





SIEMENS

DRIVE **TECHNOLOGY** & **INDUSTRIAL AUTOMATION**

LOGO!

The compact controller with a cloud interface LOGO! is a versatile compact controller that helps you solve numerous automation tasks. Additional modules and a wide range of communication options.



SIMATIC S7-1200

SIMATIC S7-1200 controllers by Siemens are the intelligent choice for compact automation solutions with extended communication options and integrated technology functions.

SIMATIC S7-1500

Advanced controllers automate both complete production plants and applications with extremely high demands on performance, flexibility, connectivity and availability. Redundant solutions are easily achieved with SIMATIC S7-1500 R/H and the SIMATIC.



SIMATIC S7-400

S7-400 is ideal for data-intensive tasks that are especially typical for the process industry. S7-400 and the innovated S7-410 product line will stay the hardware backbone of the PCS 7 control system.

SIEMENS

SINAMICS G120X

SINAMICS G120X - Master the elements: this converter is optimized for pump and fan applications in the water/wastewater industry and HVAC applications in building automation. the power rang from 0.75 KW to 630 KW.



SINAMICS S200

SINAMICS S200 is a compact and cost-optimized servo drive system for standard motion control applications, combining the S200 drive with SIMOTICS S-1FL2 servo motors and matched cables across a power range of 0.1 to 7 kW. It supports PTI and PROFINET communication for seamless integration with SIMATIC controllers and TIA Portal, delivering fast response, high overload capability, and precise motion through high-resolution encoders. With its compact design, integrated safety functions, and easy commissioning, it is ideal for packaging, handling, assembly, electronics, and general automation applications.

SINAMICS V20

The compact SINAMICS V20 is the frequency converter for simple motion sequences. It is characterized by its short commissioning times, easy handling, and energy-saving functions. The converter with its nine sizes covers the power range from 0.12 kW to 30 kW.



SIEMENS

SIMATIC HMI Unified Panels

SIMATIC HMI operator control and monitoring devices have stood the test in countless applications and in all industries. These rugged, compact panels equipped with numerous interfaces are finely scalable, from simple tasks to high-performance configurations.



SIMATIC SCADA Systems



Siemens SCADA systems, powered by WinCC, offer real-time monitoring, control, and optimization of industrial processes to enhance efficiency, safety, and embrace Industry 4.0. WinCC provides high-performance visualization and reliable data logging, seamlessly integrating with Siemens PLCs and diverse industrial devices via open standards like OPC UA and MQTT.

IPC Panels

With Industrial Computing, you can implement applications and solutions that far exceed the functions of a classic controller. SIMATIC IPC products offer you a flexible, innovative platform with long-term availability that gives you a home field advantage when meeting the challenges of the digital factory for your machines and plants.



Software

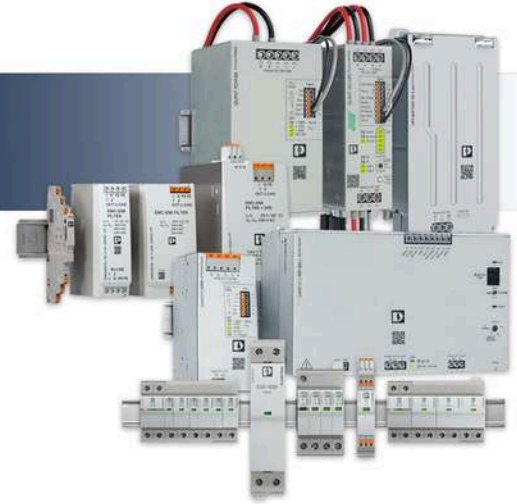
Modern automation and drive solutions have to master a variety of challenges. This requires powerful software that is as efficient, flexible and secure as possible – now and in the future.



INNOVATION ELECTRICAL & AUTOMATION PRODUCTS

Power Feeding

- DC/DC Converters and DC/AC Inverters
- EMC Filter
- Power Supplies
- Redundancy modules
- Surge protection and lightning protection
- UPS

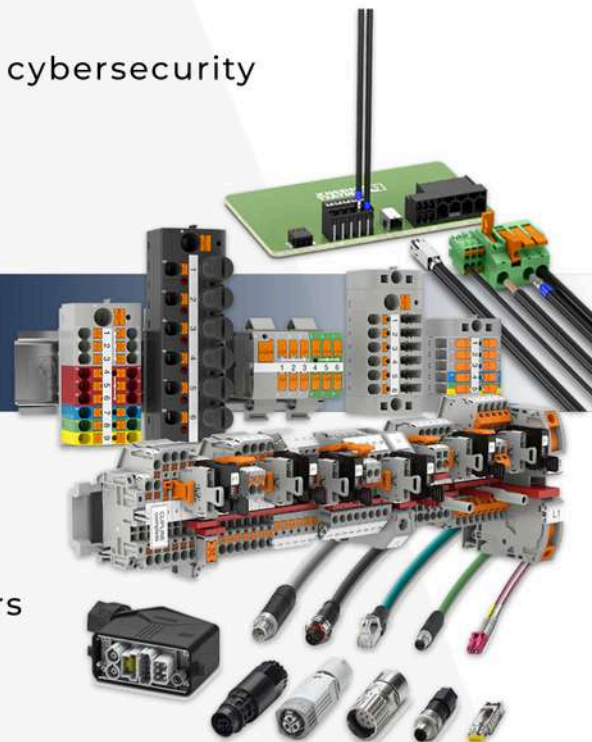


Automation

- **Industrial communication**
 - Extenders
 - Industrial Ethernet switches
 - Media converters
 - Smart Ethernet Box
 - Industrial routers for remote maintenance and cybersecurity
 - Industrial Wireless
- **PLCs (controllers) and I/Os**

Conductivity

- Cables and lines for signals, data, and power
- Connectors.
- Distribution blocks and device terminal blocks.
- Distributors, adapters, and conductor connectors for reliable signal, data, and power cabling.
- PCB terminal blocks and PCB connectors
- Plug-in test systems.
- System cabling for controllers
- Terminal blocks with system



Tools and Printing Systems

- Automatic tools for conductor assembly
- Crimp connectors
- Marking material for industrial identification
- Printers



Switching, Measuring and Monitoring



- Contactor and Power Relay
- Energy Monitoring
- Motor starters and electronic switching devices
- Relays and solid-state relays
- Safety Relay Modules and Sensors
- Signal conditioners and measuring Transducers

Digital Factory Solutions

•Why Digital Factory?

- Increase Productivity
- Improve sustainability
- 360 degree cybersecurity

•OEE Monitoring.

Efficient data acquisition is essential to achieve complete transparency in the production process, so that production can be more sustainable and efficient.

•Energy Management.

- Measuring Energy Sources
- Improving Power Factory





REFERENCES

Some Of Our Industrial Solution
& Automation Projects

FOOD & BEVERAGE SECTOR:

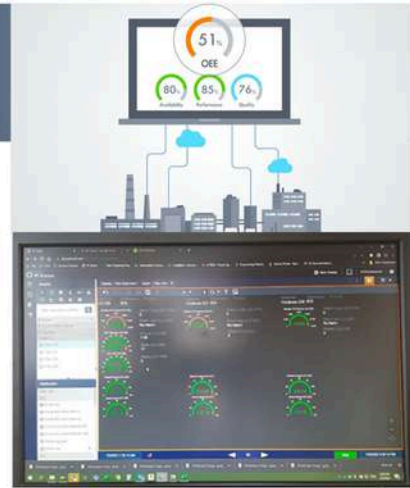
BEL EGYPT

Solution Overview:

A reporting system designed to collect and monitor essential production data, such as total production per shift, OEE, stoppage counts (per alarm and total), and stoppage durations (per alarm and total). The data is transmitted to the France HQ and broadcasted to a cloud platform (PI Vision) for real-time machine monitoring.

Key Components:

Control System: S7-315-2 PN/DP CPU
HMI: TP 700 Comfort
Networking: Ethernet Switch



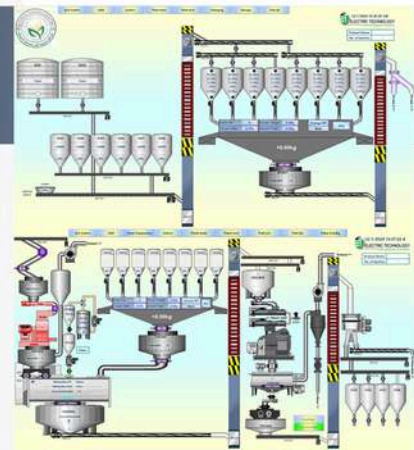
AL DOHA FOR ANIMAL FOOD

Solution Overview:

Design and implementation of a central control system that allows complete factory operation through a SCADA interface in the control room. The control panels include mimics and manual switches to ensure backup operation in case of SCADA failure.

Key Components:

Control System: S7-1512C CPU
Remote IOs: ET 200 modules
Weighing Modules: SIWAREX WP 521 and WP 321
SCADA: WinCC Runtime Professional (with Logging and Recipe Licenses)
Local Control: TP 1200 Basic for press machine



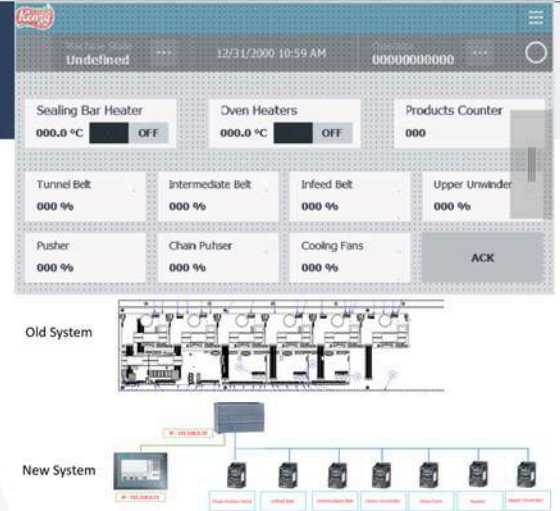
SEVEN SKY

Solution Overview:

Replacing the old control system of a Shrink Wrap machine with Siemens S7-1200 based control system and replacing the old Signal Board Inverters with new Siemens V20 Drives. Shrink wrap machines apply heat to shrink a plastic film around the product. It covers the item, and then sent it through a heat tunnel or oven for shrinking.

Key Components:

- TP700 Comfort.
- S7-1200 CPU and modules.
- Seven V20 Drives.



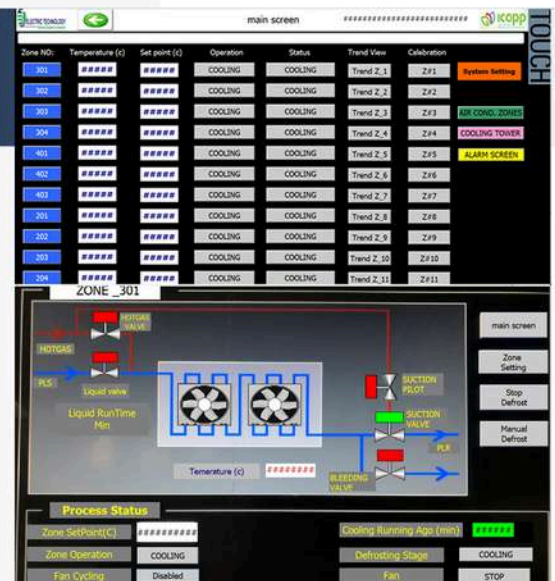
ICAPP

Solution Overview:

Design and implementation of 2 new panels with new control systems of 34 fridges for food storage. The old control systems were special controllers from IEA and it had no support in Egypt. Adding Trends and data archiving for easier supervision.

Key Components:

- S7-1200 CPU.
- TP 1200 Comfort.
- Turk pressure sensor.



CHIPSY

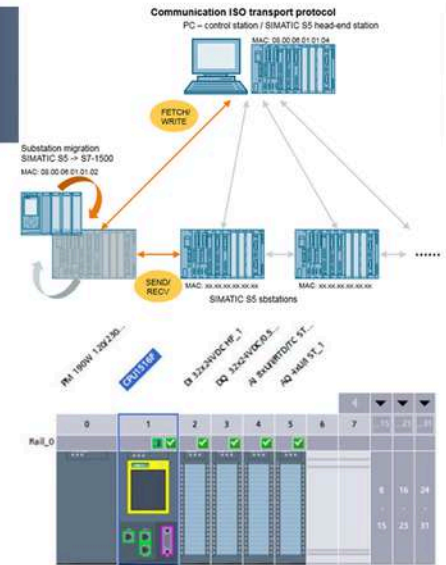
Solution Overview:

This project involves the complete migration of the existing Siemens S5 control system to a modern Siemens S7-1500-based control system, ensuring improved performance, reliability, and maintainability. The upgrade will include the integration of a KTP 1200 Comfort HMI for user-friendly operation and real-time process monitoring.

The migration aims to enhance production efficiency, reduce downtime, and extend the operational lifespan of the equipment. It will also provide improved diagnostics, easier troubleshooting.

Key Components:

- Siemens S7-1500 SIL3
- TP 1200 Comfort Panel
- SCADA WinCC Runtime license



WATER SECTOR:

TAM

Consultant: AAW Consulting Engineers

Solution Overview:

Complete control system for large-capacity RO plants (164,000 m³/day), including 54 automation panels for hardware, software, panel building, and programming.

Services Provided: PLC, SCADA, and drives

Key Components:

- SCADA: WinCC Runtime Professional (3 Licenses)
- Control System: Four S7-300-based systems
- Distributed IOs: 64 ET 200M modules
- Drives: SINAMICS G120C, G120, G120X



PLASTIC SECTOR:

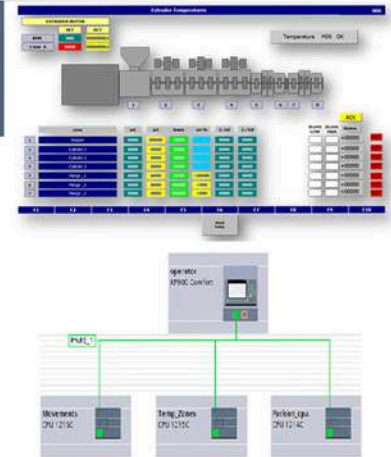
ABCO

Solution Overview:

Replaced old heat exchangers with a modern cooling system featuring two chillers and 14 panel-mounted units. An S7-1200-based control

Key Components:

Control System: Three S7-1200 CPUs
HMI: KP 900 Comfort



PACKAGING SECTOR:

CEPACK

Solution Overview:

Design and implementation of a central control system enabling full factory operation from a SCADA interface in the control room. Panels include mimics and manual switches for backup operation

Key Components:

Control System: S7-1500 CPU
Remote IOs: ET 200SP IO modules
Weighing Modules: SIWAREX WP 521 and WP 321
SCADA: WinCC Runtime Professional (Logging and Recipe Licenses)
Local Control: TP 1200 Basic for the press machine



CHEMICAL SECTOR:

UNILEVER

Solution Overview:

New design and implementation for an automation panel that handles carbonate material using S7-1200 controller and HMI comfort 7'inch Monitoring and controlling the carbonate tank with alarming and trending system plus communicating with Buffer Tank for fully automated process

Key Components:

Siemens S7-1200 controller
TP 700 Comfort Panel
Temperature modules



CEMENT SECTOR:

SAINT GOBAIN

Solution Overview:

Replacing 6 obsolete Micro Master 440 90 KW drives with SINAMICS G120X 90 KW drives. The Control and feedbacks are connected via PN communication. The drives are controlled from central SCADA for the plant and it displays feedbacks from the drives.

Key Components:

G120X 90kw Unfiltered VFD



Sphinx Glass Project

A total of 38 energy meters were installed and integrated with the Siemens automation control system. The collected data is displayed on dedicated SCADA dashboards as part of the digitalization initiative.

This represents an initial step toward achieving Overall Equipment Effectiveness (OEE), as well as the beginning of implementing energy efficiency, consumption optimization, and long-term sustainability principles.

Egyplast Project

A total of 20 electrical energy meters were installed and integrated with the PLC and SCADA systems. This implementation represents an initial phase of applying the OEE (Overall Equipment Effectiveness) framework, as well as the application of one of the sustainability stages focused on energy consumption optimization and efficiency.

EZZ Steel Company

System cabling was implemented for Siemens I/O cards, which facilitates the installation process and simplifies future maintenance of the internal panel components. This development was carried out within the production units of Ezz' Steel Company.

CONTACT

sales-ksa@electech.com.eg
yehia.nabil@electech.com.eg

☎ +966503526802

☎ +201110336671

FIND MORE
INFORMATION



www.electech.com.eg



2790 Al Misk St., Al Hamra Dist.
Jeddah, Saudi Arabia

