



COMPANY PROFILE

S.S. Electric & Automation

S.S. Electric & Automation Ltd., Part.

A complete industrial electrical & automation solutions provider

Design · Installation · Programming · Maintenance — by engineers with 20+ years of experience

PLC

HMI

SCADA

IIoT

AI Vision

Solar Cell

Weighing Scale

Control Panel

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Inside This Profile

20+

Years Experience

100+

Projects Completed

98%

Client Satisfaction

4

Regions Served

01

About Us & Awards

Company · Vision · Awards · Industries Served

03–04

02

Our 8 Services — Overview

Services Overview

05

03

Work Samples by Category

IIoT · PLC/HMI · SCADA · Electrical · Weighing · Solar · Machine Upgrades · AI/Web

06–13

04

5 Factory Monitoring Systems

OEE · Boiler · EMS · Vibration · SolarVue

14

05

Smart Service Center (OEM)

After-sales machine monitoring — Boiler · Chiller · Air Compressor

15

06

Machine Monitoring

In-factory machine monitoring — OEE · Downtime · Real-time

16

07

Work Standards & Expertise

Work Process · Expertise · Brands

17

08

Contact Us

Contact · QR · Location

18

S.S. Electric & Automation

Total Automation & Energy Solutions

IoT · PLC · HMI · SCADA · Solar

CODESYS · HTML5 SCADA · WEIGHING
ELECTRIC CONTROL · SOLAR CELL · AI



Industrial Electrical Experts Trusted by Factories Nationwide

S.S. Electric & Automation Ltd., Part. has delivered complete industrial electrical services for over 20 years. With a team of skilled engineers and technicians across multiple disciplines, we design, install, program and maintain electrical systems, automation control and IoT systems for factories nationwide — covering control panels, PLC/HMI/SCADA programming, online monitoring systems, solar energy and AI solutions for Industry 4.0. Our key strength is delivering everything **end-to-end with a single team**, giving clients fully integrated systems with reliable long-term support.

OUR VISION

“To be the automation partner factories trust — with solutions designed from the real floor, cost-effective, genuinely usable, and supported for the long term.”

Founded / Experience **20+ Years**

Installations **100+ Projects**

Head Office **Ban Phai · Khon Kaen**

Scope of Work We Cover

- ✓ Electrical systems & control panels (MDB / Control / Capacitor)
- ✓ PLC, HMI and SCADA programming
- ✓ Industrial IoT & AI Vision
- ✓ Industrial weighing systems
- ✓ Solar cells & renewable energy
- ✓ Machine modification & upgrades
- ✓ Web apps & analytics dashboards

Industries We Serve



Foundry / Metal

Foundry & Metal



Rice Mill / Food

Rice Mill & Food



Concrete / Materials

Concrete Plant



Solar Power Plant

Solar Plant

Quality Recognized by Client Awards



Top Maker Award 2017 First Runner-up

First runner-up at the 2017 Top Maker Award competition.



Top Maker (S.Q.C.D.E) Nishikawa Tachiplalert Cooper Ltd.

Award for Safety, Quality, Cost, Delivery and Environment.

Why Factories Choose Us

Engineers with 20+ years of experience

Electrical, automation and software expertise within one team

End-to-end, all in one place

Design → installation → programming → maintenance, no need to juggle multiple vendors

Designed from the real floor

We survey actual requirements and tailor to your machines and KPIs

100+ real projects delivered

Across every region of Thailand, in diverse industries

Long-term ongoing support

After-sales service, spare parts and continuous maintenance

Modern technology

IIoT · AI Vision · Cloud Dashboard for Industry 4.0



Complete Solutions Across 8 Service Areas

From design, installation and programming to maintenance — covering every need of an industrial plant. See real work samples for each category on the following pages.



IIoT Systems

INDUSTRIAL IOT

Connect machines to the cloud for real-time monitoring and data analysis.



PLC & HMI

PLC & HMI SYSTEMS

PLC programming and HMI development for automation control.



SCADA Systems

SUPERVISORY CONTROL

Centralized production monitoring and control with full data logging.



Electrical Systems

INDUSTRIAL ELECTRICAL

Design/installation of control panels, power distribution and protection.



Weighting Scale

WEIGHING SYSTEMS

Industrial weighing systems with automatic data logging and reporting.



Solar Cell

SOLAR ENERGY

Solar installations — On-Grid, Off-Grid and Hybrid.



Machine Modification

MACHINE UPGRADES

Upgrade existing machines with automation to boost productivity.



AI + Web Apps

AI & WEB APPLICATIONS

Web apps and AI systems for Industry 4.0, including dashboards.



Pages 06–13 present **6 real work samples per category** with the capabilities of each service, so you can see exactly what we deliver.

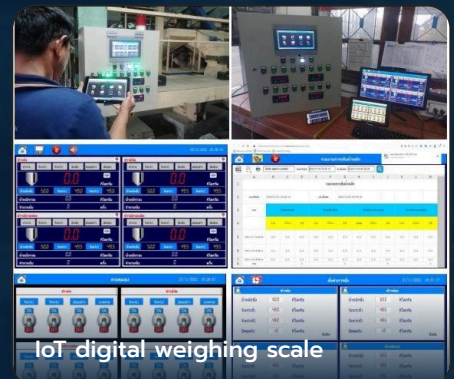
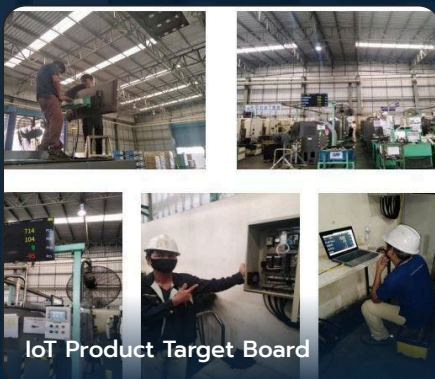
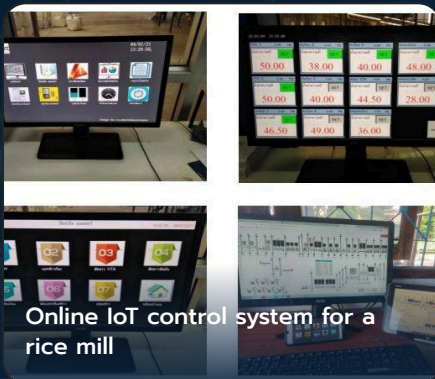


IIoT Systems

Connect machines and sensors to the cloud to monitor production status in real time, store historical data, analyze trends and trigger automatic alerts — so the plant can see its data anytime, anywhere from a phone.

- **Connect PLC / sensors to the cloud** (Modbus, MQTT, OPC-UA)
- **Automatic alerts** via LINE / Telegram
- **Real-time dashboard** + historical data logging
- **Automatic summary reports** daily / monthly

Real Work Samples



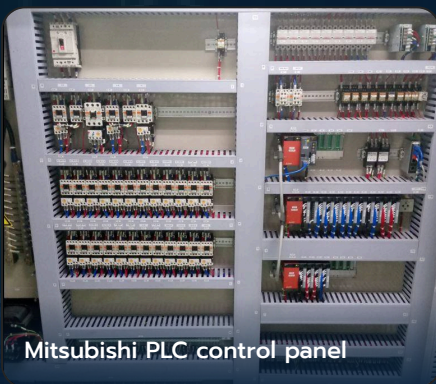


PLC & HMI – Automation Control

PLC programming and HMI screen design to control machines and production processes. We support multiple PLC brands, with safety systems and control logic tailored to each plant's operation.

- **PLC programming** Siemens · Mitsubishi · Omron
- **Machine control logic** + safety systems
- **HMI / touchscreen design** easy to operate
- **Edit / upgrade existing programs** & commissioning

Real Work Samples



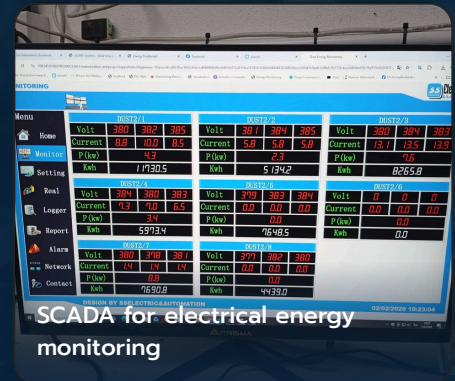
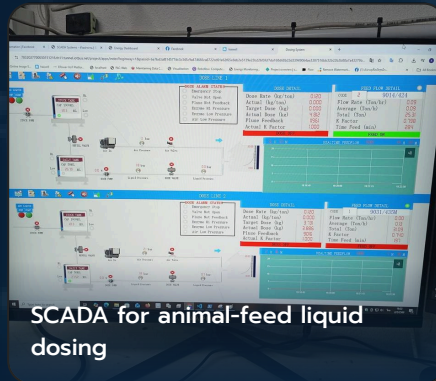
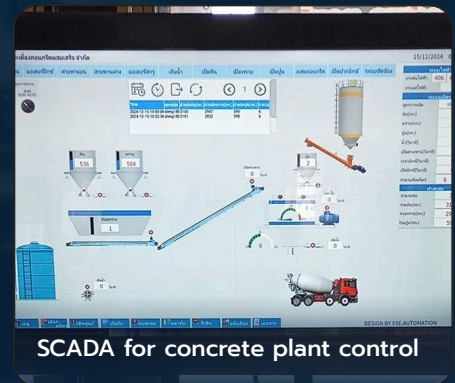
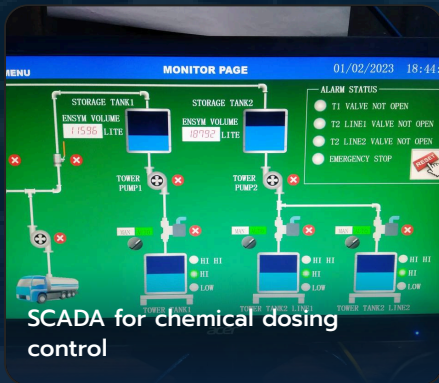


SCADA — Centralized Monitoring & Control

Design and installation of SCADA systems to monitor and control production processes from a central point — with trends, alarms, event logs and database logging — enabling multi-station control and complete reporting.

- **Centralized monitoring** across stations / lines
- **Recipe & Batch Control** for processes
- **Trend · Alarm · Event Logging** complete
- **SCADA ↔ PLC ↔ Database** integration & reports

Real Work Samples





Industrial Electrical Systems & Panels

Design and installation of industrial electrical systems — from MDB, control and capacitor panels to power and control wiring, protection systems and power factor correction — all to safety standards.

- **Design / build panels** MDB · Control · Capacitor
- **Protection & Power Factor** improvement
- **Power & control wiring** to standard
- **Inspection / maintenance** of plant electrical systems

Real Work Samples





Industrial Weighing Systems

Design and installation of industrial weighing systems — from truck scales and mixing tanks to conveyor weighing — with data logging, automatic ticket printing and integration to databases / ERP.

- Load cell & weight indicator installation
- Data logging + automatic ticket printing
- Truck / tank / conveyor weighing systems
- Database / ERP integration & reporting

Real Work Samples





Solar Cell & Renewable Energy

Design and installation of solar power systems for factories and buildings — On-Grid, Off-Grid and Hybrid — with generation monitoring and Performance Ratio calculation to cut energy costs over the long term.

- Design On-Grid / Off-Grid / Hybrid
- Generation monitoring + Performance Ratio
- Rooftop & ground-mount installation
- PEA / MEA permit handling

Real Work Samples





Machine Modification & Upgrades

Upgrade existing machines into automated systems — converting relay control to PLC, adding sensors, servos and inverters to increase production speed, reduce downtime and extend machine life without buying new equipment.

- Upgrade existing machines to automation
- Add sensors / servos / inverters
- Convert relay control → PLC
- Increase capacity & reduce downtime

Real Work Samples



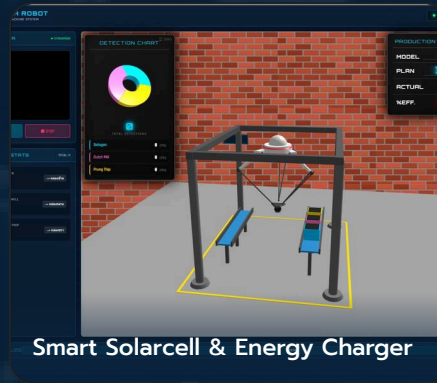
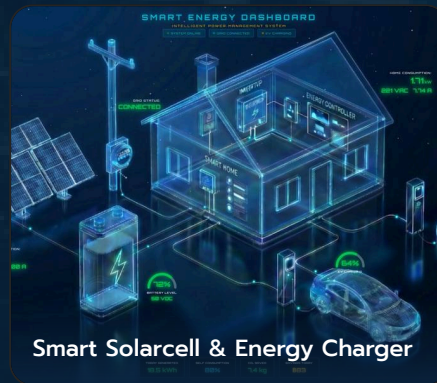


AI + Web Apps for Industry 4.0

Develop web applications and AI systems tailored to the plant — from analytics dashboards and AI Vision for detection / counting / sorting, to Thai-language AI chatbots — integrated with IoT systems and cloud databases.

- **Web app / dashboard** built to requirement
- **AI Vision** detection / counting / sorting
- **Thai AI chatbot** customer replies / data summaries
- **IoT + cloud database** integration

Real Work Samples



5 Factory Monitoring & Surveillance Systems

All five systems share the same architecture — PLC + Server + Dashboard + LINE/Telegram alerts — installed, maintained and trained by a single team, designed from the plant's real requirements.



OEE Dashboard LIVE

Production Efficiency Tracking

Measures Availability x Performance x Quality in real time, captures downtime, analyzes the Six Big Losses, alerts via LINE.

6 FBF machines

A x P x Q · 24/7

Thai AI Chatbot



Smart Boiler LIVE

Boiler Monitoring + AI

Real-time boiler surveillance — steam, fuel, feed water, flue gas — with AI efficiency calculation.

14 channels/boiler

96 snapshots/day

Fuel oil / LNG



Foundry EMS LIVE

Power & Energy Monitoring

Monitors the plant's electrical system from the 22kV source to every production line, to MEA/PEA TOU standards.

22 kW / 1,250 kVA

7 production lines

25+ parameters



Smart Vibration LIVE

Motor Condition Monitoring

Monitors motor vibration before failure — 3-axis velocity + temperature — to ISO 10816/20816.

13 motors · 2 plants

52 channels

3D Digital Twin



SolarVue LIVE

Solar Plant Monitoring

Monitors from the panels' DC side through every inverter to the PEA 22kV grid connection point.

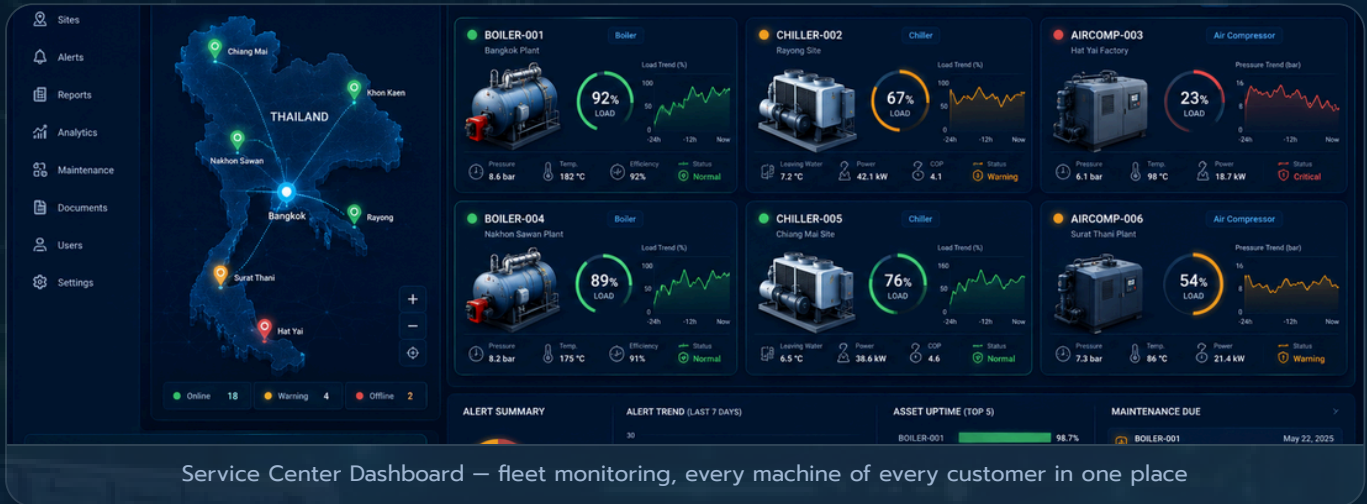
4.26 MWp

71 Sungrow SG60KTL

Performance Ratio

Smart Service Center — After-Sales Machine Monitoring

For machine manufacturers / dealers — embed IoT in the machines you sell (Boiler · Chiller · Air Compressor), then monitor every machine of every customer from one central place. Alert before failure, raise service tickets, and turn after-sales work into recurring revenue.



1

Machine

Sensors / PLC in the sold machine, one-way secure

2

Connect

IoT Gateway to the cloud, multi-site ready

3

Service Center

Seller-side fleet dashboard + service tickets

4

Customer

Mini dashboard + alerts on the customer side

Core Features

- ▶ Fleet Dashboard — every machine, every customer
- ▶ Real-time per-machine monitoring
- ▶ Preventive maintenance by running hours
- ▶ Predictive alerts before failure
- ▶ Service tickets + per-machine repair history
- ▶ Warranty / service-contract tracking
- ▶ Spare parts / consumables alerts
- ▶ AI summary + LINE / Telegram alerts

Equipment Supported

- ▶ 🔥 Boiler — steam / flue gas / fuel / efficiency
- ▶ ❄️ Chiller — water temp / refrigerant pressure / current
- ▶ 🌀 Air Compressor — air pressure / temp / load

Benefits for the Seller

- ▶ Build recurring service revenue
- ▶ Retain customers, reduce downtime & churn
- ▶ Compete on service + white-label as your brand

Machine Monitoring — In-Factory Real-time Monitoring

Connect your production machines to the system — see every machine's status, OEE and downtime on a real-time dashboard, with AI analysis, alerts when a machine stops, and automatic reports. Supports every PLC brand.



1

Field

Connect PLC/sensors at each machine (any brand)

2

Server

Store data, compute OEE/downtime + AI

3

Dashboard

OEE · machine status · real-time trends

4

Notify

LINE/Telegram alerts + automatic reports

● Core Features

- ▶ Real-time machine status (run/stop/fault)
- ▶ OEE — Availability × Performance × Quality
- ▶ Downtime with stop-reason capture
- ▶ Predictive alerts before failure
- ▶ Automatic reports + AI summary
- ▶ Any PLC brand (MQTT/Modbus/OPC-UA)

● Monitor Any Machine

- ▶ ⚙️ CNC / production machines
- ▶ 📺 Motors / conveyors
- ▶ 🤖 Robot arms / automation
- ▶ 🏭 Utilities (boiler/compressor/chiller)

● Results

- ▶ Higher OEE / output · less downtime
- ▶ Decisions driven by real-time data

Work Standards & Expertise

1

Site Survey

Gather the plant's real requirements, machines and KPIs

2

Design

Design the system, panels and program, with a quotation

3

Install

Build panels, wire, program and test the system

4

Training

Hand over and train the client's team to operate it

5

Maintenance

After-sales service and continuous maintenance

Specialized Expertise

- ▶ PLC programming: Siemens · Mitsubishi · Omron
- ▶ HMI / SCADA across multiple platforms
- ▶ Industrial IoT & Cloud Dashboard
- ▶ AI Vision & Web Application (Industry 4.0)
- ▶ MDB / Control / Capacitor panels
- ▶ Solar On-Grid / Off-Grid / Hybrid
- ▶ Weighing systems & automatic reporting

Standards & Warranty

- ▶ Designed to electrical safety standards
- ▶ System tested before handover (commissioning)
- ▶ Installation warranty and after-sales service
- ▶ Spare parts and ongoing support

Equipment Brands We Use



CONTACT US

Ready to Advise Your Project

Get in touch with our engineering team to discuss your project, request a quote, or have us survey your site and prepare a free proposal.



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