Company Profile

E-TECH SOLUTIONS

G- 41, Haware Fantasia Business Park, Sector 30 A, Opp. Vashi Railway Station, Vashi, Navi Mumbai, Maharashtra 400703.

DCS, PLC, Drives, PCC, MCC and iMCC

COMPANY PROFILE

E-TECH has a reputation for technical expertise and quality service. We deliver the best possible value while meeting individual customer requirements. Our management team has a combined experience of nearly 30 years in Industrial Automation and related software development, providing services to Indian and overseas clients. We have strong group for design and development, in addition to that we have developed an extensive professional service group to cover all areas of Industrial Automation.

By studying existing automation we can generate solutions to improve productivity, resulting in a more efficient and profitable plant environment, **E-TECH** is able to provide a complete service. Turnkey work allows for complete project management and takes responsibility away from our customers.

As a solution provider we help clients to assess their needs and then choose and implement the right technology for hardware, software, tools and other enabling technologies. This assures a custom-tailored solution that not only integrates with existing multi-vendor environments, but also provides a growth path to the future.

The suppliers that we have partnered with would provide us the world-class innovative and high quality products that meet international standards.

E-TECH's technical professionals have the expertise needed to apply leading-edge technology to superior Automation solutions. Our comprehensive portfolio of strategic, tactical and Automation services includes:

Consultancy
System Integration
SCADA software
Training
Retrofits
Software Development
Panel Engineering and Wiring (Automation and Electrical)
Software testing and Troubleshooting
On-site Service
Extensive Reporting
Annual Maintenance Contracts
Fail Safe Systems

SERVICES
Industrial Automation:

- **CONSULATING**

E-TECH offers comprehensive Consultancy services to corporate clients and industries requiring Process and Manufacturing automation solutions, software solutions. Our services include Requirement definition studies, Project management and Software development, Training, Maintenance and Post Installation Support.

- **DESIGN**

With our wide exposure we help in designing, configuring as per the application from the start. We believe in providing cost effective solutions to our customers by choosing the best combination and the right blend. Design requires careful choice of controls and memory requirements keeping in mind the cost, application and performance set by the customer.

- **INSTALLATION, COMMISSIOING AND APPLICATION SOFTWARE DEVELOPMENT**

With our experience in installation, commissioning and application program development for a varied of industrial controllers.

Installation requires a thorough knowledge of the mechanical, electrical and environmental conditions of the site of installation. We help in installation by studying the site conditions and then suggesting the per-requisites for the installation thus avoiding problems that could crop up during commissioning or during production and thereby saving time and money.

Commissioning of Industrial controller is one of the most difficult and time-consuming tasks. With, some type of industrial controllers it needs thorough knowledge of the type of operation to be performed and also in-depth knowledge of the controller itself.

Real time application software development calls for a thorough knowledge of Industries and type of application; it's also calls for extreme vigilance and carefulness during development since it is real time and action takes place immediately and anything to be simulated takes place on the actual system without any opportunity for you to visualize before execution. Application software development has to be well optimized to keep cycle times as low as possible to meet time constraints of the application, loss of a few milliseconds per operation leads to a substantial reduction in the output rate.

E-Tech Solutions (Complete Automation and Electrical Solutions)

- **RETROFITTING AND REVAMPING**

Retrofitting is modernization or revamping of machines that have been in use for a long time. Although the mechanical parts of older machines are often in good condition, the electronics have undergone complete innovation to reliable and faster ones.

It is not viable to continue using obsolete equipment because in the long run not only will the equipment reduce the capability of your plant, but it will pose another problem; that is the availability of spare parts. The manufacturer is not usually producing spare parts of obsolete equipment or is producing it at an exorbitantly high cost and thus customers' production plant will always be in danger of breaking down or ends up paying huge sums which at many a times is equivalent to the cost of retrofitting the machine with a newer system. But with retrofitting, the loss of valuable production time is reduced due to ready availability of spare parts and also repairs facility from the manufacturer.

Sometimes the company that the equipment is purchased from no longer exists. Hence the customer support and technical service will no longer be at your service. In this case, E-TECH will help you to retrofit and improve the performance in production in a cost-effective way. The other advantages that arise from retrofitting are lower downtimes, faster machining cycles, greater accuracy, machining of complex parts, program storage/increased memory capacity, improved user-friendliness and possibility of networking that are standard features of control systems now a days.

The following situations implies when to retrofit:

- Increased maintenance costs
- Decreased output
- Frequent Shutdown maintenance
- Employees not working at 100% efficiency
- No spare parts available/scarce
- Unavailability of service
- Increased downtime
- Lost production

These are just some signs that suggest that you must retrofit in order to counter these problems or other potential more serious problems. It is very important to check your machines periodically and identify these problems. In this way, you can rectify them early with E-TECH expertise to get the most out of your machinery.

General Steps involved in retrofitting

- Identify the scope of work
- Collect information on the process and **E-TECH** will conducts feasibility study
- Checking of equipment condition to identify the items to be replaced
- Propose new configurations and to prepare offers for new upgrade system
- Acceptance by customer
- Establish project schedule between **E-TECH** and customer

- Development, installation and commissioning by **E-TECH**
- Handover

In **E-TECH**, there is a ready pool of qualified and experience engineers at your service. They are highly qualified due to their engineering expertise and many years of experience to provide you **System Up-gradation** Support.

- **SYSTEM INTEGRATION**

E-TECH provides powerful integration expertise from project concept to completion including all the hardware and software decisions that will maximize your process. **E-TECH** is your one source for process control and automation solutions including design, installation, start-up, training and maintenance.

Knowledge base and resources cover a wide array of controls and products:
- Total engineering and integration "know how" of Automation and Electrical products
- Data integration, networking and web application/connectivity expertise
- Demand and long-term technical maintenance services
- Custom panel design, fabrication and assembly services
- Technical and engineering staffing services
- Advanced Control and Systems Optimization

E-TECH understands and provides total connectivity of your enterprise to the plant work cells. For process control automation you can trust.

We have a competency in the implementation of SCADA, monitoring and control systems involving number of I/O and a variety of manufacturer's hardware and software. Our scope of supply has typically included the conceptual design, detailed engineering, procurement, LT panels, PLC, Drives and HMI programming and development, data management, reconciliation and reporting, networking, drawings and documentation, and installation supervision. Additionally, we have written codes on various platforms to support different vendor protocols, different communication media, and various interface standards.
Our working knowledge of hardware and software products, along with expertise in current technologies associated with PC-based automation and monitoring, is unsurpassed.

- **PANEL ENGINEERING AND WIRING**

E-TECH provides panel engineering and wiring support for customers who need only control panels to be engineered and wired. E-TECH has broad experience in this area. E-TECH has experience from engineering and wiring of small control panels to large MCC panels. The main strength of our team in **E-TECH** with regards to this activity has to maintain strictly, the quality of work and delivery time promised to our customers.

E-Tech Solutions (Complete Automation and Electrical Solutions)

- **MAINTENANCE CONTRACT**

Maximum operating efficiency is now mandatory just to maintain financial competitiveness and corporate stability. Managers and operators striving for efficient operations thus turn to maintenance contracts to better cope with impending malfunctions and prevent these from happening.

Everyone wants to maximize their plant availability, minimize their downtimes and the associated breakdowns in production and also keep the costs of servicing as low as possible. You have definitely found the right partner because **E-TECH** helps you in fulfilling not just one, but also all of the above. All these are done by our state-of-the-art equipment and qualified personnel to assist you in producing favorable results.

Having a maintenance contract can help your company in fixing a budget in your maintenance costs thus reducing in ambiguity and resulting in better planning. Not only that, **E-TECH** will ensure that **YOU** have priority in our services. We know what is the most economical way to look after your systems. Therefore, we offer individual service packages for the servicing of individual machines and complete maintenance solutions. These packages can include inspection, preventive maintenance and corrective maintenance work that are necessary and expedient for your specific needs.

Generally **E-TECH** provides maintenance contracts for PLC and Drive equipment that may include preventive corrective or emergency service but **E-TECH** can also provide you with a total solution for your plant maintenance needs. This means that **E-TECH** is able to maintain the whole plant, for you. Thus you deal with one competent partner **E-TECH**.

The maintenance contracts are usually on a yearly basis or depending on your needs. Customers will need to provide **E-TECH** with a list of system configurations to be covered under maintenance contract and the scope of services required. This is to enable **E-TECH** to provide the best package and price. Remember, your success is our victory.

- **PRODUCTION SUPPORT**

Our service department will supply your plant with supplementary manpower requirements during peak periods to support your existing staff. Compare the savings that you could make by the utilization of our fully trained and experienced staff when compared with unfamiliar agency labor. We encourage our customers to buy a quality service that they can trust and rely upon.

- **EMERGENCY / BREAKDOWN SERVICE SUPPORT**

In the life cycle of equipment, there is bound to have breakdowns due to wear and tear, no matter how reliable your equipment is. Substantial losses may be incurred caused during the lead-time. Therefore, it is very critical that emergency trouble shooting services are available when needed.

Having a fast response time would ensure engineers to get there early and thus reduce unused resources. **E-TECH** recognizes this need and thus provides our customers with

faster response time. This is what essentially set us apart from other competitors. With all these elements that **E-TECH** has, it is no wonder that we are always the best available choice you could have. In order to provide our valued customers greater savings in time and money, **E-TECH** strives to give fast and efficient services to restore normal operations in your plant.

- **FAIL SAFE SYSTEMS**

E-TECH have a competency to handle Fail safe automation system. We have a strong team of Engineers especially to handle fail safe automation system. Our Engineers are TUV certified for such application.

We provide solution for fail safe system which includes design of system, selection of hardware, software development, Integration and Testing, commissioning, documentation and site handover.

SOFTWARE DEVELOPMENT

E-TECH has a core software development team to provide software solution for Industrial Automation. We design and develop software to improve manufacturing effectiveness, order flow management and manufacturing information visibility; our software shall be developed to support interoperability among shop-floor solutions and information-sharing among enterprise applications.

The software development division of E-TECH provides software solutions for various Automation requirements.

Our software services include -

- **Development of SCADA applications**
- **Development of PLC software**
- **Development of communication Software PLC to other systems**
- **Interfacing via OPC**
- **Development of HMI software**
- **Data Acquisition, Visualization and Control**
- **Integration of PLC's and other devices on network like Profibus or Ethernet**
- **Extensive Reporting which helps to management to understand how much is the gain against the investment**
- **Development of PLC, HMI,SCADA and Audit with 21CFR Part-11 Compliance**

E-TECH has done the control engineering, commissioning and developed software for data acquisition, logging and analysis, report generation and control of test benches.

With varied experience in developing PC based control systems for processes has put **E-TECH** in a strong position in the System software development. E-TECH has developed and used device drivers, communication protocols and hardware interfaces for varied applications. **E-TECH** project implementation in this area of operation has been both
- A part of the turnkey solution and
- An individual execution based on client's need.

We achieve this goal by specializing exclusively in the management of **E-TECH** plans, by maintaining an obsession with quality and through continuous innovation. Specialization means providing quality services will be our only business.
In our pursuit of absolute quality, we will maintain a quantitative means of measuring our progress towards this objective. This system of measurement will be simple and straightforward so that our clients will always know where we stand in relationship to this goal.
We believe that in the beginner's mind, there are many possibilities, but in the expert's there are few. In our efforts to remain continually innovative, we will maintain a beginner's mind. As the **E-TECH** paradigm shifts, we will shift our perspectives to ensure that our services always meet or exceed the needs of our clients.

FACILITIES AND SETUP

Separate office space for Engineering, Design, Application software development, testing and simulation.

Factory for Automation and Drives, LT Electrical Panels, Complete Hardware Testing and Simulation with Hardware as per client requirements.
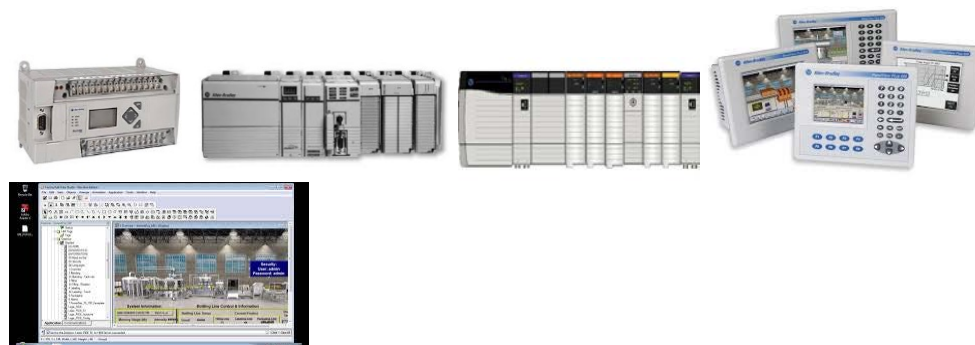
KNOWLEDGE BASE

Siemens Automation and Drives

Siemens S5 and S7 PLC, PCS-7 DCS System, Communication Modules and Protocols, HMI's and SCADA, AC and DC Drives

Category	Make	Models
PLC	Siemens	**S5 Series -** S5-90U, S5-100U, S5-115U, S5-135U, S5-155U **S7 Series -** S7-200, S7-300, S7-400, PCS7
PLC SPECIAL MODULES	Siemens	CP521, CP525, WF470, IP266, IP242, CP340, CP341, CP342-5, FM350, FM351
DRIVES DC	Siemens	6RA22, 6RA24, DC MASTER DRIVE
DRIVES AC	Siemens	MICROMASTER, MIDIMASTER, AC MASTER DRIVE VC, AC MASTERDRIVE-MC, SINAMICS G120, S120 AND MOTION CONTROL
PROTOCOLS	-	PROFIBUS, ASI, USS, ETHERNET, CAN BUS, MODBUS
OPERATOR PANELS	Siemens	OP3, OP7, OP17, OP5, OP25, TD200, TP27, TP37, TP170 Series, PROTOOL-PRO
PCS7	Siemens	DCS from Siemens - PCS7
SCADA	Siemens	WinCC (Windows Control Center)
SOFT PLC	Siemens	WIN-AC BASIS, WIN-AC RTX, SLOT PLC SYSTEM
SOFTWARE DEVELOPMENT	MICROSOFT	VC++, C++, VB, Visual Interdev
DATABASE	MICROSOFT	ACCESS, SQL SERVER

Rockwell Automation and Drives

Rockwell Micrologix, Compactlogix and Controllogix PLC Series, Panelview HMI's, FactoryTalk ME and SE SACADA software's, RSlogix-500 and RSLogix-5000 for PLC Programming, Drives PowerFlex Series.

E-Tech Solutions (Complete Automation and Electrical Solutions)

GE Automation and SCADA
VersaMax, PACSystems RX3i Controllers and distributed I/O System, Kepware, Cimplicity and iFix SCADA.

SCHNEIDER Automation
Modicon M340, Premium and Quantum PLC, Concept Engineering software

Engineering Software
For panel drawings we use software's like AutoCad Electrical, E3-Cad and   E-Plan which describes compete drawings.