

KINEMATICS

A U T O M A T I O N



Approved System Integrator

LV Motor Starters

Rockwell Automation S.E.A.

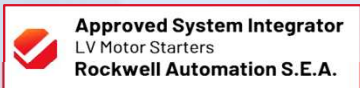


Approved System Integrator

Motion Control

Rockwell Automation S.E.A

Rockwell
Automation



we are strongest on automation field.

More than 15 years professional support for Allen-Bradley product.
“Expertise” Certified from Rockwell Automation at department of CSM (Customer support maintenance)

Motion control / PLC Programming

- Drive (Low voltage small frame until High house power)
- PLC (Legacy)
- PLC2, PLC3, PLC5, SLC500 etc.
- Advance for all programming for Controllogix5000

Instructor / Training Class

- Motion control class (Basic , Advance for Robotics)
- Controllogix5000 Programming (Fundamental , Advance language)
- HMI Class
- PowerFlex series drive.

FS Tech (TÜV Rheinland, #405/ 15, Machinery) Machine safety Certificate.



FS Tech (TÜV Rheinland, #405/ 15, Machinery)
Rockwell : Senior Field service Engineer
(7.5 Years)

Expertise on
-Allen-Bradley motion control and Legacy product(Level4)
-Allen-Bradley PLC support (Level4)
- PLC(PLC5,SLC500, ControlLogix)

Migration
- Low Voltage Drive specialist(Level4)
-HMI(Human machine interface)
-Machine safety function (TUV)

>>New Machine Installation & Support



➤ Global New Machine / New Technology

for our customer requirement to replace or increate process line in their production line. We will contact our partner to preview on customer requirement and find the best option of new machine and technology for accept concept, method and plan to installation for approve.

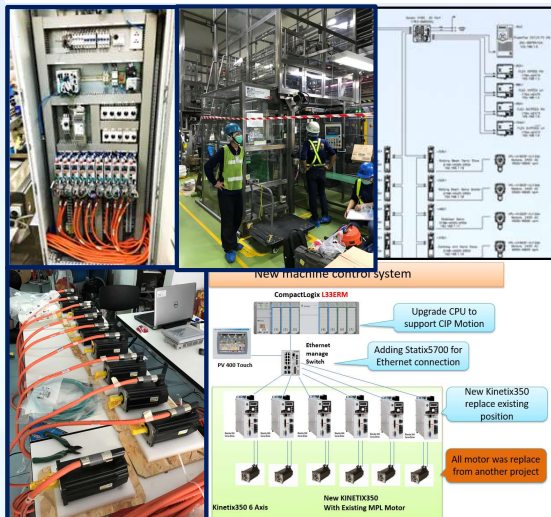
➤ Import and Transportation to Factory

We are responsible for the entire import process. From the origin to the destination management at the customer company We will stick to the actual plan that the transport system informs us and do not hesitate to take out the goods in order to receive the goods as scheduled.

➤ Commissioning and hand on machine

When the machines are brought in, they will be unpacked in the workshop to check for damage and test (in case of needing to test before entering the factory), then we install them according to the plan and tested according to the requirements. When there is commissioning we will have a report and a summary of the test results to prove the machine's ability until all requirements are met.

>>Modify / Upgrade Machine



➤ Upgrade Old machine and system / Partial migration for obsoleted part in machine

We help to prove machine and old control system. If we have some risk of equipment obsoleted or want to upgrade for high performance system , we will offer the option to our customer for new control system including Electrical and Mechanical. Our goal be going to make old machine like the new machine and have a high performance system.

➤ Cabinet replacement

We can assembly cabinet and Install electrical equipment with wiring. On our experience in the field of installation, preparation and replacement electrical work, Our customer have confident in our each work.

(Include As-Built Drawing)

>>Programming & Solve Problem



➤ Provide Process Function of Program / Add Solution / Add Function

We can analyze and find a way to improve the function or software according to the customer's needs. The addition or modification of the control system is necessary to have direct experience in this particular field. We have experts who have been in the programming industry for more than 10 years, having experience in recommending and managing problems systematically and efficiently.

➤ Rebuilt PLC Architecture

We can add or modify a new PLC architecture by communicating any protocol. and analyze the stability of communication to see if there will be problems in the future Due to the complexity of modifying the PLC architecture, there are many limitations to be taken into account. We are aware of the limitations so we can always fix and support changes.

>>Automation Training



➤ Studio5000 programming and Troubleshooting

- Project and device commonality.
- Share data and Information
- Reduce engineering time.

➤ Basic and Advance Programming Design

➤ PLC Component and Motion Control Device Typical

➤ Human Machine Interface (HMI) Design on FactoryTalk View Studio software

➤ All Series of AB PowerFlex

>>Spare Part & Equipment



Spare part / Delivery

We partner with Rockwell Automation, the official supplier and distributor of Allen Bradley products in Thailand. We also have partners for leading brands of automation equipment and sensors. We are happy to provide the products that customers need in a timely manner at a reasonable and friendly price.

- AB Low Voltage Servo Motor / Drive
- AB Low Voltage Motor Starter / AC Drive
- Motion Control and Equipment
- Power and Feedback Cable for Motion Control
- PLC Control and Equipment
- Safety Module and Safety Sensor

>>Preventive Maintenance HP/LP Device

➤ System Inspection with standard checklist

On Step of Preventive Maintenance we check and follow by "Preventive Maintenance Checklist of Industrial Control and Drive System Equipment" of Rockwell Automation Standard.

- Power off check (DC off/DC Continued)
- Power on check (Standby / Running)
- Consultation and Remediation

➤ Periodic Inspection on Equipment & Cleaning

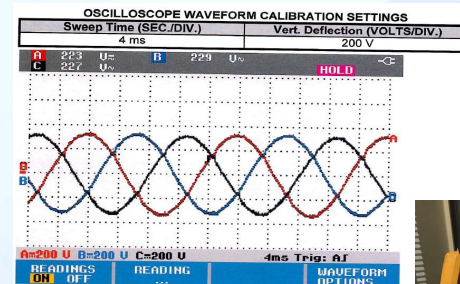
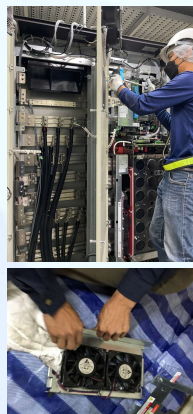
Preventive Maintenance on each equipment, We check and clean by experienced electrician with RA Inspection standard

- **Contamination ;**
inspection reveals that dust, dirt, moisture, or other
- **Cooling Devices ;**
Inspect blowers and fans that are used for forced air cooling
- **Bus Capacitors ;**
maintenance of the capacitors in the drive can be required
- **Operating Mechanisms ;**
proper functioning and freedom from sticking or binding
- **Contacts ;**
Check contacts for excessive wear and dirt accumulations
- **Terminals ;**
Check the tightness of all terminals and bus bar connections
- **Coils ;**
Be sure to clean any residues of melted coil insulation from other parts
- **Pilot Lights ;**
Replace any burned out lamps or damaged lenses
- **Solid-state Devices ;**
Inspect the printed circuit boards to determine whether they are properly seated in the edge connectors

➤ Drive Check Component

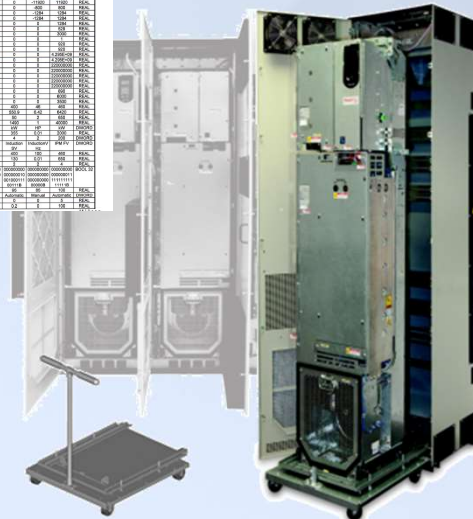
After maintenance or repair of industrial controls, always test the control system for proper functioning under controlled conditions that avoid hazards if a control malfunction occurs.

- Converter Section, Inverter Section and Ground Check in Correct Range
- Voltage Control and Main Supply Check (Standby / Running)
- Oscilloscope Waveform Calibration Check



PowerFlex 750HP Properties

Parameter	Value
Drive Name	PowerFlex 750HP
Drive Type	AC Drive
Drive Size	750HP
Drive Voltage	480V
Drive Current	100A
Drive Frequency	60Hz
Drive Speed	1800 RPM
Drive Torque	1000 Nm
Drive Power	750 HP



➤ Keep Good Maintenance Records

This rule is most helpful to locate possible intermittent problems by pointing to a particular area of constant trouble within the overall system. Further, good maintenance records reduce major costly shutdowns by demanding the use of proper test equipment and an appropriate inventory of spare parts.

We recommend that a complete record of parameter settings be kept close to the drive for future reference. Some drives also incorporate an operator interface that can store a copy of the parameter settings.

➤ Recommend Spare Part List

➤ Life Cycle Status of Component

➤ Parameter List of Drive

AC Drive Checklist

Item	Description	Status
1	Power off check (DC off/DC Continued)	Pass
2	Power on check (Standby / Running)	Pass
3	Consultation and Remediation	Pass

AC Drive Parameter List

Parameter	Value
Drive Name	PowerFlex 750HP
Drive Type	AC Drive
Drive Size	750HP
Drive Voltage	480V
Drive Current	100A
Drive Frequency	60Hz
Drive Speed	1800 RPM
Drive Torque	1000 Nm
Drive Power	750 HP



>>Automation Training



We offer training courses for operators and electricians. In most of our courses we focus on practice along with theory which allows the trainees to gain both understanding and practical action. The courses include programming, motion control and drive.or as the customer wants to train.

- **Studio5000 programming and Troubleshooting**
The Studio 5000® ,Rockwell software, environment combines elements of design into one standard framework that optimizes productivity and reduces time to commission.
 - **Project and device commonality.** Studio 5000 provides a common UI across its applications, think less about configuration and spend more time on your project!
 - **Share data and Information.** Write the information once then import it into other software applications.
 - **Reduce engineering time.** Execute lean and effective projects by enabling modular and repeatable project creation and deployment.
- **Basic and Advance Programming Design**
Programming design for other connection module and configuration controller or control equipment.
- **PLC Component and Motion Control Device Typical**
Programming and parameter setting for motion control equipment and system.
- **Human Machine Interface (HMI) Design**
Design on FactoryTalk View Studio software
- **All Series of AB PowerFlex**



>>Spare Part & Equipment

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- **Motion Control and Equipment**
- **Power and Feedback Cable for Motion Control**
- **PLC Control and Equipment**
- **Safety Module and Safety Sensor**



Allen-Bradley



PowerFlex®
Drives



Servo Motors (With Cable)

- Kinetix **VP-Series** Servo Motors
- Kinetix **MP-Series** Servo Motors
- Kinetix **HPK-Series** High-power Asynchronous Motors
- Kinetix **RDD-Series** Direct Drive Servo Motors
- Kinetix **TL-Series** Servo Motors



PowerFlex AC Drive

- PowerFlex **520** Series AC Drive
- PowerFlex **4** AC Drive
- PowerFlex **40** AC Drive
- PowerFlex **400** AC Drive
- PowerFlex **70** AC Drive
- PowerFlex **700** AC Drive
- PowerFlex **750** Series AC Drive



Chassis-Based I/O and I/O Module

- SLC I/O Modules
- ControlLogix Modules
- MicroLogix Expansion I/O Modules
- Compact I/O Modules
- Compact 5000 I/O Modules



Servo Drive

- Kinetix **3** Single-Axis Component Servo Drives
- Kinetix **300** EtherNet/IP Indexing Servo Drives
- Kinetix **350** Single-axis
- Kinetix **2000** Low-power Multi-axis Servo Drives
- Kinetix **5100** Servo Drives
- Kinetix **5300** Single-axis
- Kinetix **5500** EtherNet/IP Servo Drives
- Kinetix **5700** EtherNet/IP Servo Drives
- Kinetix **6000** Multi-axis Servo Drives
- Kinetix **6200** Safe-speed Modular Servo Drives
- Kinetix **6500** EtherNet/IP Servo Drives
- Kinetix **7000** High-power Servo Drives



PLC Programmable Controllers

- Large PLC Control Systems
 - ControlLogix **5580/5570**
 - ControlGuardLogix **5580/5570**
- Process Controllers
 - CompactLogix **5380/5570**
 - CompactGuardLogix **5580**
- Small PLC Control Systems
 - CompactLogix **5480/5380/5370/1769-L3x**
 - SmartGuard **600** Safety
 - **SLC 500** Controllers
- Micro PLC Control Systems
 - Micro **870/850/830/ 820/810/800**
 - Micro **1400/1200/1100**



Graphic Terminals

- PanelView **5000** Graphic Terminals
- PanelView **Plus 7** Graphic Terminals
- PanelView **Plus 6** Graphic Terminals
- PanelView **Plus 6** Compact Graphic Terminals
- PanelView **800** Graphic Terminals



- Global/National Machinery Compliance Solution
- Understand customer needs : Safety VS Production
- Understand customer organization and budget process
- Cooperation of Solution Selling



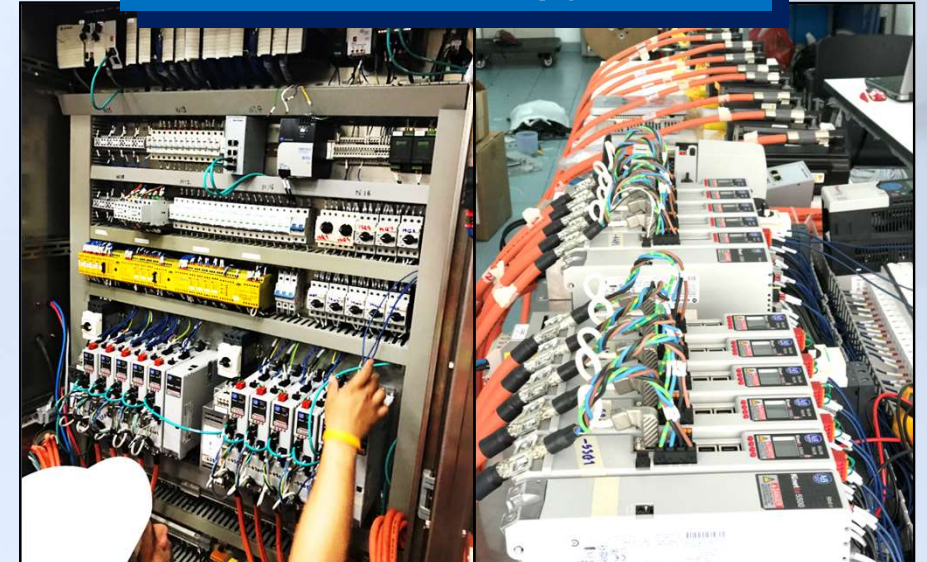
Accraply Labeler New Machine



Harland Labeler Upgrade



Motion 10 Axis Upgrade



Critical success factors

Coffee Case Packer Upgrade



Sercos Servo Migration



Utility Upsize Control System



Nozzle of Sachet Improvement



High HP Drive Maintenance

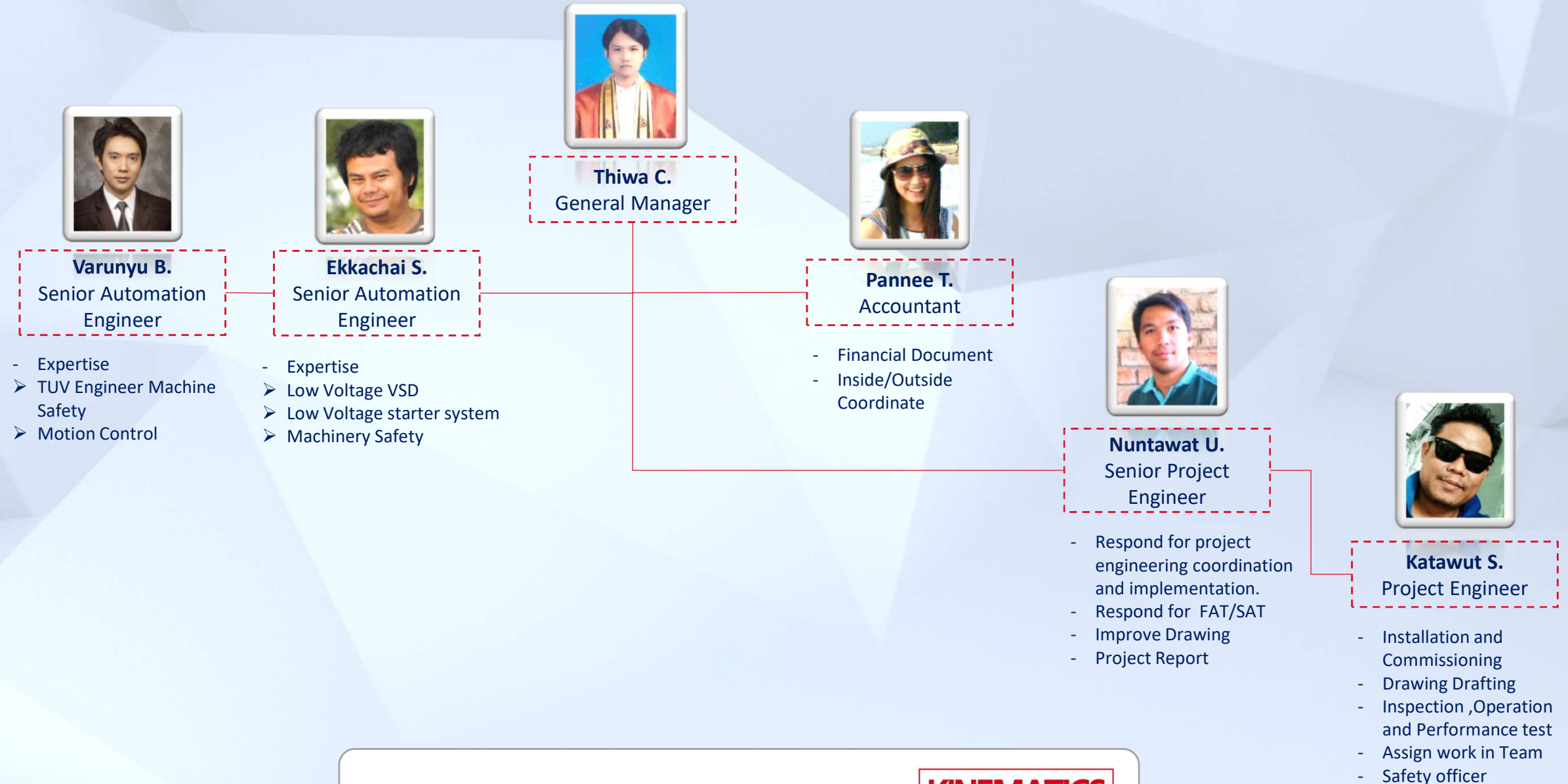


Motion System Upgrade



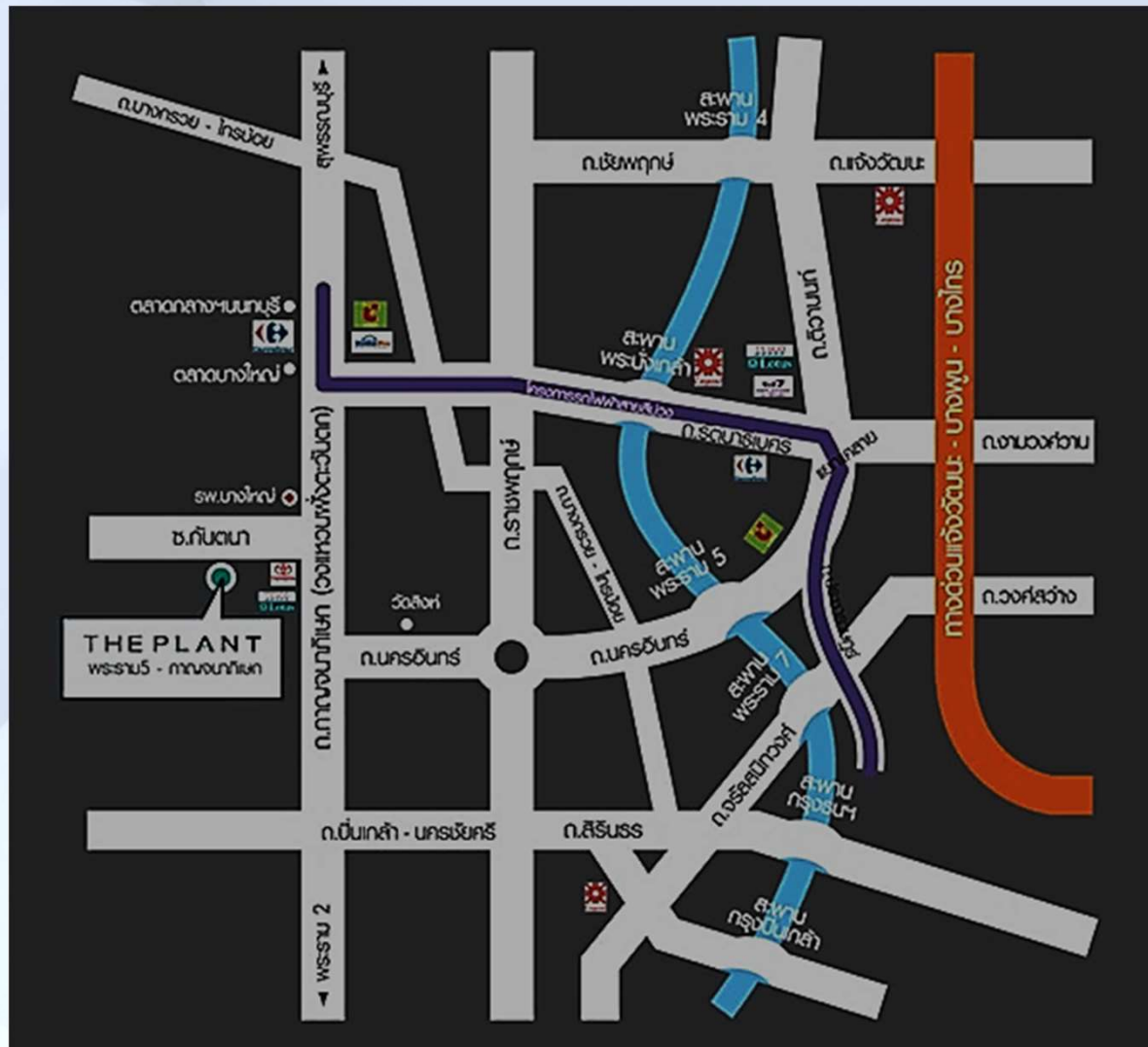
KINEMATICS AUTOMATION ORGANIZATION

YEAR 2022



KINEMATICS AUTOMATION OFFICE MAP

YEAR 2022



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KINEMATICS

A U T O M A T I O N

THANK YOU FOR YOUR ATTENTION

“Your life is a result of the choices you make”