

# ETEK AUTOMATION SOLUTIONS JSC ETS PROFILE

**Ver: 13** 

**Update: 20.05.2025** 

### About us



ETEK AUTOMATION SOLUTIONS JOINT STOCK COMPANY is a member of TAN PHAT ETEK cooperation and has become a pioneer in providing Total Automation Solutions in Vietnam.

Name of company

Founded year

**CEO** 

President & Founder

Parent Company

**ETEK AUTOMATION SOLUTIONS (ETEK)** 

2006

Nguyen Trong Thuong (Mr)

Nguyen Quoc Dat (Mr)

Tân Phát ETEK





## TAN PHAT ETEK ECOSYSTEM







**Technology Solutions & Equipment** 

for Environmental Protection













## **ETEK History**



Started with 6 members

**Business** expansion

**Education Training** Equipment

2006

 Area: 25m2 Employees: 6



2010

ABB has cooperated with ETEK since 2010 and now ETEK is authorized as a Provider Value by ABB.

Industrial Engaged in Automation solution business. Canon, Denso, Toyota are our first Japanese customers

Canon





**Factory Automation Solutions Education Training Equipment** 

2012





Continued to cooperate with major partners on packaging solutions and Vision

 Area: 250m2 • Employees: 48

Providing total automation solutions, being a strategic partner of many large firms, demonstrating the general contractor's ability in implementing a series of largescale projects with high difficulty.









**Factory Automation Solutions** 

**Education Training Equipment** 



2022

VALUE

**PROVIDER** 

ABB

Successful Exported to

India, Arabic, Cambodia,











Go GLOBAL

2024







2017 - 2021







Area: 3000 m2

Employees: 200+ • 2 Branches: Hà Nội, Hồ

Chí Minh

 Focusing on training activities, developing specialized

applications for each

industry

SAMSUNG

2016

UNIVERSAL ROBOTS

TO TECOU PHENT

### Infrastructure





HÀ NỘI



#### Total area: 10.000 m2

- · 4-story building
- Multipurpose area
- · Component assembly zone



HẢI PHÒNG



#### Total area: 5.000 m2

- · Representative office
- Product showroom

TP HỒ CHÍ MINH

#### Total area: 7.000 m2

- · Office area
- · Multipurpose area
- · Assembly zone

### NGHỆ AN

3

Total area: 5.000 m2

- · Representative office
- Product showroom

### **Products & Solutions**



### **FAS - FACTORY AUTOMATION SOLUTIONS**

- Assembly
- Packaging
- **Fabrication**
- **Robotic Applications**
- **Auxiliary Equipment**
- **Smart Factory**
- Intralogistics











**Plastic** /Metal /Ceramic



FMCG / Consumer /Chemical /Pharma /Medical



Textile /Footwear



General **Industries** 



**3C** Computer Communication, Consumer **Electronics** 



**Ecommerce** 



) School

- University, College
- Vocational school
- · High school



Building



**Tourist** area



Home



Hospital

### **ETS - EDUCATION TRAINING EQUIPMENT**

- Training equipment for Universities, Colleges and Vocational schools
- **Automation Training**

### LAS - LIFE/UTILITY AUTOMATION **SOLUTIONS**

- Automated Parking Solutions (Car, Motorbike)
- **EV** Charger
- Vending Machine
- Lifting equipment



FAS

AUTOMATION

SOLUTIONS

LAS

ETS



### **Revenue & Personnel**

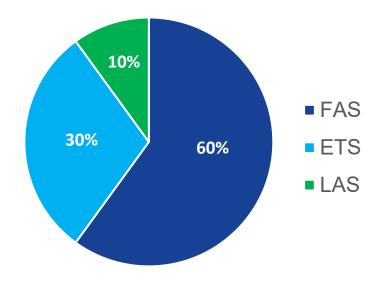


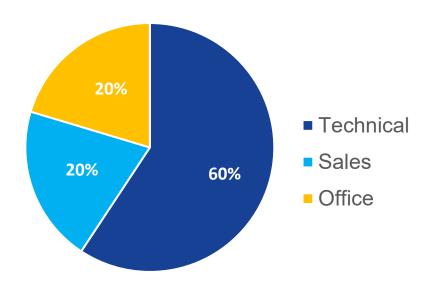
### Revenue (Million USD)





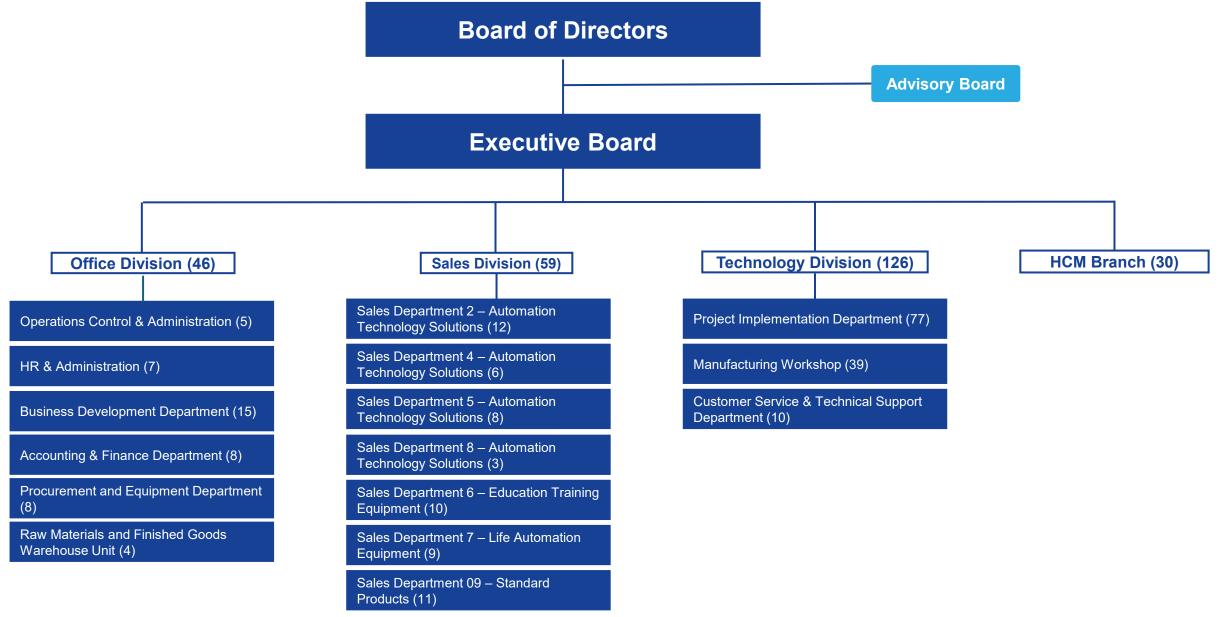






### **Organizational Structure**





### **Technical resources**

## **\$140+**

- Mechanical Design Engineer → 32 🛱
- Installation → 41 🛱
- Services 11 🖟

## Typical ETEK Engineer Profile

- 5+ Years experience
- Training and hands-on experience on Projects of ETEK and ETEK Training and Application Development Center
- The Engineering lead of at least 4 major projects



## **Management and Engineering Design Tools**



**ETEK management system** 







**Engineering design tools** 





















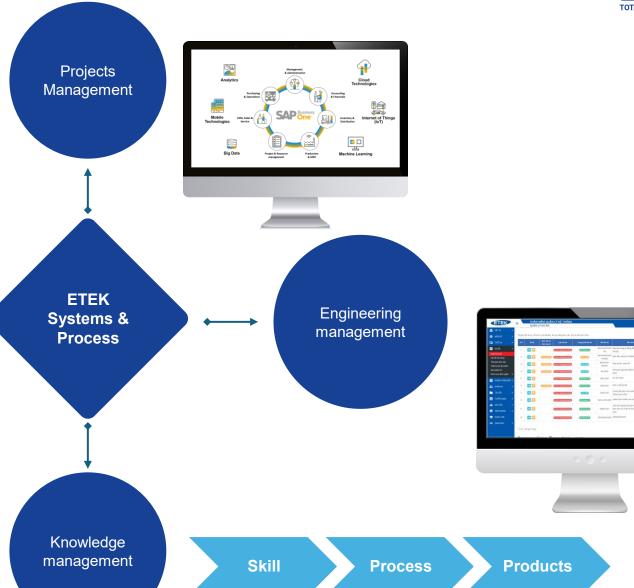


## **Systems & Process**









CERTIFICATE OF REGISTRATION

ISO 9001:2015

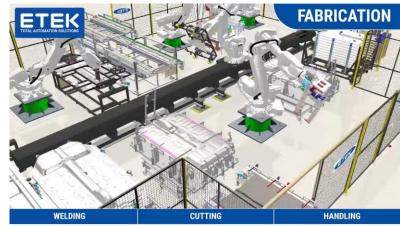
**ETEK AUTOMATION SOLUTIONS** JOINT STOCK COMPANY

Manufacture, Trade and Provision of Technical Advices of Electric and

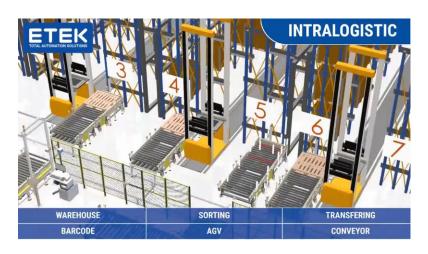
## 3D Simulation Tool

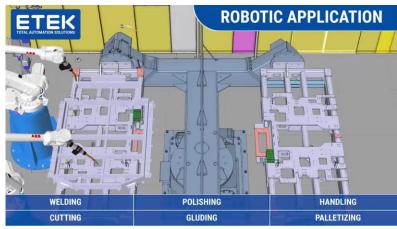








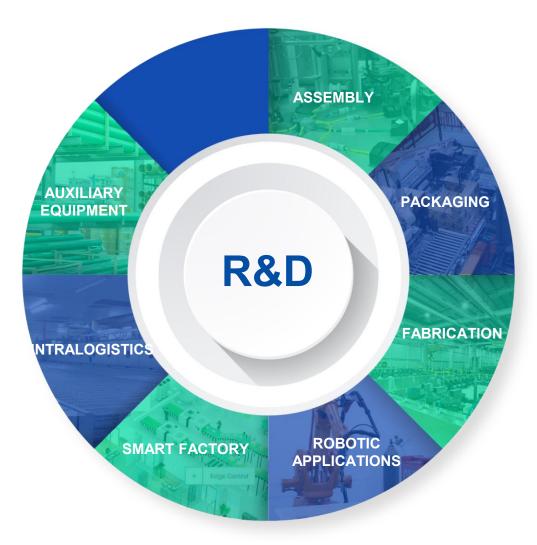






## Training and Application development center





















### **Partner**































**MISUMI** 

























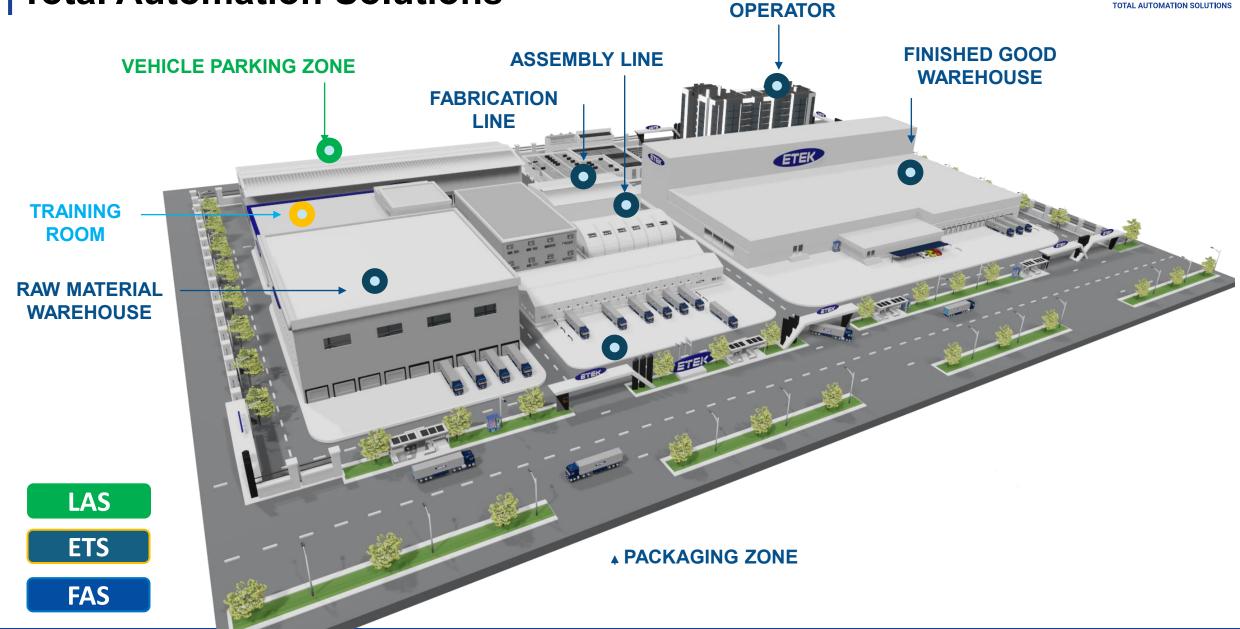






## **Total Automation Solutions**





## **Assembly**



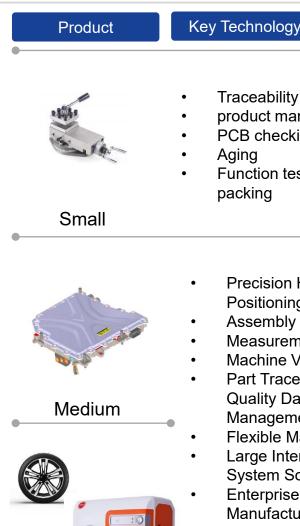


#### **Overview**

Our knowledge of assembly techniques, using a wide array of components, has served turnkey projects in some industries. These include projects that have production volumes from 25,000 to 450,000 parts per annum, and fully manual, semi-automatic, and fully automatic processes.

#### **Customer & Partner**





Large

## Key Technology



- product management
- PCB checking,
- Aging
- Function test. packing

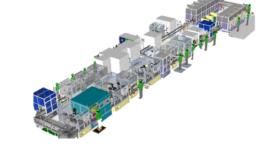


Layout

- **Key Process**
- 1. Gluing
- 2. Inserting
- 3. Welding / Soldering
- 4. Auto screw fastening
- 5. Auto rivetina
- 6. Pick and place



- Laser Marking
  - Positioning
- Press-Fitting
- Gluing
- Assembly & Coating
- Vision
- Mounting



Flexible Manufacturing

Machine Vision

Part Traceability &

Precision Handling &

Assembly & Joining

Measurement & Testing

Positionina

Large Interlinked System Software

**Quality Data** 

Management

Enterprise Manufacturing Systems Integration



- Sorting
- Insert
- Leak test
- Vision check
- Cleaning
- Metal Plate Top insert
- Screwing

### **Fabrication**





#### Overview

Etek has implemented hundreds of projects related to manufacturing in metal and plastic details, including some typical projects like:

- **Automotive Aluminum Parts** Fabrication Factory,
- **EV Battery Top Cover** Fabrication Line,
- **EV Battery Housing Fabrication** Line,
- **Powder Coating Automotive** part,
- **Automotive Plastic Parts** Injection Molding Factory,
- **Aluminum Extrusion Factory**

#### **Customer & Partner**





### Key Technology



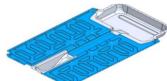
- CNC Machining
- Rim spray cleaning
- Powder coating
- Wet panting



Layout

#### **Key Process**

- 1. Melting & **Furnaces**
- 2. Die casting
- 3. X-ray
- 4. Shot Blasting
- **CNC Machining**
- Cleaning
- 7. Panting



- Spot welding
- CNC
- Gluing
- Leak test



- 1. Gluing 1st
- Spot welding
- Gluing 2rd
- 4. Glue curing
- Leak test
- 6. Dimension check



Metal

- MIG welding
- Fiction welding
- Ultrasonic cleaning
- Riveting
- CNC machining
- Leak test



- Cleaning
- TIG welding
- **CNC Machining**
- Friction welding
- Riveting
- Cleaning
- 7. Leak test



### **Fabrication**





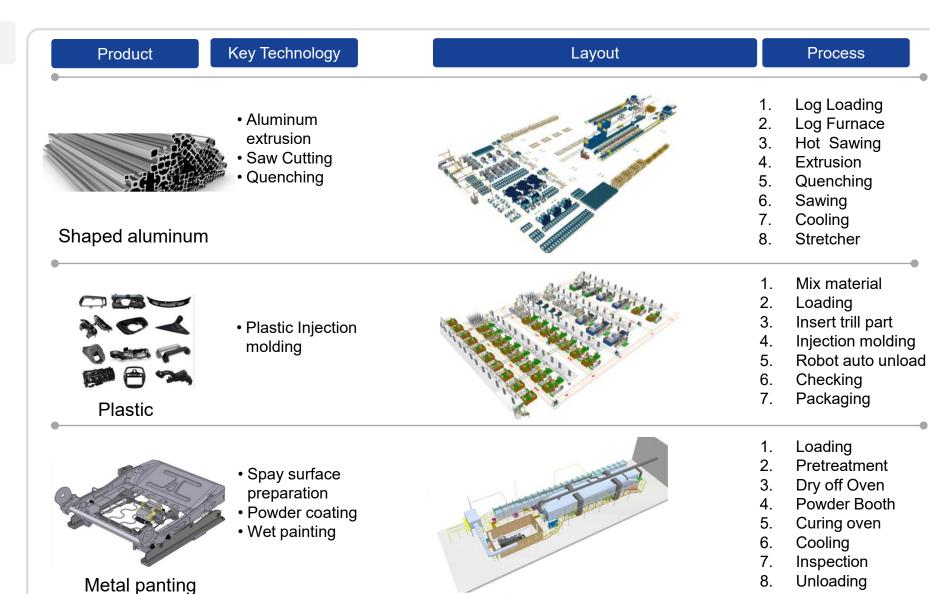
#### **Overview**

With our experience, we are confident in having capacity in terms of technical expertise, technology, and project implementation ability to provide total solutions for manufacturing metal parts, plastic parts in for most fields such as.

- Automotive & Components
- Plastic/Metal
- FMCG consumer/chemical
- 3C computer, communication Electronic

#### **Customer & Partner**





## **Reference Projects - FAS**

#### ETEK TOTAL AUTOMATION SOLUTIONS

### **Assembly**



Electric Vehicle Power
Assembly line



Battery Packs assembly line



Electronic component assembly line



Water heater assembly Line



anti fog glue dispensing machine

#### **Fabrication**



Aluminum Die Casting Factory



Automatic welding line



Automatic Painting and Coating line



Automatic Plastic Gate
Cutting Machine



Exporting The Paints Line to India

















TÂN PHÁT ETEK

## Packaging solution





#### **Overview**

There are many things you may consider while choosing your packaging partner.

- Quick response time enhances equipment uptime
- Local project management teams
- Provide solutions at optimal cost through license manufacturing strategy where possible
- Long term partners to customers, not mere suppliers

#### **Customer & Partner**



#### Key Technology **Product**



- Computer vision
- Robot pick and place
- Data acquisition
- WISE-PaaS



Layout



- Bottle feeding
- Filling
- Wrapping
- Sorting
- Data printing
- Inspection





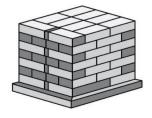
Primary packing

- Robot pick and place
- Flexible conveyor
- Code



- Case erecting
- Case packing
- Case sealing
- Label printing
- Weigh checking

Secondary packing



Tertiary packing

- Robot palletizer Servo driven



- Palletizing
- Stretch wrapping
- Top covering
- Corner inserting
- Pallet labeling



### **Reference Projects - FAS**



### **Primary Packaging**



Robotic Bottle Unscrambler



Tea Bags Packaging



Robotic Case Packer Machine

### **Secondary Packaging**



Gypsum Board Packing Line



Cell Pin Packaging
Production line

### **Tertiary Packaging**



Depalletizer



Palletizer



Wrapping machine



Automatic Bagging Line



Dây chuyền đóng gói nước giải khát



















TÂN PHÁT ETEK

## **Intralogistics**





#### **Overview**

ETEK offers extensive expertise in Material Handling solutions, employing robots, gantries, conveyors(on floor/ overhead), EMS (Electrified monorail system), RGV, AGV's, high bay warehouses with rack supported buildings in precoated sheets/insulating panels and other solutions to meet the application and our customer's needs. Our turnkey solutions cover the following area

#### **Customer & Partner**



#### **Product**

#### Key Technology

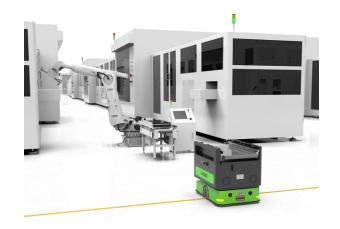
#### Layout

#### **Key Process**

#### **Production Line**

Raw material

- Smart Conveyor.
- AGV: Slam, Qr Code
- AMR



- . Handelling
- 2. Bin-picking
- 3. Order picking
- l. Pick & place
- 5. Pallet storage
- 6. Pallet transport

- AS/RS
- Vertical
- Stacker Cranes
- Software & Control Solutions
- Totes, Bins & Tray Storage
- Smart Conveyor.
- AGV: Slam, Qr Code
- AMR



- 1. Bin-picking
- Container emptying
- 3. De-stacking
- 4. Order picking
- 5. Pick & place
- 6. Stacking
- 7. Truck loading & unloading
- 8. Other handling & picking
- 9. Pallet storage
- 10. Pallet transport

## **Smart Factory**





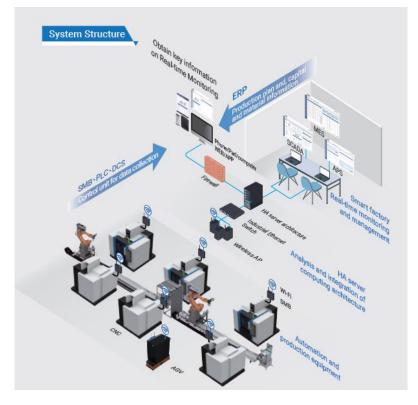
#### **Overview**

Develop a vision and roadmap for smart factory application. Data in the ecosystem is the key to adding value.

#### **Customer & Partner**



#### Layout



#### Maintenance reminder

- Maintenance checklist
- Maintenance intelligent alarm

#### Analysis error and feedback

Error alarm and analysis

#### **Power System Monitor**

- · Time period energy analysis
- Peak power consumption statistics
- Optimal contract capacity suggestion

#### Function

#### Systematic management

- Material and warehouse management
- Order management
- Production recipe management

#### Al production scheduling

- · Automatic scheduling
- · Order and production scheduling

#### **Job Report System**

- Designing job report system by user process
- Controlling production status according job report system

#### **Tracking WIP real-time status**

- Input and output statistics
- · Progress management
- Yield statistics

### Customized board with real-time display for factory production status

#### Real-time monitoring equipment information

- Equipment OEE
- Health diagnosis
- Important real-time information



## **Reference Projects - FAS**



### **Intralogistics**



Automated storage and retrieval systems



**Smart Conveyor System** 



**Automation Guided Vehicle** 

### Automotive & Components





### **Smart Factory**



Manufacturing Execution System - MES

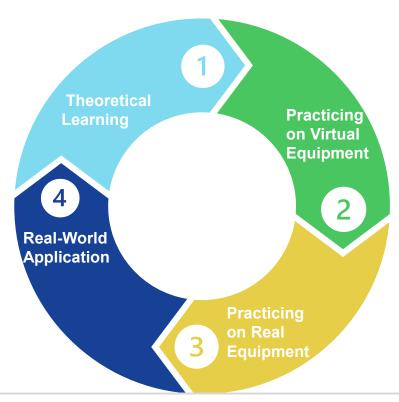


EcoStruxure™ Augmented **Operator Advisor** 

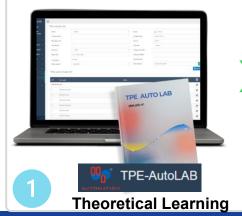


## ETEK Training Solution





- With our extensive experience in three key fields (Industrial Civil Educational Equipment), we provide product sets that allow students to gain hands-on experiences closely resembling real factory environments. Through these experiences, students acquire knowledge and practical skills that align with the needs of businesses and manufacturing plants.
- ETEK offers training products in the form of integrated models featuring components from globally renowned brands, suitable for research and practical applications (such as component connectivity and equipment protection). These enable students to experience and verify fundamental principles on real equipment in a training environment.
- Our product lines and software solutions support the connection of circuit principles, measurement, and testing on virtual devices (including schematic diagrams, 2D models, and 3D simulations).
- ETEK provides products designed to support fundamental theoretical learning, including lectures and diverse multiple-choice questions.













**Practicing on Virtual Equipment** 

**Practicing on Real Equipment** 



**Real-World Application** 

## ETEK Training Solutions

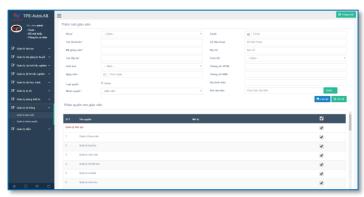


**LEVEL I** 

#### **Theoretical Research**

ETEK provides cloud-based solutions to support fundamental theoretical research, including lectures and a diverse set of multiple-choice questions.





### LEVEL III

#### **Experimenting on Real Equipment**

Through training models, students can interact directly with real equipment, gaining hands-on experience with actual hardware.





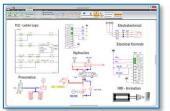


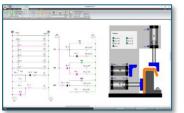


#### LEVEL II

#### **Experimenting on Virtual Equipment**

Students use simulation software to test principles, circuit diagrams, and system programming on virtual devices to verify the theories they have learned and experience circuit operations, as well as measure different parameters.











#### **LEVEL IV**

### **Real-World Application Development**

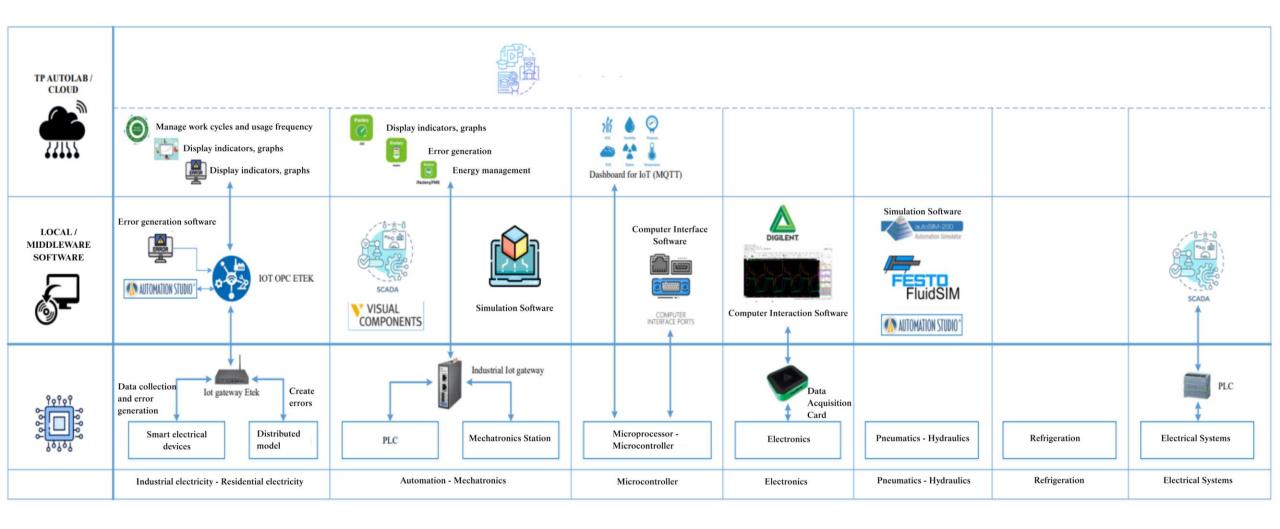
Students can practice skills such as assembly, wiring, programming, and operation, simulating real-world conditions as if working with actual factory equipment and machinery. (Examples include **clean rooms**, **chemical environments**, **high-altitude operations**, **etc.**)





## **ETEK Technology Layers**





## **Product Categories by Technology for Research / Experimentation**





1	Pneumatics
2	Renewable Energy
3	Control Engineering
4	Electrical Systems
5	Technical Science
6	DC Motors
7	Environmental Control
8	Fluid Mechanics
9	Material Testing and Properties

10	Mechanical Structures
11	Process Control
12	Basic Principles of Physics
13	Mechanical Dynamics
14	Thermodynamics
15	Automation   Industry 4.0
16	Microprocessors / Microcontrollers
17	Electronic Circuits

### **Product Categories by Technology for Skills Training**





- **Electrical Mechanics**
- Electronics 2
- Electrical Automation
- Pneumatics Hydraulics
- Refrigeration 5

- **Experimental Manufacturing**
- Support Equipment
- **Power Generation and Transmission**
- Microprocessors and Control Systems

## **Mechatronics Products**



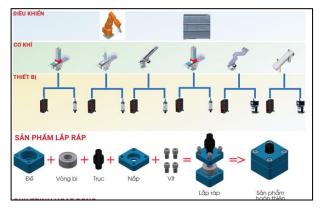


### **Key Advantages**

- Realistic simulation: The training system is designed to accurately simulate the production processes in real factories, from assembly lines to automatic control systems, helping students experience the real working environment right from the training period.
- Diverse applications in industry: From automobile assembly, electronics to food production, the simulation system can be applied to many different industries, helping students grasp the specific requirements of each field.



### Concept



Concept of 7-axis robot training model

## 1.

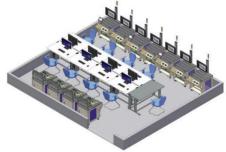




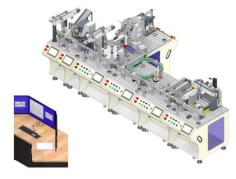




7 axis robot training model



Smart factory model



I4.0 Mechatronics Training System

## **Electrical-Automation Products**



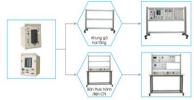


### **Key Advantages**

- Practical Training System: Accurately simulates the working environment in industry, helping students directly access modern electrical equipment..
- Diverse practice models: Provide many PLC programming practice sets to meet different training levels.
- Upgrade support: Easily expand and upgrade with additional modules, keeping the training system up to date with the latest technology.



### Concept













PLC Programming Training Kit



PLC Installation and Programming Training Kit



Electrical Installation
Practice Kit



Smart Home Practice Kit

## **Electronics Products**



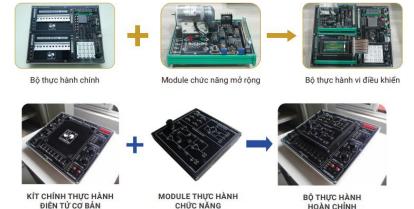


#### **Key Advantages**

- Comprehensive training system: Provides a full range of practice sets from basic to advanced, including microcontrollers, digital circuits, IoT, AI, and image processing...
- **Realistic simulation:** Practical simulation models closely resemble real-life industrial applications, helping students approach technology intuitively.
- Multi-industry support: Suitable for many fields such as automation, embedded control, Internet of Things (IoT), and artificial intelligence.



#### Concept



ноди снінн







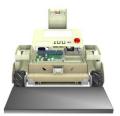
Microcontroller training device



Digital Circuit Training Equipment



**IOT Trainer Using** Arduino/ESP32



Automated-guide robot model applying AI, image processing

## **Refrigeration Products**



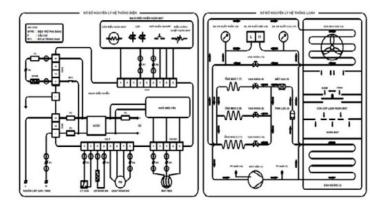


### **Key Advantages**

- Flexible design: Easy to upgrade and expand with additional modules, helping the system stay in line with the development of refrigeration technology.
- Diverse practice models: Including industrial air conditioning systems, central air conditioning, AHU air conditioning, suitable for many training levels.
- Advanced technology: Using modern components and equipment, helping students access the most advanced technology in the refrigeration industry.



### Concept









Industrial air conditioning training model



Central air conditioning training model



AHU training model

## Typical functional classroom





IOT AND SMART FACTORY
TRAINING DEPARTMENT

- Training in design, manufacture and operation of intelligent machinery and equipment.
- Learn about automatic control systems, programmable logic controllers (PLCs), industrial robots.
- Practice control programming, design of integrated mechatronic systems.



BASIC ELECTRONICS
TRAINING DEPARTMENT

- A place to research and practice electronic components, microchips, digital circuits, and microcontrollers.
- Learn about the **operating principles**, design, programming,
  and applications of **microcontrollers in industry**.
- Practice assembling and testing electronic circuit boards.



PLC TRAINING DEPARTMENT

- Training on civil and industrial electrical systems, operating principles and maintenance.
- Practice connecting, installing electrical systems, measuring and checking electrical safety.
- Learn about power supply systems, motor control and industrial electrical cabinets.



- Learn about the operating principles and applications of industrial refrigeration and air conditioning systems.
- Practice installing, operating, maintaining and repairing refrigeration systems in production and civil use.
- Learn about advanced refrigeration technologies and optimize system performance.



## **Featured Projects**



No.	Projects	Customer	Year	Official Development Support
1	Providing specialized training equipment for electricity and electronics to technical training institutions in Cambodia, under the program of the Ministry of Labor and Vocational Training of Cambodia	Ministry of Labor and Vocational Training	2023 - 2024	ADB ASIAN DEVELOPMENT BANK
2	SAHEP – World bank (Support for Autonomous Higher Education Project for Vietnam)	Hanoi University of Science and Technology	2021	THE WORLD BANK
3	Providing training equipment for the Faculty of Mechanical Engineering and the Faculty of Electrical and Electronic Engineering under the project "Skills and Knowledge Program for Inclusive Economic Growth" (SKIEG)	Vinh University of Technology Education & Vinh University	2021 - 2022	ADB ASIAN DEVELOPMENT BANK
4	Providing training equipment for the <b>Faculty of Electricity</b>	Hanoi University of Industry	2020	
5	Providing vocational training equipment for the Faculty of Refrigeration and Air Conditioning Technology	Trường Cao đẳng Nghề Cần Thơ	2022	
6	Building a Training Center Simulating a Real-Life Working Environment for an <b>Automobile Assembly Line</b>	Công ty Sản xuất Ô tô tại Ả Rập	2024	

## **Featured Projects**



No.	Projects	Customer	Year	Official Development Support
7	Vocational <b>Training Project</b> Sponsored by Project Management Unit/ General Department of Vocational Education Supply, installation, operation and auxiliary services for <b>Automotive Technology</b>	Nha Trang College of Technology	2018	german cooperation DEUTSCHE ZUSAMMENARBEIT
		Vietnam - Germany Technical College in Ha Tinh		
8	Vocational Training Project Sponsored by Project Management Unit/ General Department of Vocational Education Automotive Technology Training Equipment	Dung Quat Technical College	2017	AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT
		Vietnam-Soviet College of Construction and Electromechanics		
	Vocational Training Project Sponsored by Project Management Unit/ General Department of Vocational Education Equipment for Automotive Technology	Yen Bai Vocational College	2016	ADB ASIAN DEVELOPMENT BANK
9		Can Tho Vocational College		

## **Featured Projects - ETS**





Distributed control system



**Smart Devices** 



Pneumatic Equipment Training Room



Electrical equipment lab



Hydraulic Equiment Lab



Hydraulic equipment practice laboratory



Flexible Manufacturing
Systems



Industrial Robot Practice
Station



Robotics Lab



Electrical safety training equipment







































### **Car Parking**





#### **Overview**

ETEK is the leading company in the field of developing automatic parking systems. With advanced technology and a team of experienced experts, we have provided customers with advanced smart parking solutions, with a scale of up to 1000 parking locations and received many good feedback from customers.

#### **Customer & Partner**



#### **Products**

#### Key Technology

#### Layout

#### **Key Process**



**Automatic Parking** Puzzle



- 1. Automatic door
- 2. Large car carrier on the 1st floor
- 3 Plinth
- 4. Large car carrier on the 2st floor
- 5. Safety fences
- 6. Horizontal beam



Automatic parking Robocar



- Steel frame
- 2. Vehicle compartment
- 3. Cart
- Car carrier deck
- 5. Ray navigation



Automatic parking Robotic



- 1. Lifting machinery
- 2. Ray navigation
- 3. Vehicle clamping robot
- Cart
- 5. Vehicle compartment



## Reference Projects – LAS



### Fully automated parking system



Robotic technology parking system



Robocar technology parking system

### **Management software**



The controlling system



EcoStruxure<sup>™</sup> Augmented **Operator Advisor** 

























## **Semi-automated parking system**



Puzzle technology parking system



Puzzle technology parking system



Puzzle technology parking system



Puzzle technology parking system

## Reference Projects – LAS



#### Car lift



Scissor Lifts



4-pillar lift



2-pillar lift



1 post lift





























### **Motorcycle lift**



2-storey motorbike parking svstem

### Car turntable



Turntable parking system

### **EV** Charging



EV Charging systems

### **Lock parking** position



Lock parking position

## Vending Machine















# **Collaborative Activities**























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