

Portfolio





FARM'S PRIDE (PVT) LIMITED
Jayamalapura 272, Gampola,
Sri Lanka

Freezing technology and warehousing
ePlan, 8x cabinets, software PLC, commissioning

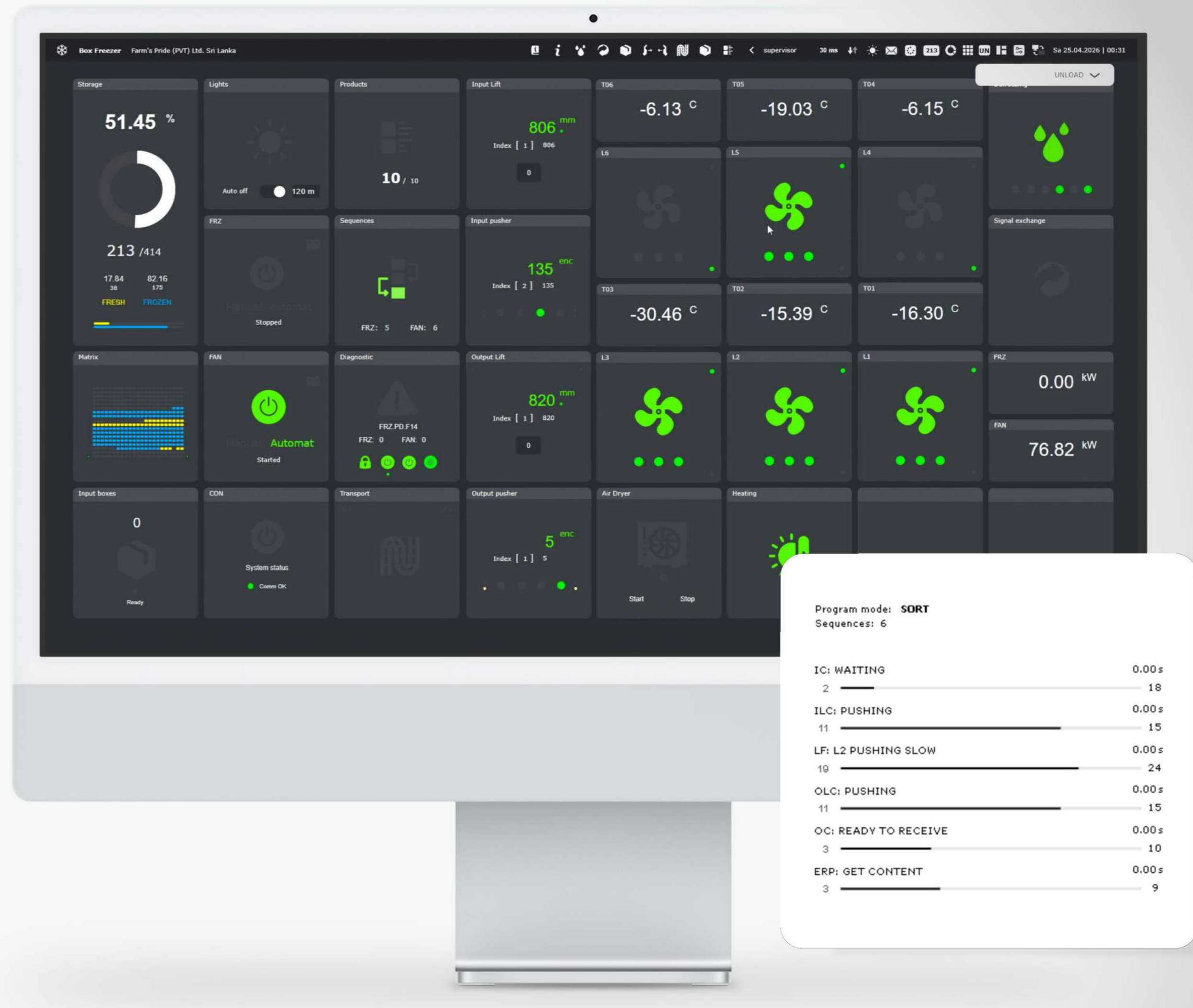
The challenge was to automate a refrigerated warehouse and peripheral transport at a poultry processing plant. The development and delivery of a comprehensive solution, which included commissioning in a harsh tropical climate, were successful. Siemens S71500 industrial PLC controllers were employed in conjunction with cutting-edge SEW positioning solutions. The development of contemporary algorithms for the positioning and placement of products on individual warehouse rows led to an increase in warehouse efficiency. A set of control cabinets for 18 fans, 4 servo drives for elevators and pushers, and 14 roller drives were included in the scope of delivery. A national newspaper and television station featured this solution, which was acknowledged as the most sophisticated and contemporary control system in the nation.

Simatic S71500, SEW Movidrive B, Sick, Turck, Balluff

Features

- ✓ Neat and intuitive interface
- ✓ SCADA system based on atVise solutions
- ✓ Conveing system and data exchange with ERP
- ✓ Sequence overview and step managment
- ✓ Web Access Technology
- ✓ Surveilance system within the warehouse

Referencing person: M.Shafeek Samad, Director



Program

5

Smooth warehouse management and adaptation to production requirements are facilitated by the availability of five distinct operating modes.

Positioning

0 mm

The creative positioning algorithm produces perfect pallet transfer on rows by achieving repeatability with an accuracy of 0 mm.

Saving energy

+50%

The implemented algorithms turned off the aggressive cooling mode after the freezing time had passed, reducing energy costs by up to 50%.

Distinction

Number 1

Our solution was rThe control system we developed was acknowledged as the most sophisticated and contemporary in the nation.



TYMBARK-MWS sp. z o.o.
34-650 Tymbark 156
Oddział Tychy w Tychach

Pallet transport and lifting

ePlan, 1x cabinet, software PLC, commissioning

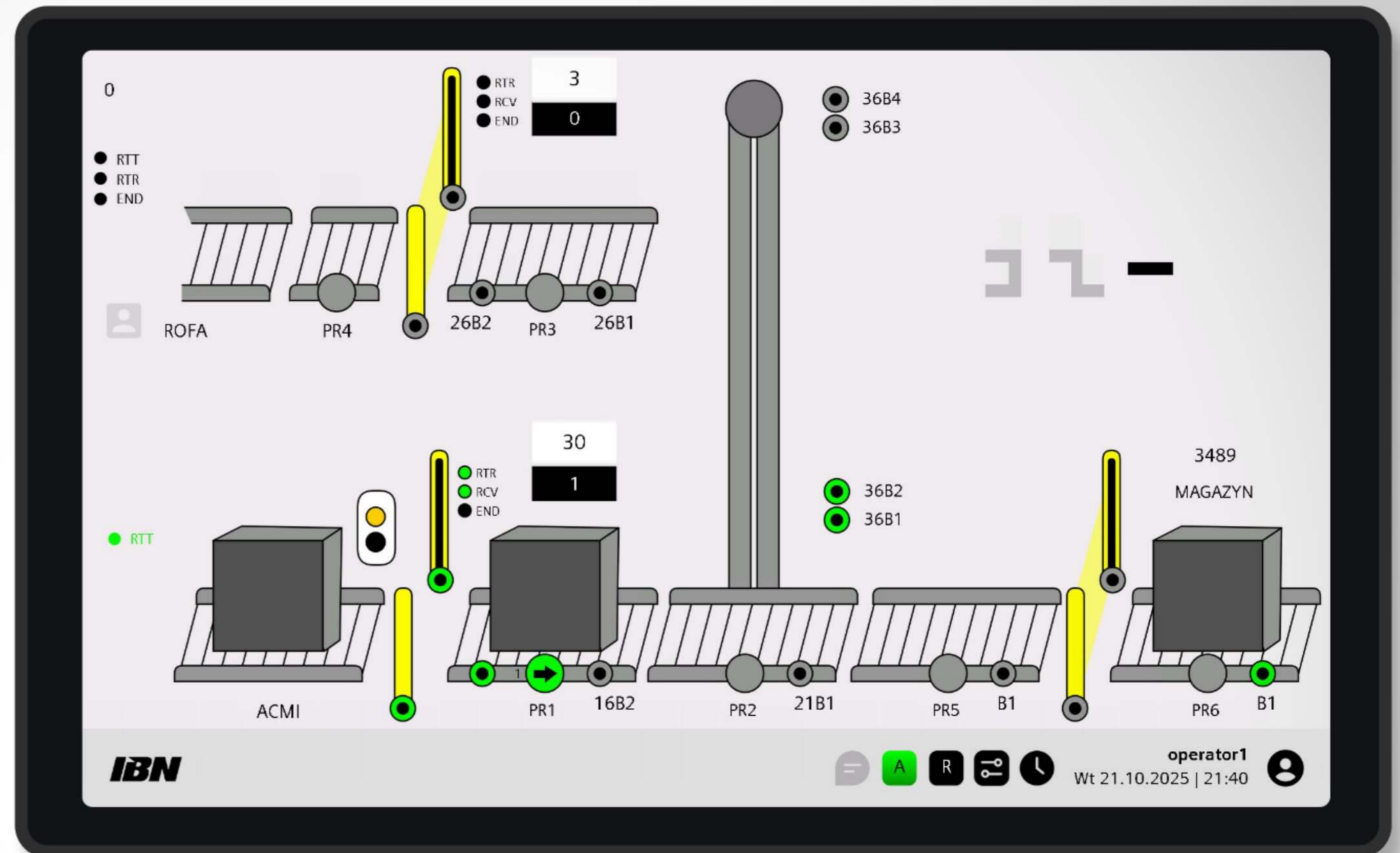
The issue of routing pallets to the warehouse from two independent production lines was resolved by modernizing the pallet transport control system in the production cell. An automatic elevator serves the two production lines, adapting to the capacity and production requirements of each line to accept goods and direct them to a shared warehouse. The ability to transport pallets in two distinct directions presents numerous potential advantages. Pallets are easy to transport in case one line breaks down. By implementing the solution, the line capacity was enhanced by an additional 12 cycles per hour. The S71200 G2 PLC controller is at the heart of the control system. It works with the Lenze inverter in the Profinet network.

Simatic S71200 G2, Lenze i550 motec, Sick

Features

- ✓ Neat and simple HMI operation
- ✓ Chat application between 2 levels
- ✓ Sequence overview and management
- ✓ MTP700 WinCC Unified
- ✓ Dark and light modes
- ✓ Smooth transfer of the pallet between rollers

Referencing person: Janusz Prorok, Director



Program

3

Transport can be conducted in three distinct directions, and the operating modes can be adjusted to accommodate production requirements.

Short timeframe

3 days

The period of modernization was exceedingly restricted. Within three days, the system was successfully modernized, complete with the replacement of the cabinet and the resumption of production.

Energy recovery

+15%

Utilizing an energy recovery system and replacing the inverter significantly decreased energy usage.

Safety stop

SS1, SIL3

The machine was made safer by using a safety system that was based on a SICK programmable PLC controller that was part of the Profinet network. Controlled inhibit in 500ms.

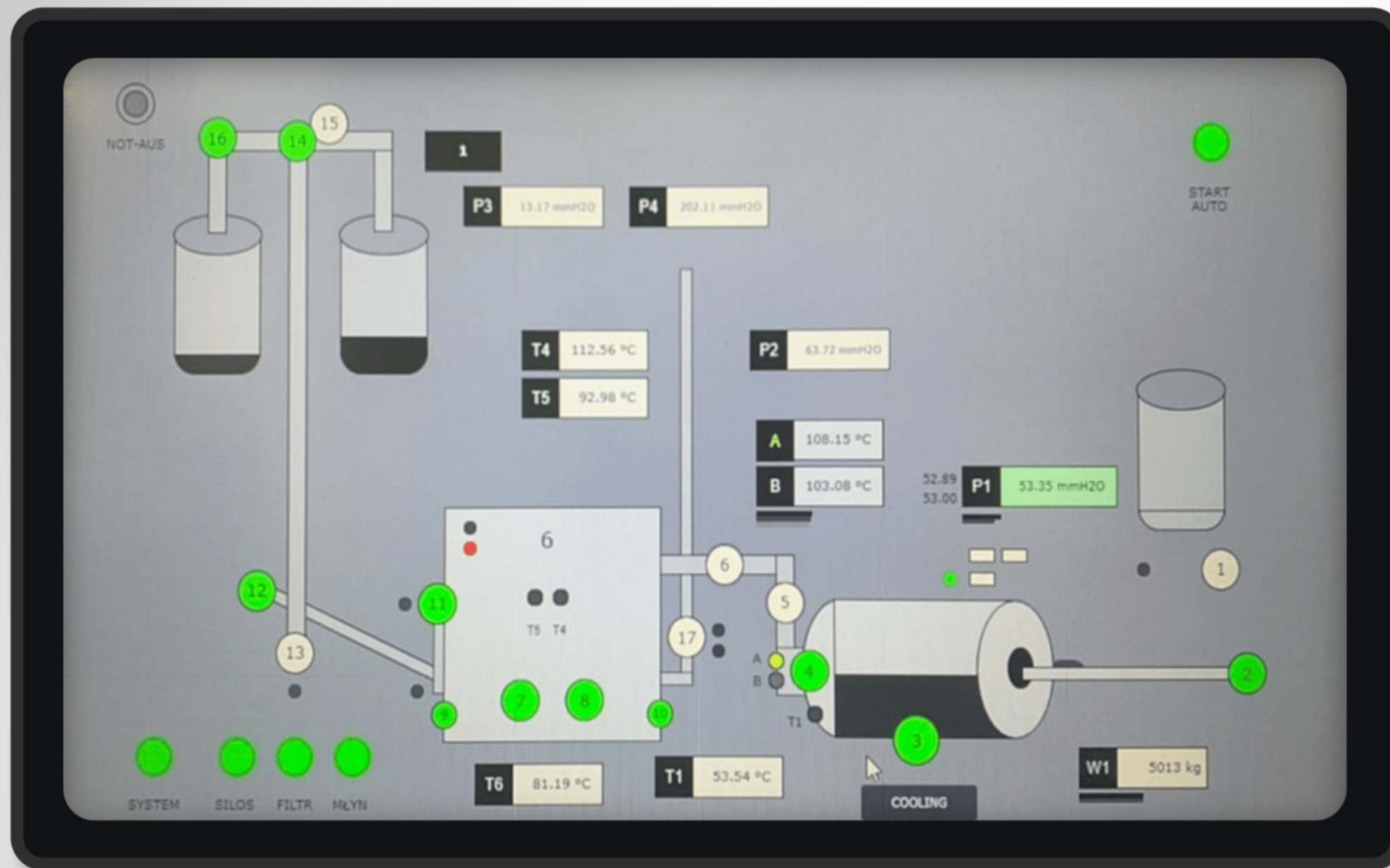


S.I.A.P. sp. z o.o.
Pszczynska 206, 44-100 Gliwice

Production of lead powder
ePlan, 2x cabinet, software PLC, commissioning

The objective was to modernize the outdated control system for the lead powder production line and its transportation to silos by utilizing screw conveyors. Maintaining the temperature curve, or the proper system operating parameters during particular times during the gradual heating of the powder during the grinding process, was a major challenge in this production. Since grinding makes a lot of heat, the bags in the filters could burn out. The protection of the filters from burnout was facilitated by the development of intelligent algorithms for controlling the outlet flap and mill cooling. This decreased expenses while enhancing safety.

Simatic S71500, Softstart Allen-Bradley, webHMI



Features

- Real synoptic map and production overview ✓
- Allen-Bradley Softstart 75kW star-delta ✓
- System SCADA based on webHMI device ✓
- Web Access Technology ✓
- Analog processing production ✓

Program

2

Both primary and emergency cooling modes, as well as maintaining operating parameters while grinding, are available.

Smart algorithms

curve

The entire process is reliably regulated by the temperature control algorithms that have been developed, which are capable of adapting to evolving production conditions.

Short timeframe

7 days

The modernization period was incredibly brief. Despite the holidays, the system was updated successfully in just seven days.

Referencing person: Kamil Szelaq, Director



EKO-POL

EKO-POL sp. z o.o.
Moniuszki 15, 42-672 Wieszowa

Duck incubation and hatching
ePlan, 18x cabinets, software PLC, commissioning

Implementation of a proprietary program and control system for the incubation and hatching of ducks. In an exceedingly precise manner, the software implemented regulates the device sequence logic and stabilizes parameters such as temperature and humidity, thereby ensuring that the necessary developmental conditions are maintained with high precision. It comes with three different recipes for different types of flocks, making it perfect for a wide range of flocks. The entire control system included 12 incubators and 4 hatchers. Detailed attention was paid to how the incubator worked and how the temperature of the eggs in storage was controlled.

17x Simatic S71200, KTP400 Basic, WebHMI



Control areas

3

The entire hatcheries, egg storage, and incubation process were covered by the master control system. Other significant facility parameters, like carbon dioxide, were also tracked.

High accuracy

0.1 F

High-precision measuring and controlling tools made it possible to have very accurate control and a stable process.

Increased profit

85 - 95.3%

In contrast to previous competitive solutions, production profits increased. As a result, hatching rates actually increased, which in turn increased business profits.

Synchronization

6 hours

As a consequence of the software solutions that were implemented, the hatching window was restricted. This constitutes the most critical component of this production. In this way, production planning can be very accurate.

Features

- Three different receptures ✓
- Smart humidity and temperature control ✓
- SCADA system based on webHMI device ✓
- Web Access Technology ✓
- Highly stable working conditions ✓
- Up to 26000 chicks at the same time ✓

Referencing person: Aleksandra Januszewska, Plant Manager

HÜNNEBECK

Hünnebeck Austria
Royerstraße 2, 2482 Münchendorf

Transport and washing robot station

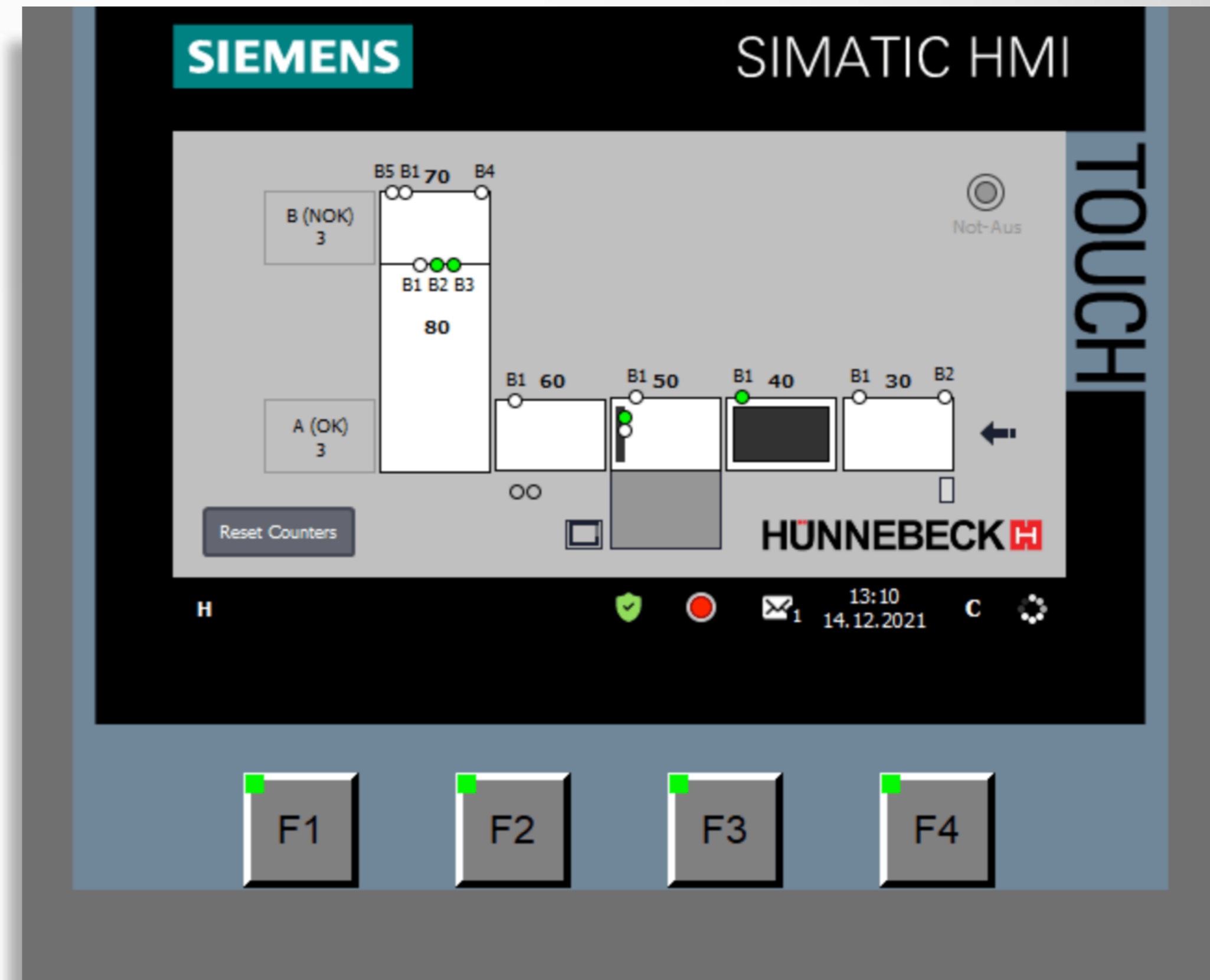
ePlan, 1x cabinets, software PLC, commissioning

The main problem that needed solving was the process of transporting and washing dirty building boards. Boards transported using roller feeders to a robotic washing station were subjected to a high-pressure washing process. The visual effect of washing assessed by the operator was divided into successful and unsuccessful ones. A simple transport system with an additional washing function accelerated the process of preparing boards and their quick selection.

Simatic S71500, SEW Movitrack, PNOZ

Features

- ✓ Simple navigation and HMI operation
- ✓ Sequence overview
- ✓ Production line overview
- ✓ Counters OK / NOK
- ✓ Designed for humid conditions



Automatic washing

+60%

The production efficiency was significantly enhanced in comparison to the manual work that was previously conducted.

Robot data exchange

Profinet

Process data exchange and communication with the washing robot controller.

KERAM

KERAM sp. z o.o.
Kościuszki 192, 42-440 Ogródzieniec

Brick production and drying process ePlan, 2x cabinets, software PLC, commissioning

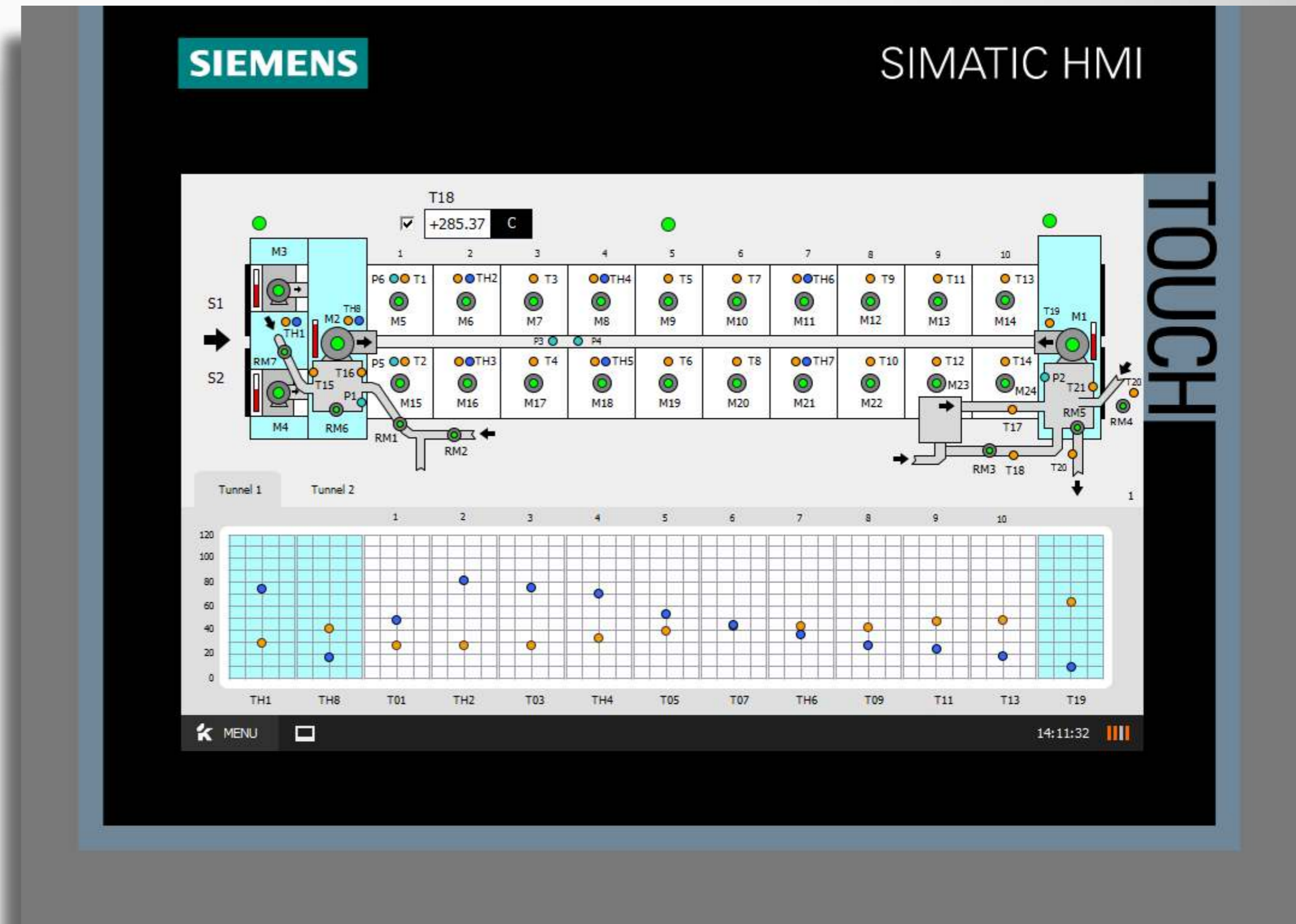
In the production of bricks, one of the most important problems is burning them, which involves a long process of removing moisture. Therefore, an important process parameter is the temperature and its proper stabilization in individual sections of the heating tunnels. Two large fans were responsible for blowing warm air into the tunnels, while the remaining 20 fans were responsible for maintaining the appropriate temperature and pressure in a given sector of the tunnel. The developed automation system stabilized the temperature in each sector so as to maintain and implement individual set values in accordance with the expected heating and humidity curve. Free parameterization of the heating curve allowed for adaptation to changing production conditions. The use of LG's modern solution allowed for significant reductions in energy costs.

Simatic S71500, LG i7 75kW, LG S-100, PNOZ

Features

- ✓ Simple menu navigation and HMI operation
- ✓ Synoptic map and process overview
- ✓ Multipoint charts and temperature curve
- ✓ Siemens Simatic KTP700 Comfort

Referencing person: Jakub Cieřlik, Director



Curve chart

13

One heating curve was created, consisting of 13 different temperature and humidity measurements. This allowed for an immediate assessment of the situation and the heating process.

Energy saving

+35%

Using the capabilities of the i7 series inverter allowed for intelligent reduction of the control voltage during fan operation, which resulted in a significant reduction in energy costs.

Data aggregation

USB

Process parameter data, i.e. humidity and temperature, were recorded on an SD card for further analysis and assessment of process repeatability.



IBN engineering sp. z o.o.
 Graniczna 74E, 44-178 Przyszowice
www.fleaxer.com

Smart 3D Warehouse Control System Owned Product and New Business

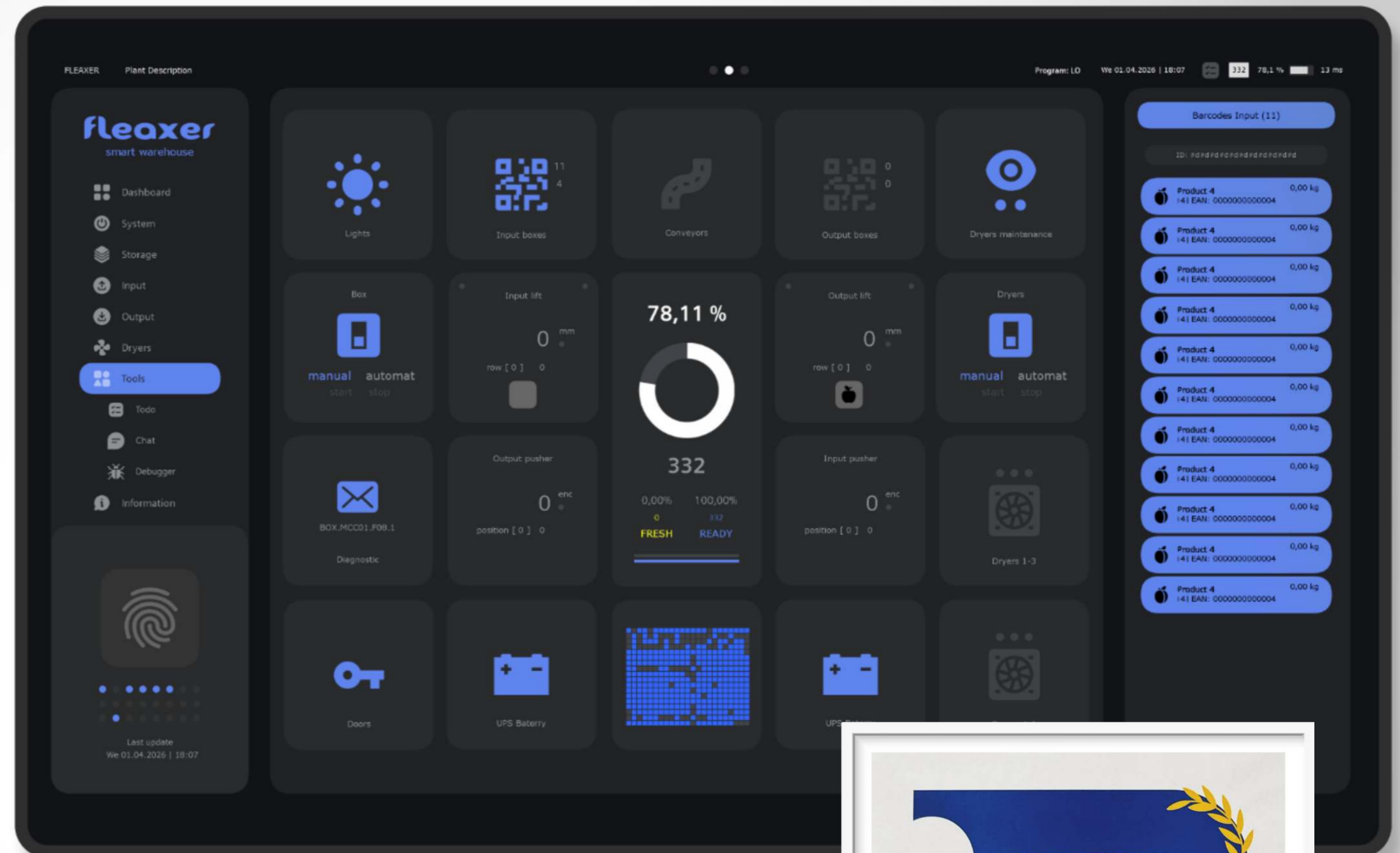
Fleaxer is a cutting-edge solution that is exclusively designed for the management and control of 3D warehouses. This is the proprietary solution of our company, and its capabilities are unquestionably superior to those of the current market. It is the product of our company and the subject of our offering, having been meticulously crafted in every aspect. Our extensive experience in the implementation of refrigerated warehouses has enabled us to recognize the obstacles and constraints that restrict the utilization of their immense potential and capabilities. The challenges were resolved by our engineering team, which developed and refined a solution that facilitated the development of new, advanced algorithms, including sorting. This simplifies and optimizes space management. More information on product's website.

Simatic S71500, SEW Movidrive Modular, Sick Safety

Features

- ✓ Modern, astonishing and intuitive interface
- ✓ Chat application and remote support
- ✓ Sequence management and cycle overview
- ✓ SCADA WinCC Unified with web access
- ✓ Usefull applications for managers
- ✓ Advanced sorting algorithms

Referencing person: dr eng. Wojciech Panna, Akademia Tarnowska



Program

7

Adapting to evolving production requirements and optimizing warehouse space are feasible through the utilization of seven operational modes.

Innovation of the Year 2026

GOLD ITAR

The ITAR innovation fair awarded our solution the grand prize in the digital technologies and design category. The examining committee, which was comprised of professors and PhDs in technical sciences, unanimously acknowledged our solution as the most innovative.



fleaxer

IBN engineering sp. z o.o.
 Graniczna 74E, 44-178 Przystowice
 Fleaxer PLC Team

Flea Invaders Game

Just for marketing and display purposes

This fascinating project was made for campaigns that promoted our solution at different industry fairs and for demonstration purposes. The purpose of this software was to pique the interest of new potential customers in our products and services. This is also a concise demonstration of our creativity and capabilities, which are directly derived from our fervor for our field. Every topic, even the most challenging one you might think of, is just a fresh challenge and another chance to put your abilities to the test for our team of programmers.

Simatic S71200 G2, SCL code, Mobile panel KTP900F



Features

- ✓ Difficulty levels
- ✓ Random speed movement of fleas
- ✓ List of the best 5 players
- ✓ Registering competitors
- ✓ Fleas attack and spacecraft shooting
- ✓ Winner drawing randomizer

Referencing person: Tomasz Zjawin, FLEAXER Team

Life credit

3

Everyone should get another chance. In the event that your adversary unexpectedly fired a bullet at you, you still have the opportunity to contemplate the situation.

Double sided shot

2

Possibility of shooting from both sides. Whether one is right-handed or left-handed is irrelevant. Prepare to shoot.

Data register

120

From a pool of up to 120 player data records, the primary prize will be selected. Random drawings determine the winner.