

Voltech Engineers Pvt. Ltd.

ISO 9001 : 2015 & OHSAS 18001 : 2007 Certified Company

CONTROL & INSTRUMENTATION (IC - C&I)

INSTRUMENTATION & CALIBRATION SERVICES



About Voltech Group

Voltech Group is one of the market leaders in electrical engineering and corporate services since 1995. With a Team of around 5000+ engineers and staffs Voltech has diversified its ventures into various sectors ranging from HR Services, Electrical & Mechanical products and services, Instrumentation Engineering, EPC Contract, International Trading, Solar Film manufacturing & Software Development.

Voltech is a leading service provider in the field of Testing and Commissioning of Electrical equipment's and sub-station up to 765 KV class. Voltech serves many industries including power, steel, oil/gas, infrastructure & cement; covering both public and private sector companies. Apart from Testing & Commissioning Services, Voltech has proven its strong presence in engineering services ranging from Electrical/Civil Design & Engineering, Instrumentation engineering, EPC projects, International trading, O&M services, Solar projects and HR/Manpower services. Over last two decades Voltech has expand its business not only in engineering services, But also in the manufacturing of Power and Distribution Transformers, Switchgears, Control and Relay Panels, Numerical & Auxiliary Relays, Battery Charger, Energy Saver Panel, Solar Thin Films, and Industrial Ball Valves.

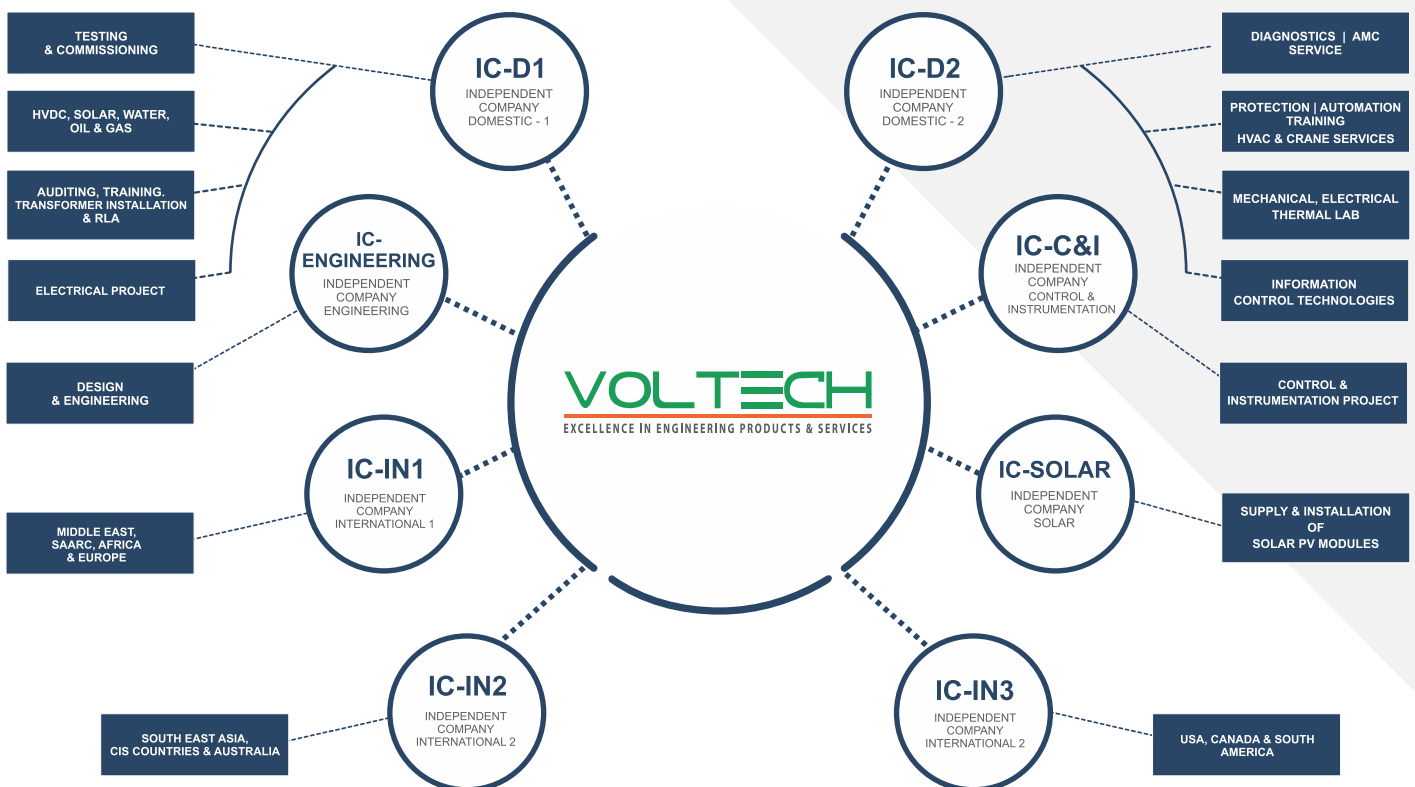
35+
COUNTRIES

5000+
EMPLOYEES

6 GROUP COMPANIES

24
YEARS OF EXCELLENCE

VOLTECH ENGINEERS PRIVATE LIMITED





Md's Desk

Greetings from Voltech Group!

This specially designed company brochure showcases the Voltech conglomerate's Control & Instrumentation portfolio, with the intention to provide you with a complete and comprehensive view of our organization. This brochure highlights in detail, our capabilities and technical proficiency along with positive customer experiences for your reading pleasure.

In due deference to the prevailing trend of the world industry, as national structures become more complicated and sophisticated, innovative and extensive technological pursuits will become necessary. In this context, the Voltech group has been formulating short and long-term plans that will contribute to the development and progression of the nation's key industries, especially in the field of Control & Instrumentation.

Organizations are created by the building blocks of hard work, persistence, obsession for quality and a never-say-die attitude. The Voltech group boasts of this strong foundation, with moral and ethical values being our driving mantra. We assure you of the highest levels of satisfaction and service at competitive prices.

We have a clear vision about building on our strengths and our achievements while holding on dearly to our

principles and guiding values. Our continually increasing sales and profits graphs over the last decade are the best endorsements we have received from the industry as a testament to our prowess. We bring to our clients much needed human values, integrity, trust and an assurance of responsibility, all of which are accentuated by our expertise in Control & Instrumentation. Our biggest assets have always been our highly trained team of professional engineers, who are backed by an exceptional group of administrators.

As we move approach the next frontier of growth and excellence, I seek the support and encouragement of all our stakeholders who have made our great odyssey memorable and rewarding. I invite you to peruse the following pages to know our corporate profile better. I look forward to developing a meaningful and mutually rewarding association, and to enjoy the privilege of calling you an esteemed client.


Mr.M.Umapathi

Control & Instrumentation

Voltech Engineers Pvt. Ltd. is being promoted to provide total C & I Solutions and stops the customers for hunting. We have excellent, experienced and committed team to cater the customer to their expectations in providing total C&I solutions for all Process industrial Segments for Construction and Commissioning Supervision Services and also taking up challenging construction projects in various industries like Refineries, Oil & Gas, Steel, Water Treatment, Cement, Sugar, Thermal and Nuclear Power Plants.

Erection, Commissioning and Calibration

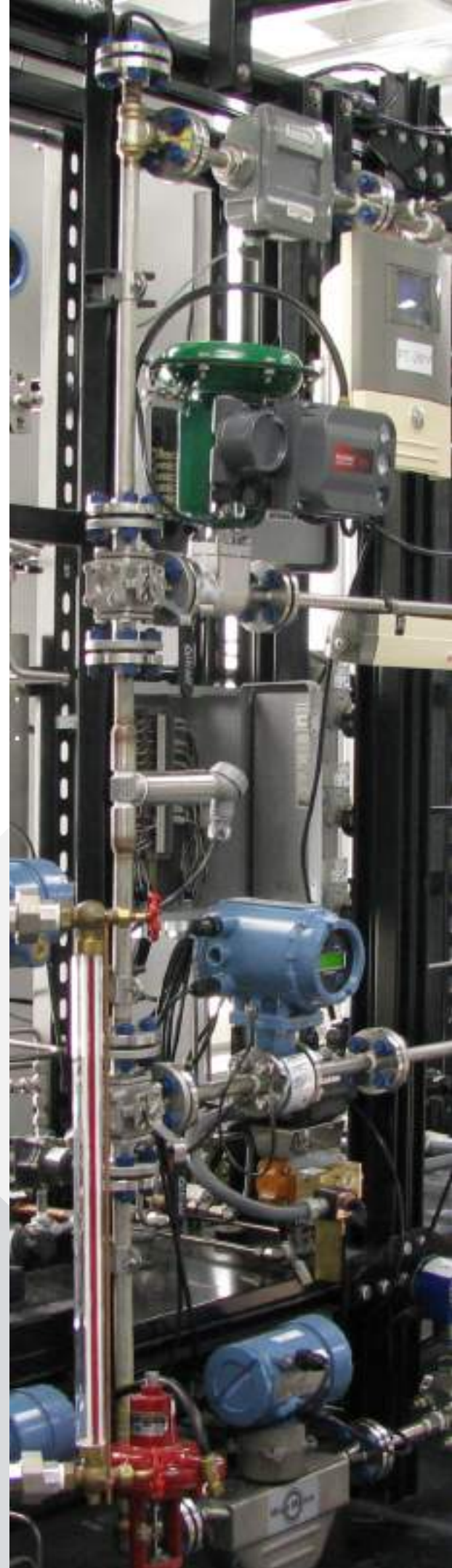
1. Field Instruments along with FF Devices

- Pressure Measurements like Absolute Pressure Transmitters, Differential pressure Transmitter, Diaphragm sealed Instruments, Pressure Gauges and Pressure Switches
- Level Measurements like DP Type Level Transmitter, Displacement Type Level Transmitters, Ultrasonic and Radar Type Level Transmitters and Level Switches
- Flow Measurements like DP Type Flow, Variable Head Flow, Electromagnetic Flow, Mass Flow and Ultrasonic Flow Transmitters and Flow Switches
- Temperature Measurements like Temperature gauges, Thermocouple and RTD. Analytical Instruments like Ph, Conductivity, Hydrazine, Silica, O₂, CO, CO₂, SO₂, NO₂, Smoke Density and Opacity Meters
- Analyzers Calibration checks are usually carried out on analyzers by injecting samples into known samples conditioning systems

2. Control Valve Activity

Installation, Inspection, Calibration, Loop checking Test

- Commissioning, Trouble shooting and Calibration of Solenoid Valves by operating the solenoid Coil and observing correct change over action
- Commissioning, Trouble shooting and Calibration of Control Valves by rising and falling signals at 0,25,50,75 and 100% of Valve Stroke
- Commissioning & Calibration of Pneumatic Positioner, I/P Converter, Electro pneumatic Positioner, position feedback transmitters and SMART Positioner
- Installation, Commissioning and Calibration of Motorized Valves by setting Open/Close limit Switches and Torque Switches for Fully Closed and Opened Position



II. Supervision and Support Services for Erection, Commissioning & Site acceptance test a of following Jobs

1. Installation

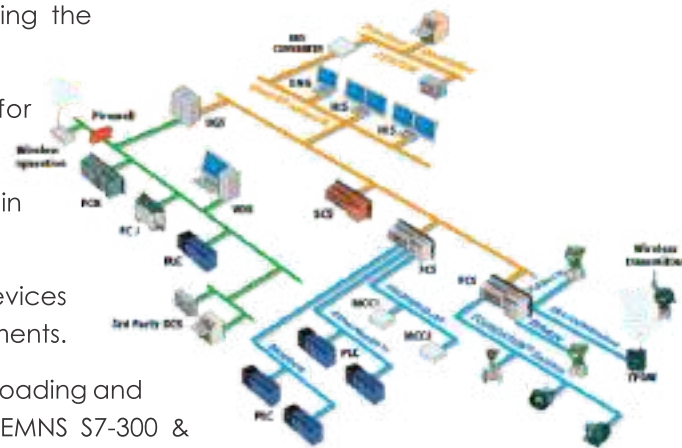
- Installation of all type of Field Instruments as per P&I Drawings
- Installation of stanchions / supports & Canopy for instruments
- Impulse tubing for Instruments as per Hookup Drawings
- Laying & clamping of single pair / Multicore cables up to control room.
- Glanding and Cable termination in Instruments, Junction Boxes & Marshalling Panels for DCS or PLC System
- Continuity checking of Power & Signal cables.
- Process Loop checking of Field Instrument
- Copper S.S tubing for all types of control valves / ON - OFF valves
- Stroke checking of Control Valves & Partial stroke for ESD Valves

2. Pre - commissioning activities - Checking for design conformity & functional check

- Inspection of equipment and installation to check for mechanical integrity
- Inspection of equipment and installation to check for compliance with drawings, specifications, regulations and code of Practice Simulator
- Powering up the Transmitters until Stabilized
- Connecting up the Handheld Programmer and Running Communication Test
- Zero and Ranging the Transmitters by use of Hand Held Communicator as per Data Sheet
- Checking the Outputs in both raising and falling modes

3. DCS, PLC & SCADA System Commissioning Activities

- Ensuring Dual power Supply change over without affecting the system / Process
- Checking of Nest Loading as per the I/O allocation for maintaining the redundancy
- Confirm of all inter-connector cables have been installed in accordance with the reference documents.
- Check of all I/O cabling to field devices and the field devices themselves are installed and comply with the reference documents.
- Uploading and Downloading the Program, logic design, nest loading and I/O assignment, graphic design and implementation for SIEMNS S7-300 & 400 and its WinCC, Yokogawa Cs3000 & Centum VP, Foxboro IA & Triconex, ABB 800xa, Annunciator and SOE



Man Power Details

Positions	No. Of. Employees	Positions	No. Of. Employees
VP / AVP	2	Erection, Commissioning & Sr. C.E /C.E	150
GM / AGM / Sr. Manager	8	Calibration/Maintenance Technicians	250
Manager / Asst. Manager	20	Instrumentation Fitters	100

MECHANICAL (PRESSURE)

We are offering a quality approved assortment of Pressure Sensor Calibration Services to our valuable customer. High grade material is used in the execution of the offered services with the assistance of highly skilled and trained professionals. Our offered services are executed in line with the defined industry norms to follow the ongoing market trends and technology. Apart from this we are offering these services at economical price.

Parameter/Ranges (Lab & Site)

Pneumatic

- Vacuum : (-0.95 bar to 0 bar)
- Pressure : (0 to 2 bar)
- Pressure : (0 to 20 bar)
- Pressure : (0 to 35 bar)

Hydraulic

- Pressure : (0 to 400 bar)
- Pressure : (0 to 700 bar)



FIELD /TEST INSTRUMENTS

Pressure & Vacuum Gauges

- Bourdon Type Gauges, Diaphragm Type Gauges, Capsule Type Gauges, Liquid Filled Gauges, Compact Type Gauges, Differential Type Gauges

Pressure & Vacuum Transmitter

- Pneumatic smart Pressure Transmitter, Electronic Pressure Transmitter, Differential Pressure Transmitter [Linear & Square Root], Draft Pressure Transmitter

Switches

- Electro Mechanical Pressure Switches, Diaphragm Switches Bourdon Tube Switches, Diaphragm Piston (Dia-Seal Piston) Switches, Piston Switches & Solid-State Pressure Switches.

Manometer & I/P Converter

- Digital & Analog Manometer and I/P Converters

CALIBRATORS/MASTERS

- Analog Master Pressure & Vacuum Gauges
- Digital Master Pressure & Vacuum Gauges
- Vacuum Calibrator
- Pneumatic Small Pressure Calibrator
- Pneumatic Medium Pressure Calibrator
- Hydraulic High Pressure Calibrator



STANDARD INSTRUMENTS USED FOR CALIBRATION

Vacuum Calibrator

Make : GE - Druck /DPI611-13G
Model : PACE 1000

Medium Pressure Pneumatic Calibrator

Make : GE - Druck
Model : PACE 1000/DPI611-13G

Low Pressure Pneumatic Calibrator

Make : GE - Druck
Model : PACE 1000/DPI611-13G

High Pressure Hydraulic Calibrator

Make : GE - Druck
Model : PACE 1000/DPI611-13G



Dead Weight Tester

Make : Nagman
Model : H3000 Series

Digital Master Pressure Gauge

Make : GE-Druck
Model : DPI 104

Hydraulic Pressure Comparator

Make : G.E



THERMAL (TEMPERATURE)

We provide services for Thermal Calibration at diverse range With extensive support and assistance of skilled Engineers. And offer high quality at lab & site thermal calibration services to the customers. Our calibration services are offered with the aid of latest testing tools to display exact parameters of the tested object

Parameter/ Ranges

1.At Lab

Low Temperature :(-40 to 100°C)

2.At Site

Low Temperature :(-10 to 100°C)

3.At Lab & Site

Medium Temperature:(100 to 600°C)

High Temperature : (600 to 1200°C)

FIELD / TEST INSTRUMENTS

RTD's

Pt/Ni/Cu -2,3&4 wire

Temperature Indicator/Controllers

Digital Temperature Indicators & Controllers with & without sensor, Recorders and Switches

Liquid-in-Glass thermometer

Thermocouples

J,K,T,B,R,S,E TYPE

Thermocouples

Temperature Transmitter

Electronic /SMART (Digital) Transmitter with & without Sensor

Temperature Gauges

Rigid Stem/Capillary-Bimetal Dial Thermometer, Liquid Fill Dial Thermometer, Gas Filled Dial Thermometer and Mercury in Steel Thermometers.

CALIBRATORS/MASTERS

Temperature Calibrator

- Low Temperature dry bath calibrator
- Low Temperature Liquid bath calibrator
- Medium Temperature Dry bath calibrator
- High Temperature Dry bath calibrator

Master Temperature Indicator & controller

Std reference RTD's

Std reference Thermocouple with CJC



STANDARD INSTRUMENTS USED FOR CALIBRATION

• Standard Reference RTD

Make : Ametek /ASP Sensor

Model : STS 100B901/SSP670

• Medium Temperature Dry Bath Calibrator

Make : Nagman

Model : MTC 650

• Standard Reference Thermocouple with CJC

Make : Isotech / TMS Europe

Model : S type – 1600/S type

• High Temperature Dry Bath Calibrator

Make : Nagman

Model : MTC 1200

• Sub Zero Temperature Dry Bath Calibrator

Make : Nagman

Model : MTC 40

• Standard Temperature Indicator with Multi Channel

Make : Isotech

Model : Millik

• Sub Zero Liquid Temperature bath Calibrator

Make : Southern Scientific

Model : SSI CS01

• Standard Multi Function Calibrator

Make : Eurotron

Model : Microcal 2000+



List of Instrumentation / Commissioning / Automation Project Support in Process Industries

Oil & Gas (Shutdown Job)

- IOCL-Bhatinda-ABB
- IOCL-Panipat-ABB
- GAIL-Pata-ABB
- IOCL-Vadodara-ABB

Oil & Gas (Automation)

- IOCL-Bhatinda-ABB
- IOCL-Numiligarh-ABB
- BPCL-Haldia-ABB
- IOCL-Panipat-ABB

Oil & Gas

- IOCL-LPG Kandla - ABB
- TAS-IOCL Bhatinda - ABB
- TAS-HPCL Kandla - ABB
- TAS-IOCL Sangrur - ABB
- TAS-IOCL Bharathpur - ABB
- OIL INDIA Assam - ABB
- IOCL-Guwahati - ABB
- Petroleum Bangalore - SHELL
- Numaligarh Refinery Assam - ABB
- Sanand - ABB

Power Plant

- NPCIL-KKNPP
- Vedanta-Sterlite-Tuticorin
- Siemens-Torrent Power-DGEN Gas
- Tata Projects-NTPC-Raigarh
- Doosan Power-Bandel TP station
- Simbhaoli Power-Hapur-UP
- L&T-DB Power Projects-Chhattisgarh
- FL Smidth-Gulberga Power
- Balco Power Plant-Korba
- KSK Akaltra

Cement Plant

- Emami - ABB
- Nandyal and Dolvi - ABB
- UTCL- Jhajjar-Haryana - ABB
- Manikgarh -Nagpur - ABB
- UTCL-Shambhupura - ABB
- Siddhivinayak -Nimbol - ABB
- JSW-Vijayanagar - ABB
- Heidelberg -Damoh - ABB
- KHD-ACC -Bhilai
- KHD-Lafarge -Arasmeta
- Dungsam -Bhutan
- UTCL-Dankuni - ABB

Steel Plant

- JSW-Toranagallu
- SAIL-Rourkela Steel Plant - ABB
- Tata Steel Plant-Kalinganagar Project
- SAIL-Salem Steel Plant
- Thermax-Vizag Steel Plant
- ABB & Thermax-JSPL-Angul

Metals & Minerals

- Zawar Mines - Udaipur - ABB
- Zawar Mines - Udaipur - McNally Bharath



Major Projects - Domestic

M/S. LINDE INDIA LTD.

Type of Plant : Oil & Gas **Period of Business** : July'19 to fill date **Location** : HPCL, Vizag, Andhra Pradesh
Scope of Work : Erection & Commissioning of Instrumentation Work.

M/S. YOKOGAWA INDIA LIMITED

Type of Plant : Oil and Gas **Period of Business** : April'19 to fill date **Location** : IOCL, Cherlapally, Telengana
Scope of Work : Supply, Installation, Testing & Commissioning of Instrumentation Works at IOCL, Indane Bottling Plant

M/S. RELIANCE INDUSTRIES LIMITED

Capacity of Plant : 1,240 bbl/d (197 m3/d) **Period of Business** : May 2016 - Till date **Location** : J3-Jamnagar, Gujarat
Scope of Work : Erection and commissioning of field instruments calibration for DTA/SEZ

M/S. AARKAY INSTRUMENTS PVT LTD

Type of Plant : Oil and Gas **Period of Business** : Nov 2018 to May 2019 **Location** : B-193, Offshore - Mumbai, MH
Scope of Work : Erection & Instrumentation work at B-193 process platform under Bassien Development 3 well platform & Pipeline Project.

M/S. INOX AIR PRODUCTS INDIA LTD.

Type of Plant : Gas Plant **Period of Business** : July'18 to Sep'18 **Location** : Sriperumbudur, Tamilnadu
Scope of Work : Installation, Testing & Commissioning of Field instrumentation works.

M/S. THERMAX LIMITED

Capacity of Plant : 1x4 MW Power Plant, Unit #2 **Period of Business** : May'18 to Sep'18 **Location** : Chintampalli, Andhra Pradesh
Scope of Work : Supply of C&I Erection, Hardware Material and Installation Works.

M/S. KSK MAHANADI POWER COMPANY LTD

Capacity of Plant : 6 X 600 MW Thermal Power Plant **Period of Business** : 2017 - 2018 **Location** : Nariyara, Chhattisgarh
Scope of Work : Operation and Maintenance of all the Field Instruments, Analytical Instruments & Electrical Equipment for Associated Systems & Auxiliaries

M/S. MEIL

Type of Plant : Oil and Gas **Period of Business** : 2014 - 2016 **Location** : Lakwa, Assam
Scope of Work : Commissioning and Calibration of Field Instruments for ONGC

M/S. SIEMENS - TORRENT DGN POWER PLANT

Capacity of Plant : 1200 MW DGEN CCPP **Period of Business** : 2014 - 2015 **Location** : Dahej, Gujarat
Scope of Work : Erection, Commissioning and trouble shooting of instruments

M/S. NUCLEAR POWER CORPORATION OF INDIA LTD.

Capacity of Plant : 1000 MW **Period of Business** : May 2010 - Dec 2015 **Location** : Kudankulam, Tamilnadu
Scope of Work : Calibration, Pre - Commissioning, Commissioning of Instrumentation & Control systems in Unit-2

Major Projects - International

M/S. SHAPOORJI PALLONJI & CO. PVT. LTD.

Type of Plant : Process Plant **Period of Business** : Mar'19 to till date **Location** : Guinea - Conakray
Scope of Work : Erection, Testing & Commissioning of 11kV Switchgear - 6 Units.

M/S. TOSHIBA PLANT SYSTEMS & SERVICES CORPORATION

Capacity of Plant : 2x120 MW CCPP **Period of Business** : July' 17 to Dec' 18 **Location** : Kinyerezi, Tanzania
Scope of Work : Complete Commissioning of Electrical, Instrumentation & Mechanical Works at Kinyerezi II.

M/S. VOITH HYDRO PVT. LTD.

Capacity of Plant : 42 MW Hydro Power Plant **Period of Business** : Dec' 18 **Location** : Achwa, Uganda
Scope of Work : Testing & Commissioning of Electrical & Instrumentation Works at Achwa II.

M/S. AARKAY INTERNATIONAL SERVICES LLC

Type of Plant : Methanol Plant **Period of Business** : Mar' 18 to May' 18 **Location** : Salalah, Oman
Scope of Work : Turnaround Maintenance of Electrical & Instrumentation Works at Salalah Methanol Company.

HSE Management

To provide the highest Quality as well as Professional Occupational Health & Safety Services to our Employees. To establish and meet the client's needs in terms of Occupational Health & Safety Management. To assist our clients in providing employees a healthy and safe working environment, free of hazards.

We believe that accidents don't have to happen and that they can be prevented. Thus we aim to assist industries in the prevention of accidents and injuries through Auditing and Training. Our highly experienced and well-trained staff and Safety Officers have the practical and theoretical expertise to assist our workmen in the prevention of losses caused by accidents.



- Leadership Accountability
- Comply With EHS Laws
- Risk Assessment And Hazard Control
- Incident Reporting And Investigation
- Risk Control Program
- Work Place Safety Awareness
- Contractor Safety Program
- Strengthen Existing H&S Program



Clientele



SIEMENS



YOKOGAWA



TOSHIBA



Greenko



Our Presence

International Locations

ASEAN :

Cambodia | Indonesia | Laos | Myanmar | Malaysia | Singapore
Thailand | Vietnam

SAARC :

Bangladesh | Nepal | Sri Lanka

Middle East Countries :

Bahrain | Iraq | Jordan | Kuwait | Oman | Qatar | Saudi Arabia | U.A.E

Africa :

Algeria | Egypt | Kenya | Nigeria | Senegal | Tanzania | Uganda | Zambia

Europe : Germany | Spain | Turkey | United Kingdom

South America : Brazil, Chile

Australia | Iran | Japan | Russia | South Korea | USA

India Locations

Bangalore | Bhubaneswar | Bilaspur | Chennai | Guwahati | Hyderabad
Kolkata | Mumbai | New Delhi | Raipur | Vadodara | Vijayawada

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