) and Dynamic Positioning II.

After New Ship Building Field, he joined onboard Sailing. Initially he sailed on Passenger ships and later he sailed on scientific vessel which mainly used to survey the sea bed. In this period he acquired good operational experience of all equipments and machineries present on board. In addition to this he came across various operational problems. Following jobs were mainly undertaken during this period

- 1) Plant preventive maintenance for all electrical equipments as per Schedule
- 2) MMD routine inspection of passenger ship at regular intervals.
- 3) Undergo various Annual surveys by various Classification societies and various company audits.

He also worked in Dry-Dock for one ship. Mainly prepared list of defects/work that can be attended in lay off and dry dock period as per the priority. At that time he supervised complete overhauling of all heavy machineries as well as underwater work related to electrical sensors. Also he supervised Air Conditioning Plant and Refrigeration Plant repair work. He also participated in all Temperature and Pressure transmitter/Switches calibration work during dry-dock.

OUR SERVICES

1) Electrical Drawing Design

- Requirements of authorities and classification societies keeps on changing, which we closely observe at all times.
- Single line diagram of all the systems throughout the ship.
- Preparing single line and termination drawings for control and monitoring, communication, navigation, based on equipment suppliers data.
- Guidance drawings for cable layout and Preparation of cable schedules and cable quantity estimations.
- Interface drawings for various machineries for e.g. Main engines, Propulsion system, Main switchboard, DP, Joystick, Power management system, Vessel management system.
- Illumination level calculations, lighting plans and its circuitry.

2) Consultation regarding statutory requirements.

- Consultation regarding Classification Society's requirements for existing ships.
- Suggestions for change in existing system to comply with classification requirements.
- Preparation of trial protocols.
- Consultation regarding FMEA requirements for DP class vessels.
- Consultation regarding conversion projects.

3) Preventive maintenance and Breakdown Repairs of Ships

- Fault finding and trouble shooting for running problems.
- Routine maintenance for electrical machinery.
- Preparation of Planned maintenance schedule for all electrical machinery.

4) Third party inspection in shipbuilding and repair stages

- Supervision and quality checks for all electrical installations on board.
- Pre-commissioning checks and commissioning.
- Supervision for basin trials and sea trials

5) To prepare technical specification as per owner's requirements

Our Experience

Client Name: - Delta Corp Limited, Goa

Project Code: - DSC/13-14/PRJ001

Duration: - Apr 2013 to Aug 2013

As we are stepping in to this field, recently we have completed our first assignment with Delta Corp Limited, Goa. It was a retrofitting conversion project and we got an opportunity to prepare all electrical drawings and to provide complete design solution for Central Alarm Panel, Local Alarm Annunciator Panel, details as follows.

Ø Design of Central Alarm System panel.

As per the Alarm List given by the client we have given complete design for the Central Alarm System to the panel manufacturer. This include complete Internal Wiring diagram for Central Alarm Panel, selection of hardware for the same, Panel Internal Layout, Front Panel Cut out layout. Preparation of cable laying schedule. Preparation of cable terminations details at both ends.

We have provided complete programming for the system. Also we have assisted on site commissioning of the system.

Ø Design of Local Alarm Annunciator panel for Auxiliary Engines

As per the client's requirement we provided complete design for Local Alarm Annunciator Panels for Auxiliary Engines.(Engine Make: Caterpillar) This include complete Internal Wiring diagram for panel, hardware selection, panel internal and front layout.

Also we provided complete programming and onsite commissioning for the same.

Ø Preparation of Main and Emergency lighting layout ,Fire detection Alarm System Layout and Antenna layout.

Ø Preparation of Single Line Diagram and Internal Wiring Diagram for all auxiliary machines and propulsion machinery.(Total 150 Nos of Drawings)

Job includes tracing of the cables and drafting of drawings accordingly, as listed below.

- 1) All Pumps and Fans Starter Panel
- 2) Main Generator and Emergency Generator Alarm Monitoring System
- 3) Main Engine Alarm Monitoring System
- 4) Propulsion System and Reduction Gearbox system
- 5) Steering Gear System and Steering Gear Alarm Interface
- 6) All Navigational Equipments
- 7) All GMDSS Equipments
- 8) Bridge and Engine Room Console Layout and Internal Wiring Diagram
- 9) Co₂ Release System Panel and Halon Gas Release System Panel
- 10) HVAC System (Air Conditioning and Ventilation System)

Client Name: - Timblo Shipyards Pvt. Ltd.

Ship Name: Water Lilly

Project Code: - DSC/13-14/PRJ002

In this project we have undertaken consultation regarding Main Engine and Propulsion problem. Both Main Engine RPM not increasing above certain value after Propulsion Clutch IN. Same diagnosed and solution given to the client.

Client Name: - Timblo Shipyards Pvt. Ltd.

Ship Name: Halani Two

Project Code: - DSC/13-14/PRJ003

In this project we have undertaken total repairing work for Navigation Light System. Also we have done consultation regarding Deck Alternator Voltage development problem.

Client Name: - Timblo Shipyards Pvt. Ltd.

Ship Name: Ocean Sachiel

Project Code: - DSC/13-14/PRJ004

In this project we have undertaken total checking and repairing work of following systems

- 1) Fire Detection and Alarm System (checking/testing of all FDA manual call point, FDA sensors, Bell, General Alarm)
- 2) Navigation Light System
- 3) Checking/Testing of Emergency Lighting all over the Ship
- 4) Also we are assisting Ship yard to clear Annual Survey for the ship as well as Surveyor recommendations.

OUR CLIENT

- 1) Unitech Marine Private Limited , Goregaon Mumbai
We are designing various Electrical panels for Unitech Marine Private Ltd as per their requirements. Like CO2 alarm System Panel, Emergency Generator Black out Start Panel etc.
- 2) Delta Corp Limited,Goa <http://www.deltacorp.in/casino.html>
Delta Corp is a fast-growing Indian company operating primarily in two business segments – Hospitality and Gaming. For one of their project **M.V. Horseshoe we have designed Central Alarm System.**
- 3) Timblo Shipyards Pvt. Ltd.
Timblo Shipyards Pvt. Ltd. (TSPL) endorsed by [Panduranga Timblo Group \(PTG\)](#) a conglomerate pioneering in the fields of mining,engineering,ship building, agriculture etc.
We are undertaking various kinds of repair, major fault findings, troubleshooting job, all kind of Survey assistance in their dry-dock.



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