



Simplifying  
**ELECTRICAL & AUTOMATION**

**One Solutions Platform for  
All your business needs**

*Customer Satisfaction is our  
prime motto.....*

SATECH is the place  
for  
One smart hassle  
free solution  
for  
Standards &  
Customized  
requirements  
for  
All kind of Electrical  
& Automation  
Sectors  
for  
Individuals,  
Autonomous &  
Captive industries,  
Firms, Organizations,  
Infrastructures,  
Residential &  
Commercial  
Buildings etc.

# SATECH VIDYUT AUTOMATION EPC LLP

## ABOUT US

**SATECH VIDYUT AUTOMATION EPC LLP** is founded in 2015 by the Electrical & Automation domain expert, who is always striving for customer satisfaction with excel reputation and goodwill by delivering zero defect solutions & services and with a dream to be a big contributor in the development of the Power/Energy Infrastructure & Automation sectors from India & throughout the world.

The key stakeholders of the company are continuously working on the concept of smart & advance solutions and services to materialized this vision every day.

Company having **Project Segment** & team of expert engineers to be closer with customers and be flexible for their requirements for consideration of solutions among the dominated giants for Electrification of all segment industries, Substation Automation, Railway, Process Automation. Renewable Energy based power Plants.

Company having **Trading segment & Manufacturing Facilities**, equipped with modern technology CNC Machines for design & manufacturing of Power Distribution Equipment, LT Panels, Bus Ducts/Bus Turnkey, Rising Mains & Automation Equipment with acquisition of highest level of customer satisfaction and trading of all kind of primary & secondary Power Distribution Equipment & Switchgears, Switchboards, Transformers, Package substations, Cables & Wires, Solar products, all Process & Energy Automation hardware & software.

Company provides excellence, qualitative & hassle free **Services** to customers for their standard & customized requirements for Engineering & Consultancy, Energy Audit, Installation, Erection & Commissioning of Substations, Plants & Machineries and Skill Resource Supply.

Company believe in technology transfer by delivering qualitative excellent **Customized & EPC Training** in the domain of Electrical Design Engineering, Substation Automation & Industrial Automation to customers & Trainee from the technical institutions to make them expertise on modern technologies & solutions and to overcome the need of Skilled Resource from the domain industries.

The company has also joined hands with OEM and reputed vendors & suppliers to leverage the procurement process smooth for latest & best of materials for a WIN-WIN situation, used in the Projects, Services, Trading & Manufacturing of wide range products, turnkey projects & services.

## OUR VISION:

- ✍ SATECH shall be the most trusted, respected and preferred brand for Projects solutions, services, Trading & Training.
- ✍ SATECH solutions shall be *Advanced Smart Digital Solutions* in the Energy Sectors.
- ✍ SATECH shall not be limited to Solutions & Services but also excel in the segment of energy saving & conservation.
- ✍ SATECH shall be the leader for Skilled Resource Development to overcome the requirement of domain industries.

## OUR MISSION:

- ✍ To create a unique, outstanding, advance smart solution for different- different requirements.
- ✍ To deliver excellence services, customer contact & coordination for care, commitments with minimal span of time.
- ✍ To create single platform for customers for their different segment's requirement .
- ✍ To create a world class Excellence Center for Skilled Resource Development for continuously enhancing own technologies and develop *Qualitative Smart Engineers* to leverage the customers or industries requirements.

## OUR VALUES:

- ✍ Fully understandable for fulfil the needs of internal and external customers.
- ✍ Be frank, fair, honest, hard work, innovative, responsible, and non-political, lead to perfection in every moment of situations.
- ✍ There is no place for tolerate mediocrity. Stretch, Excel and Exceed.
- ✍ There is no place for to be afraid of conflict, when it is required and is just.
- ✍ Always keen to concentrate on quality every day from very top down and from the bottom up.
- ✍ Empower and delegate, but don't over delegate.

**CUSTOMERS ARE OUR DRIVING FORCE &  
QUALITY IS OUR STRENGTH.....**



# PROJECTS & SOLUTIONS

## WE ARE CONNECTING YOUR BUSINESS WITH LATEST TECHNOLOGIES

SATECH is specialized in Smart Integrated EPC Solution Business, which is not limited to supply of products but excel to integrated solution in the segment of power, energy and process industries for delivering qualitative, safe & reliable operational systems at customer sites. The proposed solution is developed & tested first at in-house high technology Excellence Solution Center through expert team of dynamic engineers. Our Prestigious customers are from the sectors; Utilities, Power distribution companies, Energy, Grids, Substations, Industries, Infrastructure, Transportation, Residential & Commercial Buildings and Institutions etc.

### ELECTRIFICATION

SATECH is specialized in the solution business for all kind of **Electrification** works for all business segments. This includes design & developments of products & solutions, installations, Erection & Commissioning of plant & machineries, substations, switchgears, transformers, package substations, laying & terminations of MV & LT cabling, laying and connections of control & communication cables and wires, conduits, laying of cable tray, lighting (CFL & LED) & fixtures, auxiliary supply equipment & their fittings and many more.

The company is also in the BMS (Building Management System) solutions & services for control & monitoring of firefighting system, automatic door open/close, operation of passenger lifts & escalators and other security & access control system to avoid the unauthorized entry in the premises or systems.



### RENEWABLE ENERGY BASED POWER PLANT



SATECH is in the solution business for set up all type of renewable energy based power plants; Erection & Commissioning of Solar Power Plants along with connectivity from grid supply for power trading either side with installed capacity of kW to MW.

The Street Light System is CFL & LED (rated for 50kHrs) light based system for axially symmetrical light distribution with attractive luminaire housing, high efficiency crystalline solar panels & dusk to dawn solar charge controllers and weather rugged poles with structure design suitable for adjust tilt angle to operate at wind velocity up to 100km/hr.



### SUBSTATION AUTOMATION

SATECH is specialized in HT, MV & LT Substation Automation, Feeder Automation, Network Automation, Unmanned Substations and Energy Monitoring & Management systems, integration with smart control & protection devices, redundant control/data centers, smart energy measurement meters and setup of critical communication networks for smart control & monitoring of substation equipment from locally as well remotely through SCADA over the various protocol IEC-61850, IEC60870-5-101/104, OPC, 103, DNP3, Modbus serial & TCP/IP and many more with or without use of various databases as MS Access, MySQL, MSSQL Servers for Historians, Reports.

These solutions are designed & supplied with RTU, FRTU, Data Concentrator & Event Logger and FPI (communicable or non-communicable) for Installation, Erection & Commissioning of substation equipment (Transformers, SF6 breaker, Autoreclosers, Sectionalizers, Earth switches, LA, Measurement and Protection IEDs) up to 33kV indoor/outdoor conventional & remote operated substations.



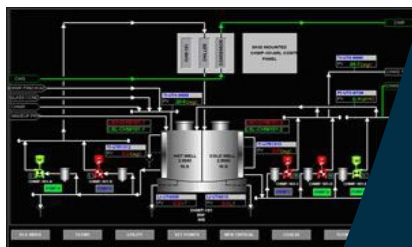
### RAILWAY & METRO SCADA



SATECH provides excellent solution in the segment of Railways & Metro for automation of Power Substation, Axillary Substation & Traction equipment for controlling & monitoring through SCADA and Supply, Installation, Erection & Commissioning, Integration of field RTU, Control centers hardware & software, Communication equipment and Printers etc. And setup of efficient & reliable communication networks for controlling & monitoring, archive & historians and reporting system on different protocol as per the customer requirements.

### PROCESS AUTOMATION

SATECH is specialized in industrial automation solutions & consultancy services for providing complete safe, reliable, smooth & efficient control over the process for improving the quality of production goods with reduction of manufacturing time & product cost on industries recommended protocol to control & monitoring of process industries, plants & machineries with energy management. The company also offers wide range of services such as System integration, Project planning & consulting, Automation troubleshooting, Project implementation, and Historian & report generation and many more.



### RESOLUTION

This is the place for online & offline resolution for all the hurdles in the field of electrical & automation.



### RENEWABLE SOURCE OF ENERGY

A single watt power saved by you can light up the house of someone. The nature has given so many source of energy on the earth but "Sun" is the most effective source of Green Energy with attractive pay back period for easily adaptation of individual personal.

# TRADING & MANUFACTURING FACILITIES

## WE STANDARDIZE & CUSTOMIZE THE PRODUCT AS PER YOUR REQUIREMENTS

SATECH as a smart Integrated EPC Solution & service provider, we understand the standard & customize requirement of the customers to leverage for timely completion of project specific site works. Our expert engineering & consulting teams, excel the support to customers for procurement of right product without compromising of specifications & quality standards. As a trader we strive for the customer for cost effective product in-line with their requirements. Our design & manufacturing facilities customized the product to attain the attention & higher satisfaction level among the customers from different sectors.



### POWER DISTRIBUTION PRODUCTS

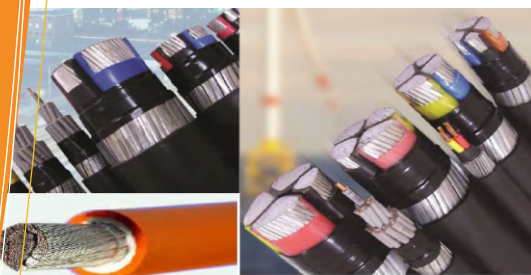
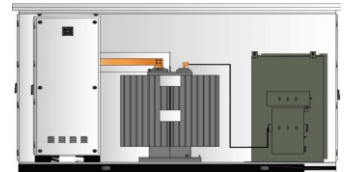
SATECH having the manufacturing facility equipped with modern technology CNC Machines & other production facilities for design & manufacturing of all kind of Power Distribution Switchboards & Smart Control Panels as;

- ✦ Power control Centres - Fixed and Draw-out
- ✦ Motor control Centres - Fixed and Draw-out
- ✦ Smart MCC's - Fixed & Draw-out
- ✦ Double bus bar power panels
- ✦ Automatic power factor capacitor panels
- ✦ PLC based DG Auto synch. load sharing panels
- ✦ PLC based process control desk panels
- ✦ Bus duct & rising mains
- ✦ AMF panels
- ✦ VFD panels
- ✦ Control & Relay panels (Single/Duplex type)
- ✦ Star/Delta/Soft/Reverse Starter Panels
- ✦ Feeder pillars,
- ✦ Pushbutton station, Junction Box,
- ✦ Terminal box & SIC Panels
- ✦ Customized Metallic Enclosures for control, protection, security & communication network.

### POWER DISTRIBUTION PRODUCTS

SATECH deals in all kind of Primary & Secondary, MV & LT Power Distribution Products & their accessories;

- ✦ MV Switchboards up to 33kV.
- ✦ LT & MV Transformers (Windings: Copper & Aluminium and Type: Dry & Oil).
- ✦ Ring Main Unit (RMU) 3W & 4W with expansion unit up to 22kV, motorized & non motorized with or without FRTU & FPI (communicable or non communicable).
- ✦ Package substations etc.



### CABLES & WIRE

SATECH deals with full range of high quality cables & wires with quality approved by the certifying bodies or authorities for;

- ✦ Low voltage to Medium Voltages: Aluminium & Copper, Power & Control, Armoured & Unarmoured.
- ✦ Aerial Bunched Cables (ABC).
- ✦ Instrumentation cables.
- ✦ Thermocouple cables.
- ✦ Steel Braided & Tinned copper specialized cables.
- ✦ Single core & Multi core copper flexible control cables.
- ✦ Data & Communication cables.
- ✦ FR, FRLS wire & many more.

### AUTOMATION PRODUCTS

SATECH deals with all kind of Automation Products & Solutions for Substation Automation and Industrial Automation; Communicable & Non communicable type equipment as;

- ✦ Software: SCADA, Drivers, API etc.
- ✦ Controllers: PLC, RTU, FRTU, FPI, DCS, Bay Controller.
- ✦ Protection: IEDs on IEC61850, MODBUS, DNP etc.
- ✦ Measuring equipment: Energy meter & MFM with or without communication feature.
- ✦ Instruments & sensors: Analog & Digital type.
- ✦ Control center equipment: Servers & workstations, Monitor, Printers etc.
- ✦ Network: Managed & Un-managed ethernet switches & Ethernet Fiber Switches.
- ✦ Communication cables & accessories etc.



### SOLAR PRODUCTS

The company deals in Solar Power Plant products & accessories, PV Solar Panels, Smart UPS/Inverters, DC systems, Batteries & Lights (CFL & LED), Folding & Structure, complete Street Light standard (Dusk to dawn solar charge controller) & customized system based on customer requirement, fancy lights and many more for domestic purpose also.

### C-CLASS & LIGHT FITTING MATERIAL

The company deals in all kind of C-class materials & light fittings used at site for maintenance, erection & commissioning, Product developments, Process plant & all other industries.



# SERVICES

## WE ARE TO TAKE CARE OF YOUR ALL BUSINESS NEEDS

SATECH is an excellence, qualitative & hassle free service provider in the segment of engineering, consultancy, energy audit, installations and skilled resource supply & allocation for Utilities, Power distribution companies, Energy, Grids, Substations, Industries, Infrastructure, Transportation, Residential & Commercial Buildings and Institutions etc. The facilities for development, testing & demonstration of the solution at in-house excellence center are also available before final implementation at site.



### ENERGY AUDIT

As per Central Govt. Ministry of power, Bureau of energy efficiency the energy saving & conservation is mandatory for some of the designated consumers. However, to lower the increasingly expensive energy costs by reducing the losses & improving the efficiency of equipment and forward towards the sustainable future, energy audit is mandatorily required for all segment of business entities or customers.

Expert team of Energy Audit, facilitates customers for inspection by walk through & proper survey by modern tools & equipment of latest technologies to make the excellent qualitative analysis of efficiently energy flows & conservation.

The analysis result with set of instructions to operate the substations, plants & machineries and process in the correct & efficient manner by proper guidance or suggestions for replacement of the inefficient equipment with amount of energy saving is shared with the customers along with payback period for appropriate actions.

The auditor team also support the customers for replacing inefficient equipment by correct, suitable & inline with specification and techno-commercial feasible energy efficient equipment in substations, plant & machineries, infrastructures, institute and buildings etc.

### ENGINEERING & CONSULTANCY

The expert team of service, provides excellence Engineering & Consultancy services for hassle-free zero defects qualitative designs of project architectures & solutions, planning & control of process & flow, drawings & documentation and detail project reports that are designed & developed on latest technologies & modern tools, for small to excel requirements of the projects from starting stage to safe, economical & reliable execution till final handover with in the budget & specified time line with analysis of all associated direct & indirect risk throughout the project life cycle to customers or end customers .



### ERECTION & COMMISSIONING

SATECH deals with installations, Erection & Commissioning of substations, plant & machineries at customer or project sites.

The site expert team are full of skill with all kind of site specific work to complete the activity or process under the target time line with minimum of wastage and optimum utilization of resource & materials at site.

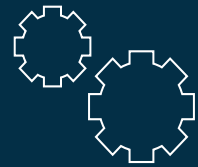
The engineers at site organize the training for customer personals to guide for proper operation & control activities over the power monitoring & control equipment and process plant & machineries.

The dedicated team handles all the site specific requirements safely, effectively & efficiently even after handover the sites to customers for AMC, Warranty and Maintenance of all substation equipment, process plants and machineries.



### SKILL RESOURCE SUPPLY

SATECH support customers for supply of Skilled Resources on third party payroll, man-day & man hour basis in the segment of electrical, substation automation & industrial automation for taking care of all the projects & site specific activities, responsibilities and assist for design & engineering, preparation of documentation, all the project specific planning, sourcing & procurement of materials, warehouse management, supervision & control over the substation, processes plant & machineries, erection & commissioning work, preparing & managing the project reports, documentation for project handover and all other AMC, warranty & maintenance activities of the projects & sites.



### CUSTOM SOLUTIONS

We take care the customized requirement of your all the needs during the engineering & execution of the projects.



### ENERGY AUDIT

As per Central Govt. Ministry of Power Notification, the energy audit is mandatory for designated consumers.

# TRAINING PROGRAMS

## OUR COMMITMENT IS TO PILOT INDIVIDUAL TOWARD EXCELLENCE

SATECH is specialized for organizing & delivering the customize & EPC training program based on customer demand or requirements from electrical, power, energy & process industries. The training program is extended to fresh engineers from the technical college or universities for EPC based standard training modules in the segments of Electrical Design Engineering, Substation Automation & Industrial Automation to overcome the need of skilled resource from domain industries. The training is organized at in-house "Excellence Center for Skilled Resource Development" or customers and institutional premises.

### TRAINING

Day by day the requirement of skilled resource is increasing exponentially for effectively & efficiently implementation of smart & advanced technologies throughout the world or developing countries like India.

To overcome the need of skilled resources from segmented industries, we come up with EPC training modules for dynamic fresh engineers to trained on the live equipment & projects for enhancing their theoretical knowledge into practical capabilities for controlling the project specific activities during the work on industrial platform for effectively & efficiently deliver the output to employers.



### EXCELLENCE CENTER

The company supports for installation of "Excellence Center for Skilled Resource Development" at customer & institutional premises for development of resources as per industries requirements.

The center can be used for *Research & Developments* on innovative ideas, improvement in working solutions & processes, creating live testing and training platform for enhancing the knowledge of trainees on technologies & tools and understand the importance, role & responsibilities of equipments or devices used in the substations and plants & machineries.

### TRAINING MODULES

The course contents of specialized training module focus on information & introduction of project life cycle & activities from starting of the project to till handover with role of customers, consultants, suppliers, vendors, and integrators or solution providers customer interaction etc and preparation of contract/specification/tender document, techno-commercial offer, purchase orders, reports, techno commercial analysis for risk & opportunities, design & engineering, planning (technical, commercial, resource and equipment & machinery), vendor (analysis, evaluation & selection) for procurement, warehouse & site management, activities & doc. related to handover, AMC (warranty & Maintenance) and role & responsibilities of project specific stakeholders.

### ELECTRICAL DESIGN ENGINEERING

The contains of the electrical design engineering modules assist the trainees for understanding, uses, roles & responsibilities of the electrical equipment used for electrical networks from power generation to distribution till reach of individuals. The technical course covers the followings as;

- ✍ **Basic Information:** The role & responsibilities of equipment dedicated for generation, transmission, primary & secondary distribution, LT system, role & responsibilities of protection IEDs & measurement equipment, bus topologies, control systems & equipment, type of earth & grounding, selection of equipment as per specification & size, heat & load calculations, configuration, interconnectivity and troubleshooting & type of maintenance of product & equipment and system etc.
- ✍ **Tools:** The 2D AutoCAD is used for designing of electrical network, system architecture, general arrangement, switchgear, switchboards, protection & control Panels & project specific drawings, Excel for planning & calculation and Microsoft for documentation activities; design, process, quality, inspection, progress reports & handover documents.

### SUBSTATION AUTOMATION

The contains of the substation automation modules assist the trainees for understanding, uses, roles & responsibilities of the automation equipment used for substation automation from minor automation to fully automation on specified protocol. The technical course covers the followings as;

- ✍ **Basic Information:** The role & responsibilities of equipment dedicated for generation, transmission, primary & secondary distribution, LT system, role & responsibilities of protection IEDs & measurement equipment, selection of control & monitoring software & hardware equipment as per specification, heat & load calculations, configuration, interconnectivity and troubleshooting & type of maintenance of product & equipment and system etc.
- ✍ **Tools:** SCADA is for graphic (System Architecture, SLD, Alarms, Events, Repots, Measurement etc) design & development, setting configurations for the system, the 2D AutoCAD is used for designing; system architecture, general arrangement, communication networks, protection & control Panels & project specific drawings, Excel for planning & calculation and Microsoft for documentation activities; design, process, quality, inspection, progress reports & handover documents.
- ✍ **Field Interface:** Controllers (Bay controller, DCS, RTU, Event logger, FRTU), Protection (communicable FPI, Protection IEDs) Measurement (Energy & Multi Function Meters) equipment and cable & accessories.
- ✍ **Control Room Equipment:** Servers, HMI (OWS & EWS), printers and cable & accessories with termination & splicing.
- ✍ **Networking Equipment:** GPS Modem, GPRS Router, M2M & Gateways, Media Converters, managed or un-managed Ethernet or Ethernet Fiber Switches (EFS), LIU/ODF and cable & accessories with termination & splicing.

### INDUSTRIAL AUTOMATION

The contains of the industrial automation modules assist the trainees for understanding, uses, roles & responsibilities of the automation equipment used for process industries from minor automation to fully automation on specified protocol. The technical course covers the followings as;

- ✍ **Basic Information:** The role & responsibilities of equipment dedicated for process plants & machineries, flow controls, treatment process plant systems, batch mixing process, mass production units etc, selection of control & monitoring software & hardware equipment as per specification, heat & load calculations, configuration, interconnectivity and troubleshooting & type of maintenance of product & equipment and process etc.
- ✍ **Tools:** SCADA is used for graphic (System Architecture, Process & Flow, Alarms, Events, Repots, Analog value etc) design & development, setting configurations for the system, the 2D AutoCAD is used for designing the process network, system architecture, general arrangement, communication networks, protection & control Panels & project specific drawings, Excel for planning & calculation and Microsoft for documentation activities; design, process, quality, inspection, progress reports & handover documents.
- ✍ **Field Interface:** Controllers (PLC & RTU, Protocol converters), Monitoring (process equip., motors, conveyors, sensors, actuators, valves, input & output digital/analog devices, protection, measurement) equipment and cable & accessories.
- ✍ **Control Room Equipment:** Servers, HMI (OWS & EWS), printers and cable & accessories with termination & splicing.
- ✍ **Networking Equipment:** GPS Modem, Router, Gateway, Media Converters, Managed or Unmanaged Ethernet or Ethernet Fiber Switches (EFS), LIU/ODF and cable & accessories with termination & splicing.

***Search for all  
business needs  
Endup Here.....***

***Thank a lot for  
Giving opportunities  
To Serve you batter.....***



#### TECHNOLOGY

We understand the requirement of customer & go for the certifications or approvals from the respective bodies to support customers.



#### MONITOR

The customers are our driving force for making solutions, services & support excellence. Hence we always monitors our self to be inline with cutomers requirements.



## **SATECH VIDYUT AUTOMATION EPC LLP**

**A-11 DEEPAK VIHAR KHODA COLONY**

**OPPOSITE: C-63, SEC-57,**

**NOIDA-201301, UP INDIA**

**Contact: +91 8588805055/8810306634**

**Email : [satyendra@satechinfra.com](mailto:satyendra@satechinfra.com)**

**Web:- <https://www.satechinfra.com>**

**Manufacturing Facilities: Noida & Greater Noida (UP).**