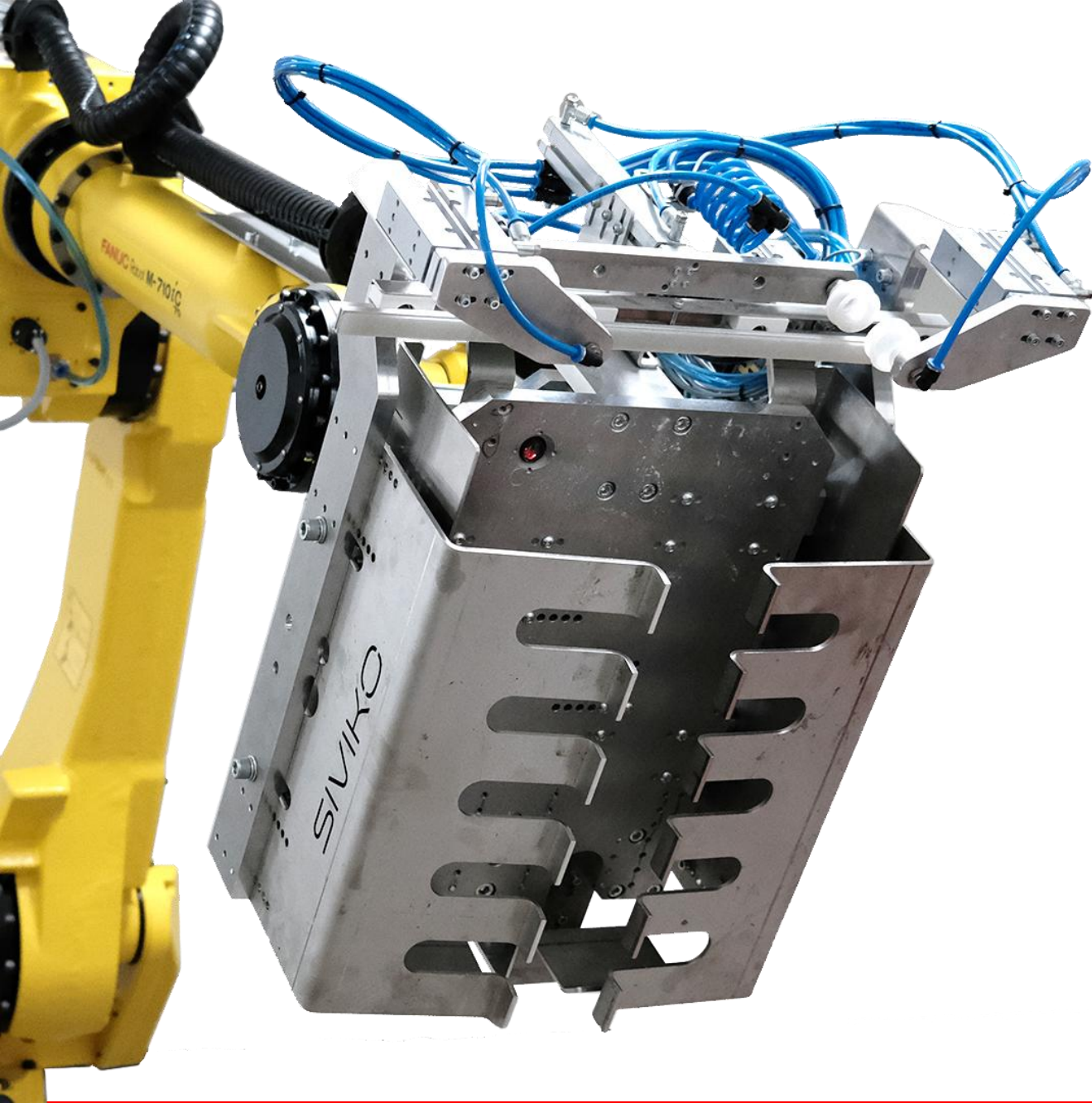




Presenting Siviko OOD

SVETOSLAV VASILEV

CO-OWNER & CEO

SIVIKO OOD

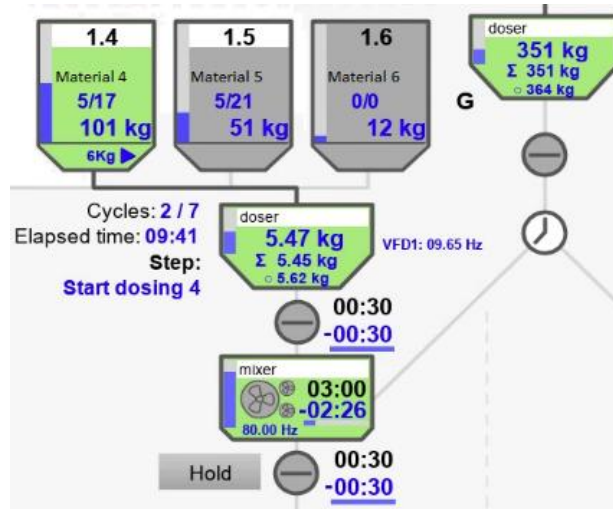
We enable the industry to become more productive and efficient through industrial engineering and software solutions.

SIVIKO

engineered at



Integration of industrial robots



Integration and development of industrial control systems (SCADA, MES, EMS and IIoT)



Engineering and manufacturing of non-standard machines

Team & key strengths

We founded the company in 2014 with the idea to combine the different competencies of the co-founders in a team that would be able to produce great products and services. Back then, as well as today, this means far better integration between software and hardware, implementation of new cutting-edge technologies and most of all a putting the needs of the clients on the prime spot. The emphasis on quality and honesty makes the difference.

Today, we are hardware and a software company and we still have the same passion to create great industrial automation products and systems that are easy to use, more productive and reliable. We measure our success by the success of our clients. We have found that there is nothing more motivating and energizing than to work with entrepreneurs, managers, engineers and operators that really care about their work. If you are looking for the same attitude in your partners, we have just opened our doors to you.



Svetoslav Vasilev, CEO & co-owner

Education: MSc Management, Stockholm School of Economics, Sweden; MSc International Management CEMS, MicroMasters degree "Principles of Manufacturing", MIT

Responsibilities: Business strategy and development, project management, process analysis and optimization, lean management, technical writing and UX design



Victor Raychev, Energy, & co-owner

Education: PhD Student in Power Engineering, Technical University of Sofia, Bulgaria

Responsibilities: electrical design, design of algorithms and interfaces, quality and implementation control, project management, electrical measurements and diagnostics.



Kamen Krastev, Automation & co-owner

Education: PhD Intelligent Systems through modern sensors, "Angel Kanchev" University of Ruse, Bulgaria

Responsibilities: Automation design, engineering and implementation of industrial control systems (SCADA, MES, EMS and IIoT), PLC programming and software development.



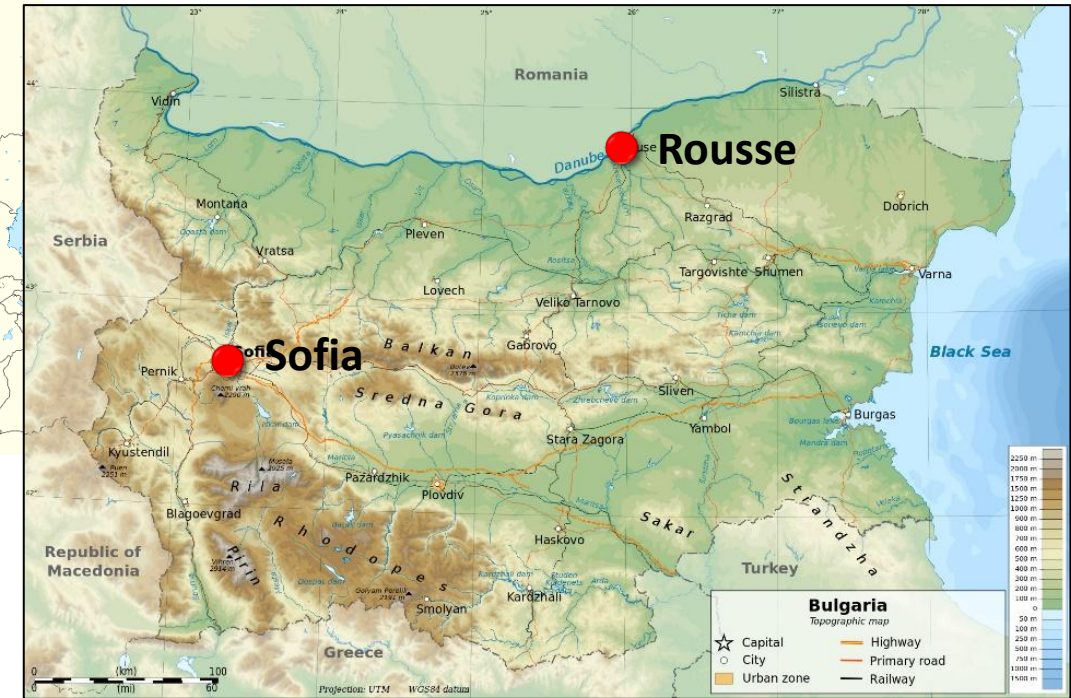
Ivo Raychev, Mechanics & co-owner

Education: MSc Mechanical Engineering, "Angel Kanchev" University of Ruse, Bulgaria

Responsibilities: Project management from design to manufacturing, mechanical engineering of machines and equipment, 3D design.

Location & network

- We have offices in two major cities – the capital Sofia (1.2 m inhabitants), and the fifth largest city Rouse (0.15 m inhabitants), which is only 60 km away from Bucharest, the capital of Romania.
- We have strong connection with two big technical universities – Technical University of Sofia and Rouse University
- We work jointly with one of the biggest High-Voltage Laboratories in Bulgaria – the one of TU Sofia
- We have good network of other local engineering and manufacturing companies
- We have approx. 800 sq. m workshop in Rouse, with additional 200 sq. m office.
- We are member of the organizations:



The workshop in Rouse



The office in Rouse



Team

- Our team consists of 11 people as of Jan 2025:
 - 4 mechanical designers
 - 3 electrical engineers
 - 3 PLC, Robot and SCADA programmers
 - 1 business development and administration
- Our team is young (avg age is 35 years) and very well qualified.
- We are doing some of the most complex robotic systems in Bulgaria.
- We have a sophisticated project management system.
- We are constantly improving our internal processes.



The team in Dec 2023



Customers

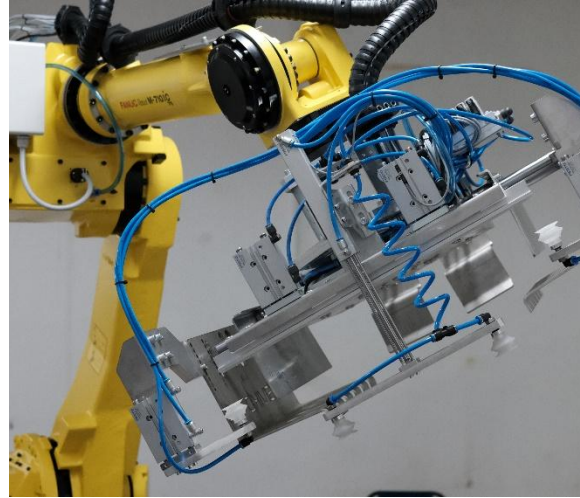
Some of our key customers



Portfolio and Project Examples

SIVIKO OOD

Examples from our work – robotics and non-standard machinery



[read more](#)

Example projects for integration of industrial robots

Palletizing Robot with Pallet and Padding Pick-up



[video link 1](#)

In this palletizing project, we have create a gripper that does three different operations – it can pick and place empty pallets, pick and place a plastic padding and palletize bags of dry building materials. The software allows users to create their own palletizing programs for bags by entering the following parameters bag size, weight and orientation; Pallet dimensions; layout program configuration for even and odd rows; Number of bags and rows. Based on the entered information, the software automatically creates and optimizes the robot's movements.

Industrial Robot Handling Valve Bags



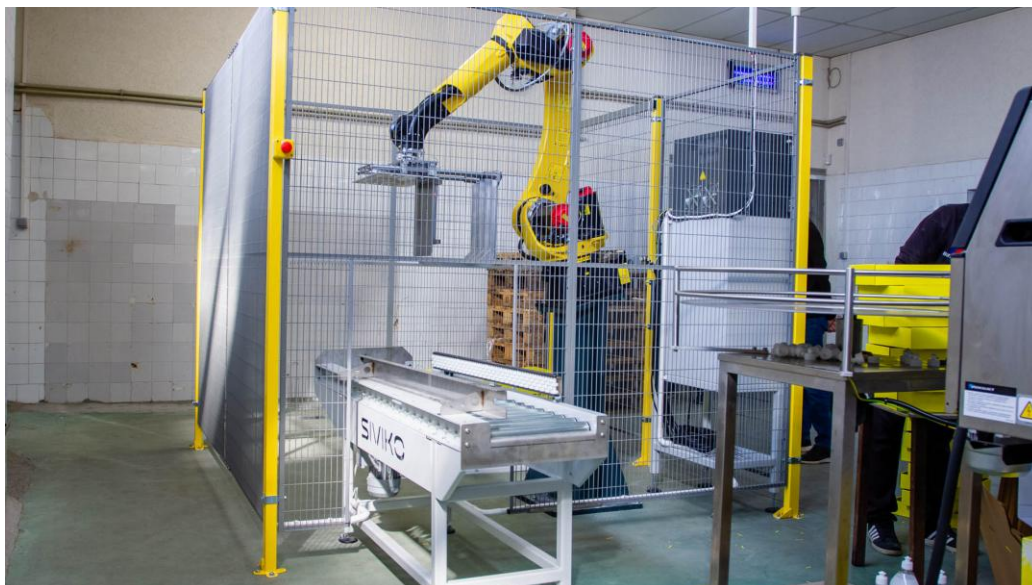
[video link 2](#)

The Siviko Bag Application Robot system is an excellent automated solution for the bagging process of valve bags. It is fast, flexible, compact in size and easy to use. It can work with all types of filling machines and with many different types of valve bags.

There is also a palletizing robot and the whole system is integration the control system created on the Ignition platform.

Example projects for integration of industrial robots

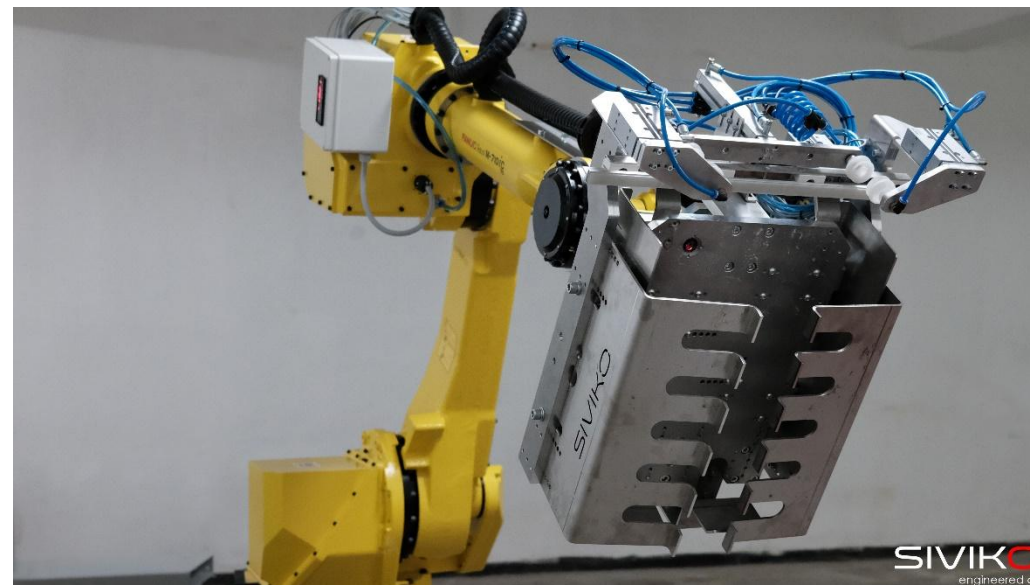
Palletizing Robot Handling a Variety of Boxes



[video link 3](#)

Robotic palletizing of boxes. The robot, a compact, fast and affordable FANUC M-20iD/35, equipped with a Siviko PBXG gripper palletizes over 10 types of boxes with different sizes, designs and weights up to 13 kg. The robot cell is compact – measuring 2.5 m by 2.5 m and simple in design, making it an ideal solution for smaller factories. The palletizing programs are selected from the robot's teach pendant from a drop-down list.

More than Palletizing Robot



[video link 4](#)

FANUC M-710iC/70 palletizing robot manipulates plastic bags and does 6 different operations with a single gripper. The robot takes up the empty bags, opens and positions them, controls the dosing, seals them with heating, and finally palletizes the bags.

Example projects for integration of industrial robots

Welding Robot for Boilers



[video link 5](#)

The industrial robot uses MIG/MAG welding for the manufacturing of biomass boilers. The robot cell has two positions on which the tubes of the boiler are welded to the base and top of the boiler.

Robot Tending Over-moulding Machine



[video link 6](#)

Siviko PHR-1 is a system that tends to an over-moulding machine. It features sophisticated control software that runs the whole system. The process starts with feeding in the plastic parts, which are oriented via a vibratory bowl feeder. The precise handling of the oriented details is of key importance. The parts are handled by a FANUC SCARA SR-6iA equipped with a custom-made gripper outfitted with various sensors for quality control. The robot has to unload and load 24 components from a mould in a cycle. It also tears off and deposits the remaining sprues.

Example projects for integration of industrial robots

Packaging and Palletizing of Food Products with Two Robots



[video link 7](#)

This robotic system is designed to package and palletize food products using two industrial robots. The FANUC M-10iD/12 robot handles packaging, while the FANUC M-710iC/50 robot is responsible for palletizing. The system can package two different sizes of salad boxes into three different sizes of cardboard boxes, and it serves two production lines simultaneously.

Roller Painting of Inductive Components by Robot



[video link 8](#)

We have completed an exciting project for our clients at AQMagnit. The robot cell, featuring a FANUC industrial robot, has been tailored to perform the impregnation of inductive components using fast-drying varnish. Additionally, the system can glue the metal lamella as a secondary function. This project marks the first time this manual production process has been automated. Our team invested significant effort into research and experimentation to ensure a stable process with high-quality output, short cycle times, and user-friendly operation.

Non-standard machine project: Siviko Automated Cable Tester ACT 150

- Siviko ACT 150 is an innovative automated cable tester that offers reliable and convenient automated solution for cable manufacturers and distributors that want to ensure the quality of their products by running in-house electric tests for active resistance, withstand voltage and location of eventual faults.
- We have designed, engineered and assembled every important aspect in this machine – hardware, electric schematics, safety chains, PLC programming, HMI design, and the hybrid Siviko OS
- You can find more information and technical specification at <http://siviko.com/siviko-act150/>



Non-standard machine project: Production Line for Bag in Box Packaging

- This is perhaps the most complex engineering project we have ever completed as of 2024. It's a 4-lane machine designed for manufacturing bag-in-box packaging, which is commonly used for storing wine, natural juices, and other beverages.
- The Siviko BBM1 is a cutting-edge Industry 4.0 machine. It utilizes precise servo motors for its most crucial movements and incorporates numerous smart sensors and regulators to manage the temperature, tension, and movement of different machine parts.
- Thanks to its advanced hardware, we've been able to develop a software application that can create and store recipes for different packaging types. This has significantly reduced setup time and minimized planned downtime.
- Moreover, the machine is equipped with a sophisticated monitoring and control system based on the Ignition platform. It offers robust tools for real-time management and data collection, generates event alarms as needed, and enables remote and preventive maintenance.
- You can see the machine in action:
<https://youtu.be/Wd1pYubE3XA?si=MGX6qZqdDjzX8Xlz>

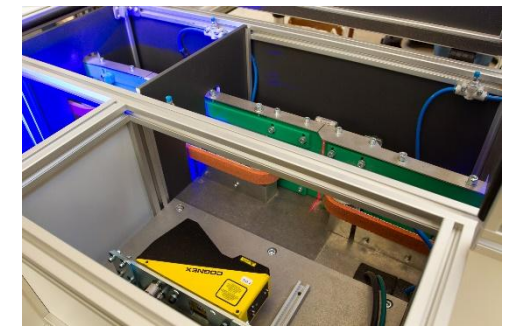


Non-standard machine vision project

- **Engineering of machine vision systems**, which can be complemented with our solutions for non-standard industrial automation, industrial control systems and industrial robots. This does allow solving more complex problems.
- Machine vision has four main applications:
 - **Guidance** – accurate localization of a part's position and orientation in 2D and 3D space and guidance of robots or machines to them;
 - **Identification** - ability to read codes, letters and numbers;
 - **Measurement** – measuring distances and locations to assess whether they meet well-defined specifications;
 - **Inspection** – identification of defects, irregularities and other manufacturing irregularities.

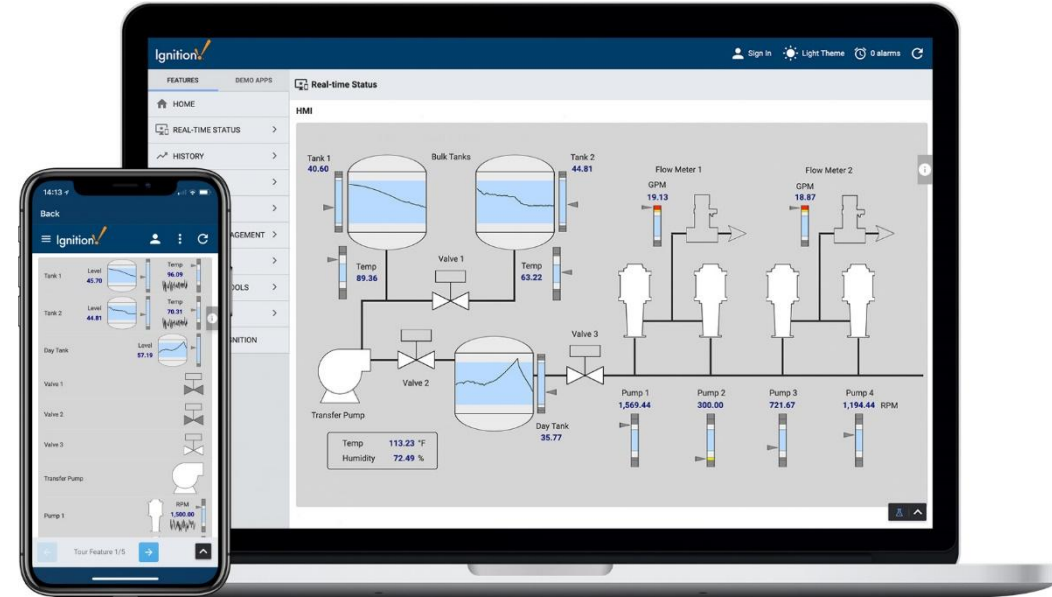
- **Примерен проект:** Wood tile inspection and quality control machine using Cognex machine vision camera and profiling sensors (switch on subtitles):

<https://youtu.be/QV89IWrlbAM>



Industrial control system - Build a Smart Factory with Ignition

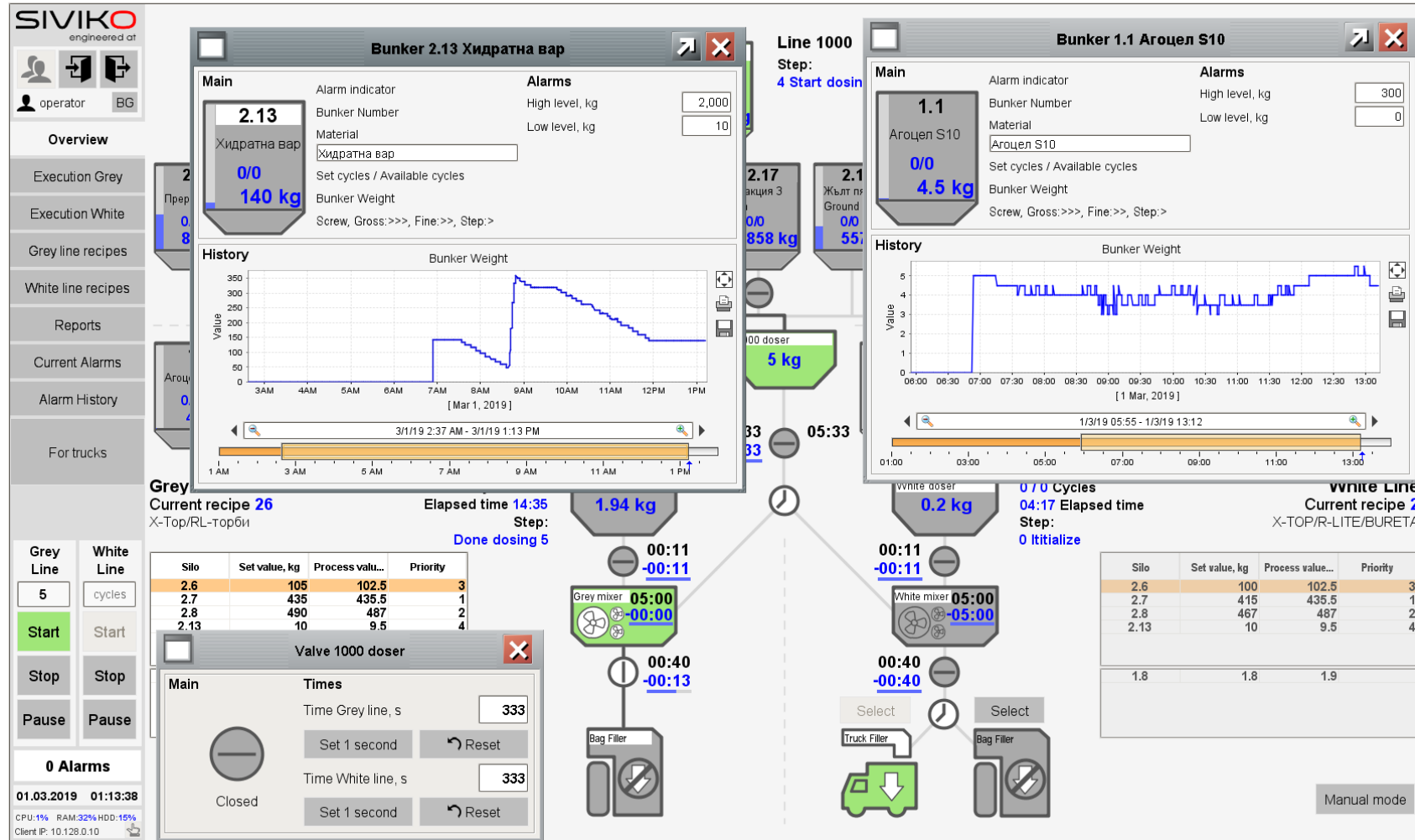
- **The industrial control system is a combination of software, hardware and communications** infrastructure that allows real-time data acquisition from the production process and its management and optimization.
- We use the software platform Ignition to create the industrial control system that our customer needs.
- **Ignition software is the first truly universal industrial application platform** for connecting all your data, and designing and deploying industrial applications throughout an enterprise, without limits. It consists of the [Ignition platform](#) and [Ignition modules](#) that add powerful functionality, empowering the creation of virtually any kind of industrial application including **SCADA, MES, IIoT, reporting, alarming**, and more.
- Ignition is being developed by [Inductive Automation](#), an independent company founded in 2003 and based in California, USA.



Siviko is a Gold Certified Integrator of Ignition 8.1

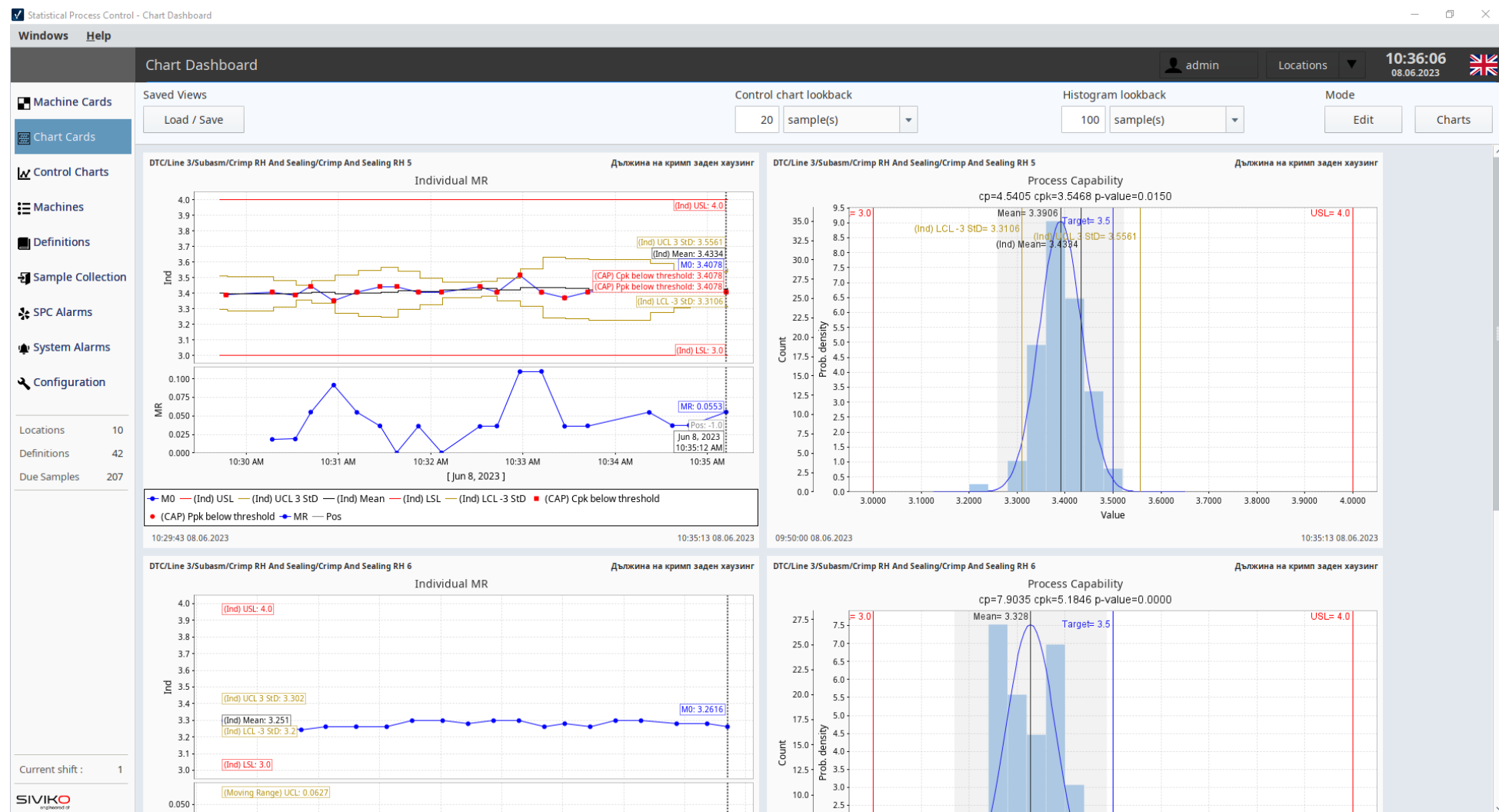


Example project: SCADA for production of dry budling materials



- Ignition-based system running a factory that produces dry building materials
- The system visualizes the working process and controls and manages the recipes
- Ability to create, manage and monitor alarming statuses
- The system has reporting that is generated automatically from the machine data.
- As a result of this project, the performance and the management of the factory have been significantly improved. The downtime has been decreased, as well as the waste and production errors.
- More information at: <https://siviko.com/2019/07/10/digital-factory-ignition/>

Example: Statistical Process Control Software



Example: Robot Palletizing Software in Ignition


engineered at


admin BG

Packing

Product Layouts

Current Product Layout

Box Layouts

Current Box Layout

Settings

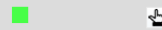
Current Alarms

Alarm History

4 Alarms

CPU:0% RAM:20% HDD:74%
Client IP: 192.168.77.217

12.02.2024 13:10:17



Layout name11Течност за чистачки 2л

Description

Box sizeL390 mmW250 mmH295 mm

Pallet sizeL1,200 mmW800 mmH0 mm

Boxes per row9

Rows per pallet4

Boxes per pallet36

Package positions

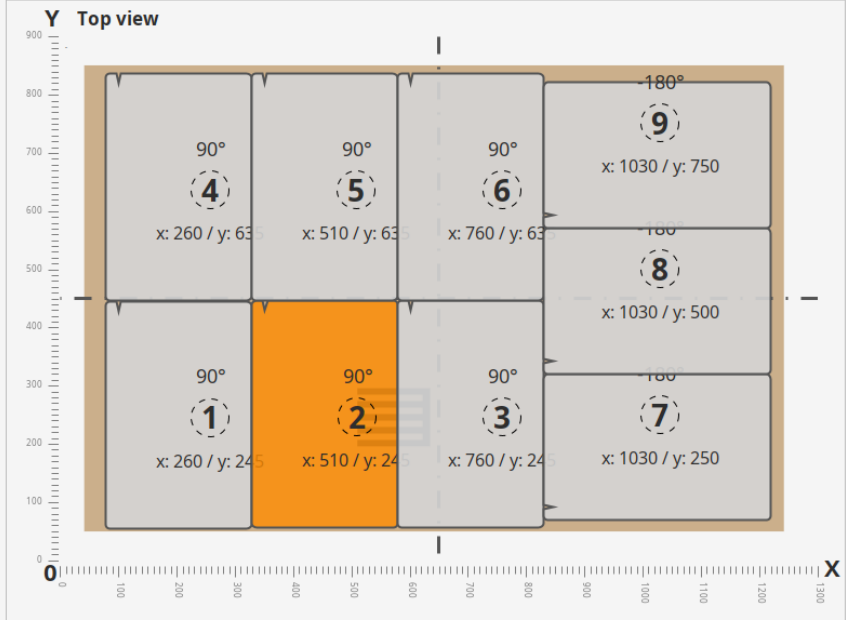
place_nr	X	Y	Z	°
1	260	245	30	90
2	510	245	30	90
3	760	245	30	90
4	260	635	30	90
5	510	635	30	90
6	760	635	35	90
7	1,030	250	30	-180
8	1,030	500	30	-180
9	1,030	750	30	-180

OddEvenChange order▲▼ImportExport

RevertFromToSaveCancel

Edit Box Palletizing Layout

Y Top view

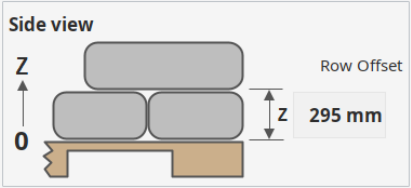


Package move

StepX510 mmY245 mmZ30 mmR90°

10mm/1°◀X▶X▼Y▲Y▼Z▲Z↺↻

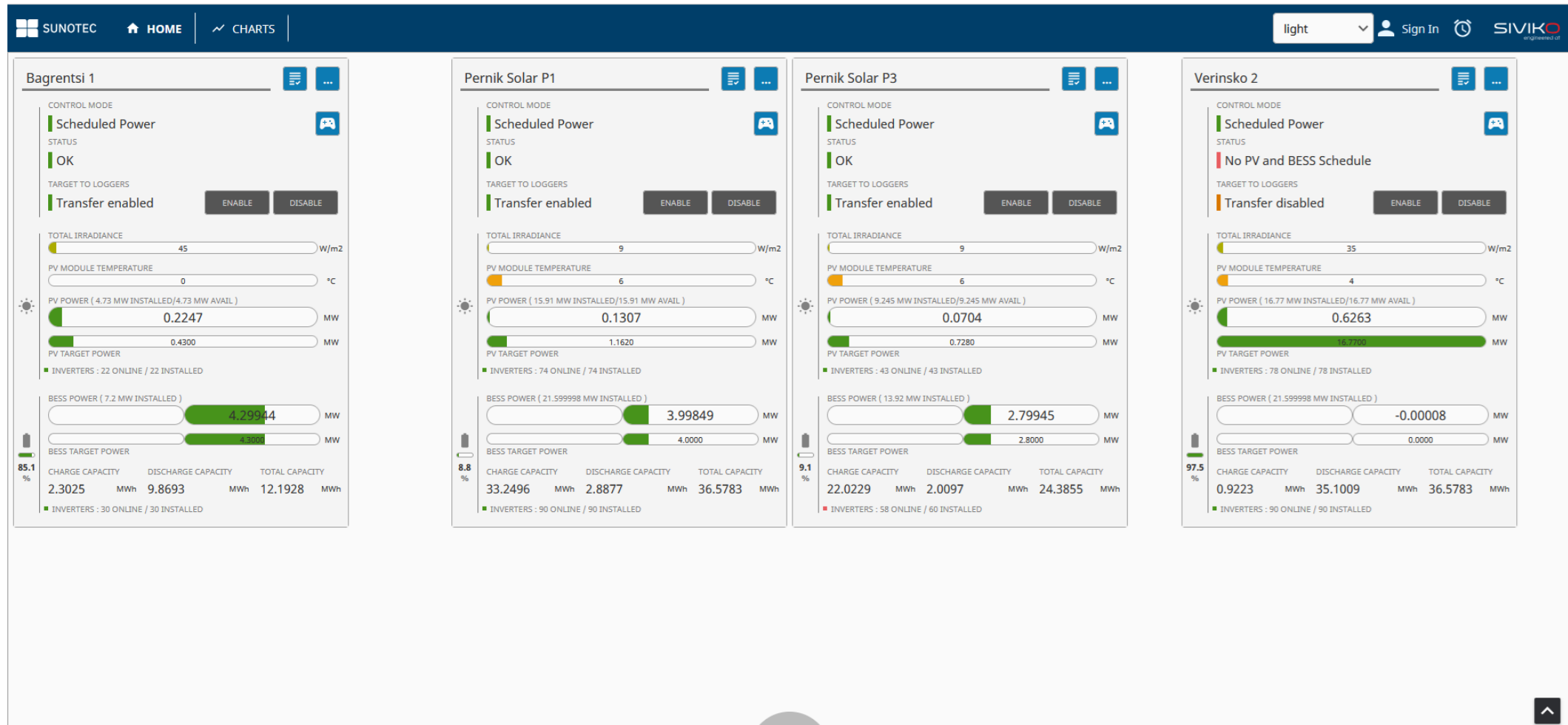
Side view



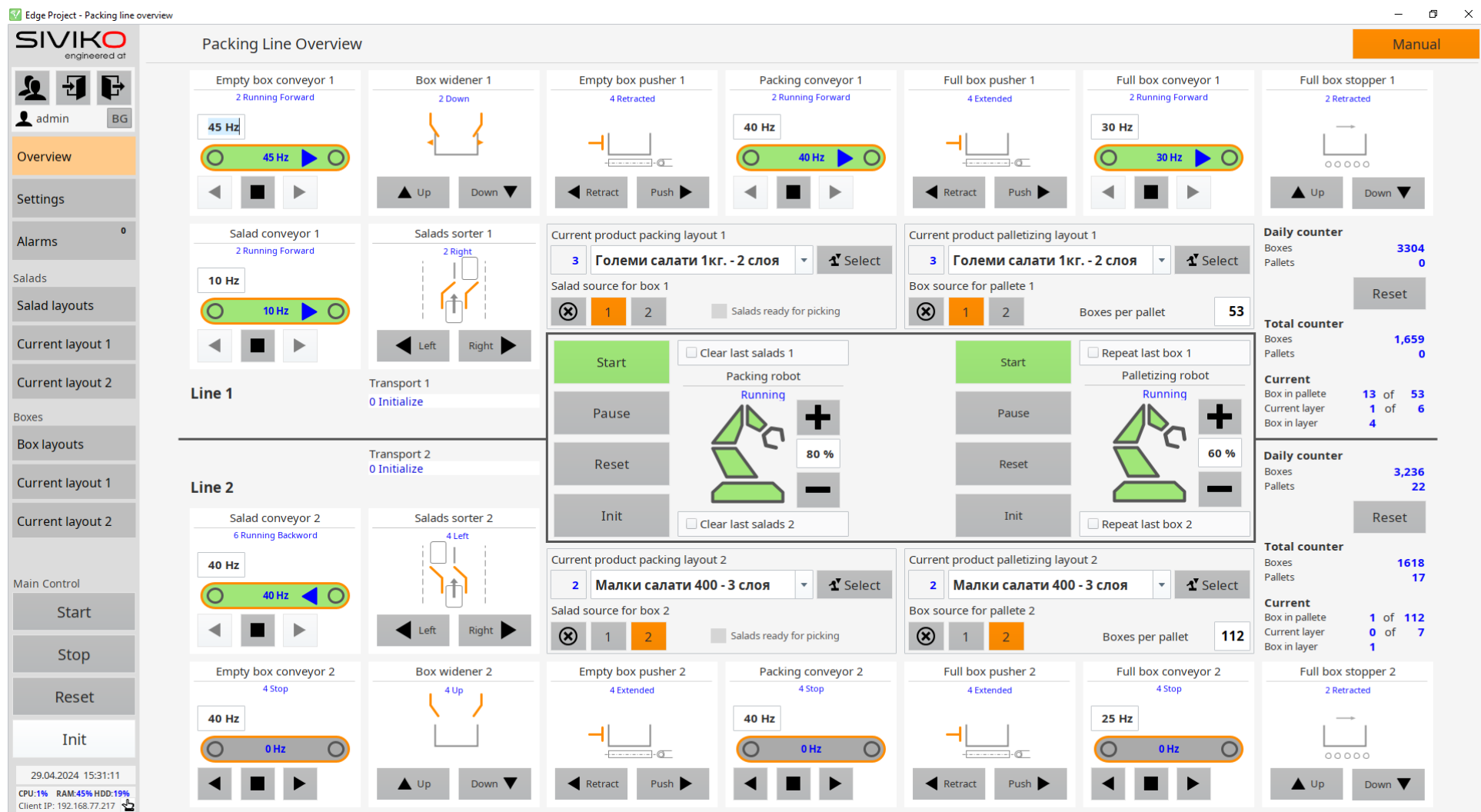
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SIVIKO

Example: PV Power Station Remote Management



Example: Local SCADA system for packaging and palletizing robots



A dark gray background with a subtle pattern of light gray hexagons.

SIVIKO

engineered at

industrial robots • control systems • automation

www.siviko.com