ELVAC

Technology Monitoring and Company Power Engineering

Custom Company Information Systems

Production Monitoring and Control

Advanced Production Planning

Company Data Visualisation

SOLUTIONS CATALOGUE
ELVAC SOLUTIONS

FOR PRODUCTION

ELVAC

SELECTED SERVICES OFFERED BY **ELVAC SOLUTIONS s.r.o.**

SOLUTIONS, PRODUCTS AND SERVICES

We develop control, monitoring, geographic and information systems for the aviation, military, water management, industry and power engineering. We provide integrated solutions and turnkey software development.

We analyse business processes and provide their modelling, prototyping and support via information systems. We provide certified service with all the delivered products up to the scope of 24/7.

PARTNERSHIP / ELVAC SOLUTIONS s.r.o.

✓ Silver Integrator of CitectSCADA
✓ Holder of the Microsoft Silver Competency in application development
✓ Holder of the Microsoft Gold Competency for data platforms
✓ Authorised Partner of PHILIPS Signage Solutions
✓ Certified Hewlett-Packard Component Supplier

hp Business Partner

Citect
Registered
SILVER
Integration
Partner

PHILIPS
*Signage*Solutions

Microsoft Partner | Gold Data Analytics
Silver Application Development
Silver Data Platform

OUR SOFTWARE PRODUCTION SOLUTIONS

Tech IS
www.techis.eu

FACILITY MAINTENANCE PLANNING AND MANAGEMENT

iMPROVE iT!

PRODUCTION INFORMATION SYSTEM

apsolut!

ADVANCED PRODUCTION PLANNING

InfoPanels
www.infopanels.eu

COMPANY DATA PRESENTATION

Enterprise Resource Planning

TURNKEY SOFTWARE DEVELOPMENT

SCADASOLUTIONS

CONTROL AND MONITORING SYSTEMS

ELVAC SOLUTIONS Ltd.
SUPPORT AND SERVICE

We provide SLA service with our products to the extent of up to 24/7/365.

QUALITY

We have the following certification to support the quality of the delivered solutions and services:

✔ **ISO** 9001 — Quality management system for the development, production, sale and maintenance of industrial control, monitoring and information systems.

✔ **ISO** 20000 — Service and support for industry control, monitoring and information systems.

✔ **ISO** 27001 — Sale, development, supply and service of industrial control, monitoring and information systems.

✔ **ISO** 12207 — Application and solutions of technical-information, industrial, monitoring and geographic information systems.

✔ **ÚCL** — **Civil Aviation Authority Certification**
Approval certificate to develop, produce, install, maintain, repair and modify aeronautical ground facilities.

SERVICE

Our work does not end with the acceptance of the work or product. We provide the following services to our clients:

- Up to 24/7 technical support based on the Service Contract.
- Telephone support to end users within the Hotline Service.
- Provision of technical support in the form of paid Subscription Service.
- Supervision and monitoring of the supplied software or hardware.
- Specialised training in all our solutions and systems.

A modern production company cannot do without an effective information system these days. There are different types of company information systems based on the processed data.

The monitoring and control of technological units are provided by SCADA control and monitoring systems. Production resources and processes are monitored by MES/MOM information systems. CMMS/EAM systems provide maintenance and administration of the company equipment, and APS-type systems are used in production capacity planning.

The control of company process management is provided by ERP systems and the Digital Signage solution can be used for the presentation of data from all the previously mentioned systems.

The following pages provide descriptions of our own solutions covering all the mentioned areas.

InfoPanels
www.infopanels.eu
COMPANY DATA PRESENTATION

ERP
TURNKEY SOFTWARE DEVELOPMENT

apsolut!
ADVANCED PRODUCTION PLANNING

Tech IS
www.techis.eu
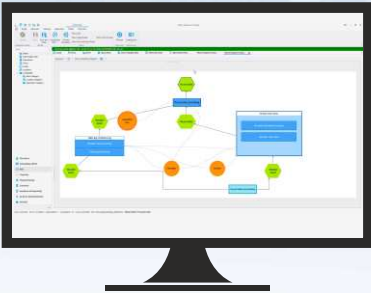**FACILITY MAINTENANCE PLANNING AND MANAGEMENT**

¡MPROVE iT!
PRODUCTION INFORMATION SYSTEM

SCADASOLUTIONS
CONTROL AND MONITORING SYSTEMS

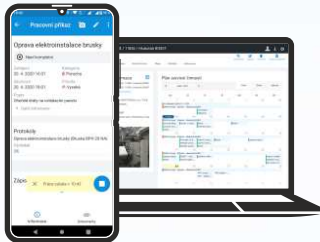## ERP

Integrated solutions of turnkey company information systems are provided by implementing custom orders with the use of **ELVAC RESOURCE PLANNING** modules.

Digital Signage

The **InfoPanels** information system connects to any source of company data and their visualisation.

APS

We deploy **APSOLUT!**, our own software for advanced production planning.

SCADA

We offer an integrated set of applications for industrial automation and data visualisation for building a reliable control and monitoring system **(RCMS)** with the use of **SCADA**-type software.

CMMS/EAM

Asset management and company maintenance control are provided by implementing the **TechIS** system.
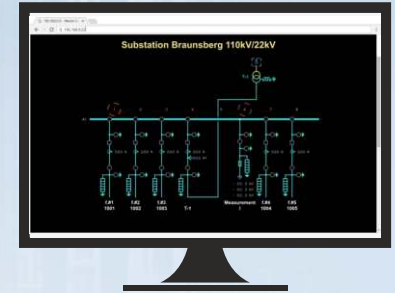
MES/MOM

We deliver **iMPROVE iT!**, a modern production information system for production monitoring and control.
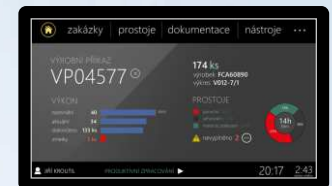
CONTROL AND MONITORING SYSTEMS

We offer an integrated set of applications for industrial automation and data visualisation that helps build new control and monitoring systems while integrating the current ones.

- A modular solution with an option of gradual extensions.
- A uniform user interface for the monitored and controlled systems.
- User-friendly configuration tools.
- A well-arranged alarm system.
- E-mail or SMS notifications of critical events.

- **likeSCADA** – based on the modular ELVAC RTU hardware.
- **CitectSCADA** – monitoring technologies in industry, transport and power engineering.
- **ETAP** – control and monitoring energy systems.
- **Development** of communication drivers when standard industrial solutions cannot be used.
- **Delivery of hardware** for data collection and technology control.
- **Integration** with company information systems.
- **Development** of turnkey control and monitoring systems.

APPLICATION

- Machine data acquisition and monitoring
- Monitoring and controlling complex technological units
- Monitoring and controlling energy consumption - company power engineering
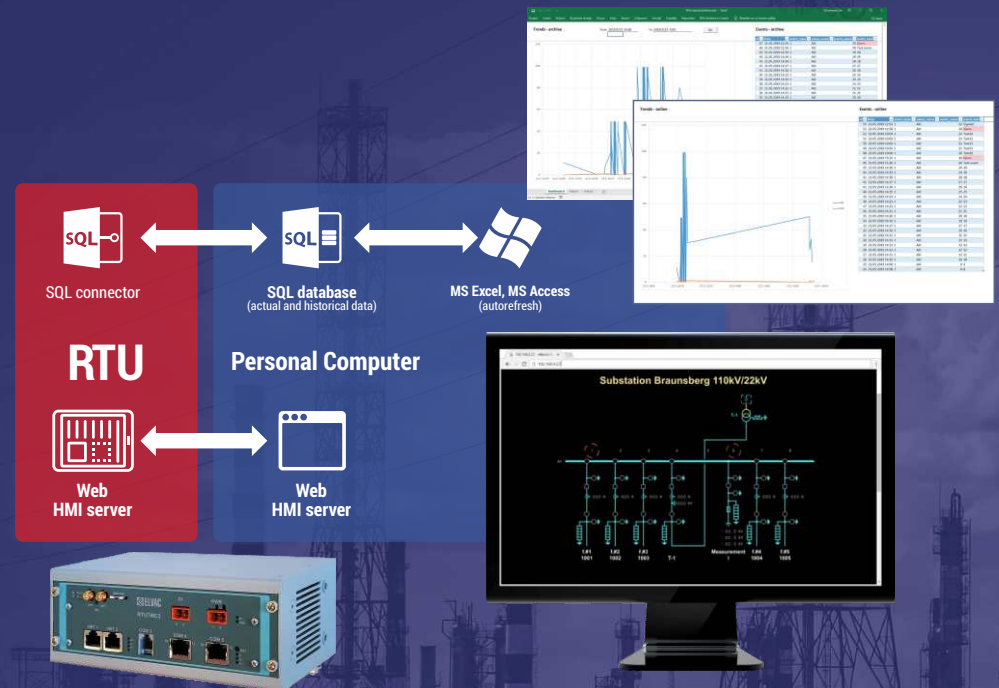- Building robust dispatching systems

SELECTED IMPLEMENTATION

Control and monitoring systems in power engineering

SCADASOLUTIONS, an ELVAC division, offers an accessible control and monitoring system based on easy-to-extend modular elements. We have developed and we manufacture a time-tested series of measuring and control units for company power systems, the ELVAC RTU7M series equipped with likeSCADA web interface that offers, among other things, a simple vector visualisation of diagrams with an interaction option and an option to save the measured data in an external SQL database. Your future control and monitoring system can grow with your requirements and needs thanks to the scalability of the RTU7M units.

How does the system work?

RTU7M is a programmable logical automaton **(PLC)** with a large number of extra functions. It has been primarily developed for power engineering, but it can be used in any industry. RTU7M can work as an independent control and monitoring industrial micro-computer that saves measured data to an SD card and controls the energy process with a custom algorithm. However, you might appreciate the perfection of the design when you connect an RTU7M unit into the data network via an Ethernet interface, or thanks to the integrated LTE modem and VPN connection. It will enable you to save the measured data directly into the Microsoft SQL database. You can easily visualise the status of the measured and controlled components, as well as control the technologies thanks to the integrated RTU7M unit web browser. You can monitor and control the RTU7M unit with a master SCADA system.

RTU7M with **likeSCADA** interface is scalable and it is an efficient solution for collecting data on power consumption and for regulating consumption limits. Save money for electricity by reducing the consumption limit. We will help you get data for setting the right value using the RTU7M unit and resolve the management of energy-intensive processes.

SQL connector

SQL database
(actual and historical data)

MS Excel, MS Access
(autorefresh)

RTU

Personal Computer

Web
HMI server

Web
HMI server

Substation Braunsberg 110kV/22kV

iMPROVE iT!

PRODUCTION PROCESS CONTROL

iMPROVE iT! is a modular MES/MOM production information system that allows you to integrate all the company data and helps you set processes to improve labour productivity.

- On-line collection of data from machines, production equipment and production divisions.
- On-line production control.
- Adherence to production procedures.
- Connection to ERP and other company systems.
- Lean and paperless production.
- Quality control and assurance.
- Production visualisation.
- OEE, SPC and other key production indicators.
- Analyses and evaluations.
- Monitoring energy intensity of production and the entire facility management.
- Inventory management and visualisation.

APPLICATION

- Chemical, food-processing, pharmaceutical, electrical and plastic industry sectors
- Mechanical engineering, serial production and automotive
- Utility – namely in production monitoring

PRODUCTION   ANALYSES   OEE   ATTENDANCE   WAREHOUSE   SPC   VISUALIZATION   INTEGRATION
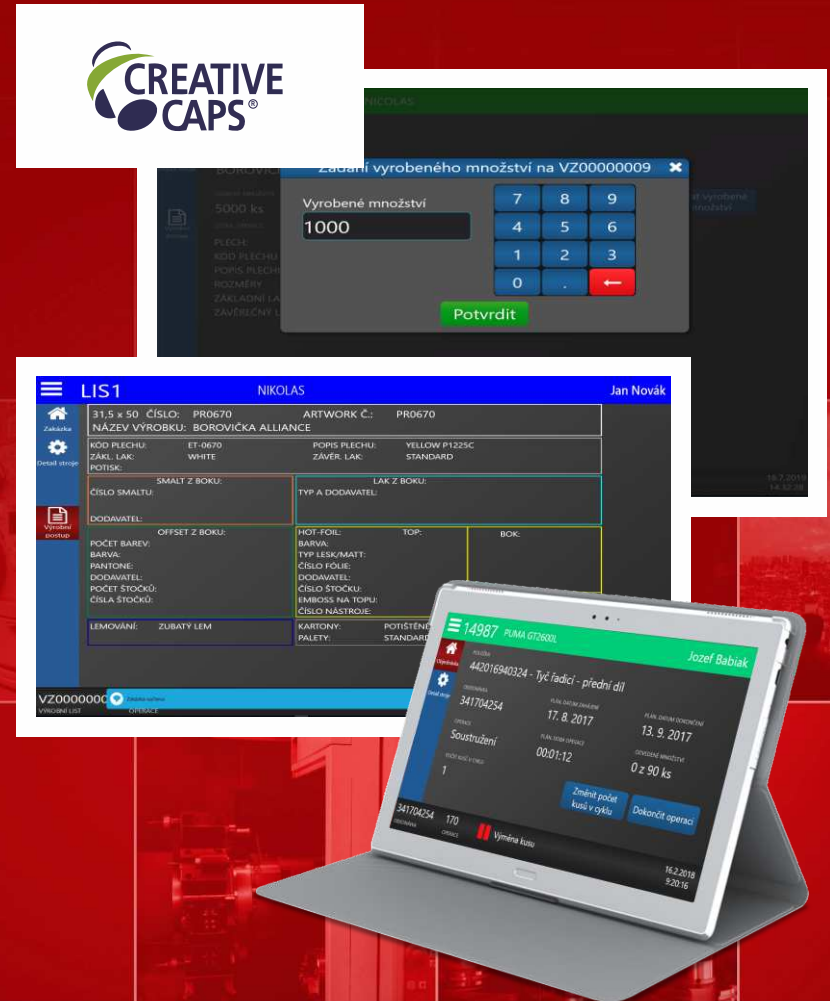
SELECTED IMPLEMENTATION

Implementation of iMPROVE iT! in Creative Caps s.r.o.

The implementation of the system had a significant impact on the speed and quality of information transfer between company systems (iMPROVE iT! - ERP - attendance system) and their users. It replaced complicated order records in the MS Excel application and enabled monitoring real-time production, order status, machine use, employee performance, downtime durations and causes, adherence to work procedures, records of non-conforming product and so on.

The integrated solution also included the delivery of all hardware, i.e., the server, machine terminals and data collection units.

The Company Management decided on the future system extension with production planning and inventory management modules.

MAINTENANCE
PLANNING

Stock Balance
OPTIMIZATION

Register of
EMPLOYEES

READY FOR INDUSTRY 4.0

REDUCTION IN DOWNTIME
AND FAILURES

Register and
Administration
of PROPERTY

Tech⊡IS
www.techis.eu

FACILITY MAINTENANCE PLANNING AND MANAGEMENT

The **TechIS** information system is a modern solution for planning, control and records of maintenance of company machines, equipment, fleet and assets in general. It provides users with a continuous accessibility to essential information and contributes to savings and better maintenance management.

- **Records and management of assets, persons, organisation units.**
- **Easy-to-navigate maintenance planning.**
- **Reduction in downtime and malfunctions.**
- **Optimisation of spare parts inventory.**
- **Automatic setting up of maintenance orders based on signals from machines.**
- **A modern mobile approach to asset management and maintenance performance, QR and NFC support.**
- **Continuous accessibility to important documents.**
- **Creating analyses and reports.**
- **Paperless operation (replaces paper logbooks).**
- **Prepared for Industry 4.0 (connection to production systems).**

**KEY COMPANY
MAINTENANCE SOLUTIONS**

VYUŽITÍ

- Companies with their own production equipment
- Companies providing external maintenance
- Companies managing movable and immovable assets

SELECTED IMPLEMENTATION

Implementation of the TechIS system at AL INVEST Břidličná, a.s.

In AL INVEST Břidličná, a.s., major European and the largest domestic aluminium producer, they lacked an effective tool for management and planning of plant maintenance. In the words of the project manager, "They purchased TechIS to replace the clearly missing control of internal performances and to gain the ability to track maintenance costs online. The quality and functionality of the customization was a priority for delivery."

About a hundred users work with the system in Břidličná, who always have at hand information about the assigned tasks, all the documentation for machines and production equipment, they can write down the work done or write off used spare parts directly on the spot. The data collected in this way is then used for extensive reporting, used also for assessment of entire maintenance process and its team.

The custom modification of the system also solved the requirement for interconnection with the SAP system used in the company.
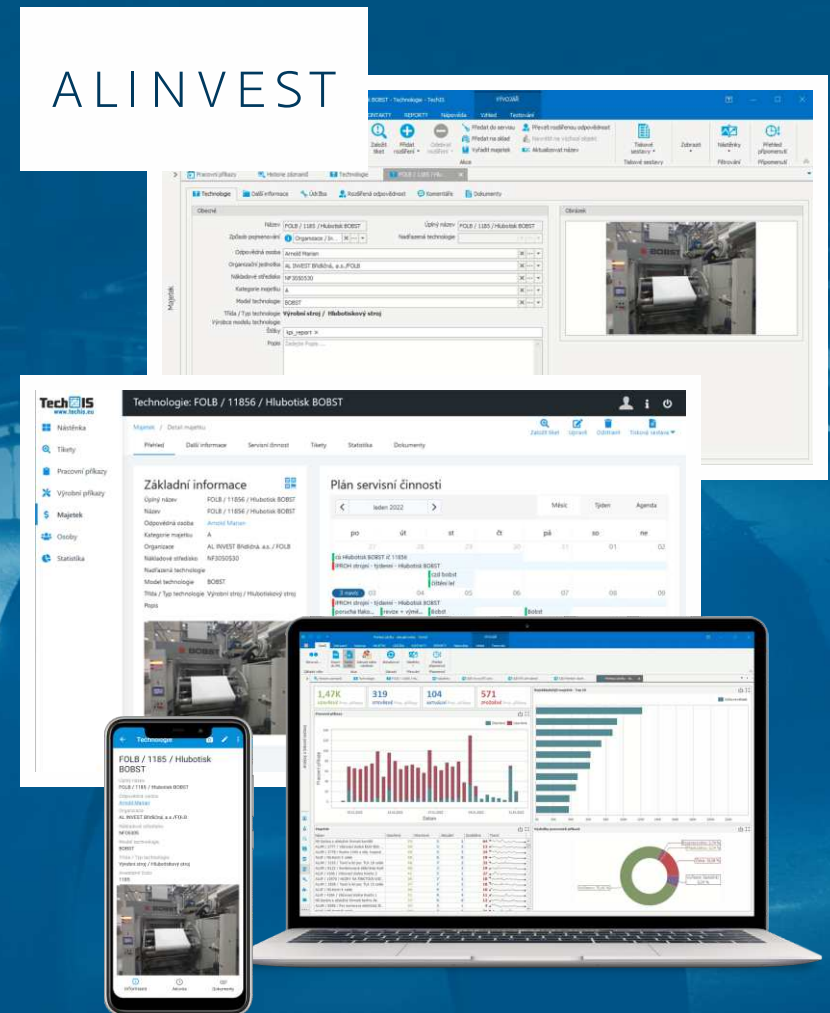
apsolut!
ADVANCED PLANNING AND SCHEDULING SOLUTIONS

ADVANCED PRODUCTION PLANNING

APSOLUT! is an effective APS software with numerous properties and functions surpassing competitive products. The user interface and data visualisation in the APSOLUT! product is based on Microsoft standards. The access to the individual functions of the application is similar to Microsoft Office. It is most often used by people working in operation and top management, planners, employees at purchasing and sales departments, and other employees using APS software outputs, directly or indirectly.

- **Full-fledged APS** (Advanced Planning and Scheduling) **software.**
- **Complete support of the advanced planning process.**
- **Integrated scripting language, DMS** (Document Management System)**, report system, dashboards, notification system.**
- **Easy integration with company ERP systems, attendance systems, MES/MOM production information systems, CMMS/EAM systems for company maintenance and asset management, and more.**
- **Network environment with an interactive collective access to the process of advanced production planning.**
- **Support for calendars and timelines for manual order transfers.**
- **Simulation support.**
- **Workshop planning support.**

APPLICATION

- All production companies with various types of production
- All companies with comprehensive technological processes

SELECTED IMPLEMENTATION

Implementation of ADVANCED PRODUCTION PLANNING
at Glatt-Pharma, spol. s r.o.

The **APSOLUT!** system creates production plans based on the input data from the ERP (ABRA) system. Besides the process of advanced production planning (APS), it offers many interesting and useful functions and properties:

- provision of information on the job (operations) queue at specific workstations,
- option to change the order of operations,
- transfer of operations to other workstations,
- distribution of operations,
- displaying the production plan in the form of a calendar,
- displaying the production procedure diagram.

The implementation of Glatt-Pharma also includes the option of production scenario simulation. The simulation allows modelling alternative capacities of workstations, their performance or working hours. It is possible to simulate various alternatives of the delivery date, the scope of the order, its priorities and other specifics at the level of orders.

Huisman Resource Planning

CUSTOM COMPANY INFORMATION SYSTEMS

A complete solution of a company information system (ERP). The system is designed for organisations that look for an integrated solution that covers the entire production and operating cycle of the company.

The modules of the ERP system we developed cover all areas from order acceptance to its final delivery to the end customer, including the support processes. Integration of modules for project management, financial planning, capacity planning, technological preparation of production, product life cycle management (PLM), planning purchases and subcontracts, logistics, quality management, project and production documentation management, supplier evaluation and so on. The integration with third-party systems allows for efficient automation of the entire production process and provides considerable time savings.

APPLICATION

Project cost management (Controlling)

- Budgeting
- Cost accounting
- Financial planning (Forecasting)

Personnel planning

- Paid leave and replacements
- Statement of work
- Production planning
- Maintenance control, CMMS/EAM (TechIS)

Warehouses and inventory management

- Purchasing material, components and services
- In-house transport and shipping
- Project management
- Supplier evaluation
- Quality management

Pricelists

- CRM
- Order processing

SELECTED IMPLEMENTATION

HRP implementation at Huisman

Huisman Konstrukce, s.r.o., a company with rich experience in the area of designs and production of heavy machinery (lifting and handling equipment) for leading global companies operating both on land and sea, is currently using the platform of our ERP system, which provides:

- PLM – product life cycle management,
- budgeting and financial planning,
- better groundwork for management's decision-making,
- the same information for all system users,
- greater pressure on adhering to procedures (processes),
- integration with other company systems – accounting, attendance, production and logistics, marketing and sales.

The ERP system also includes other general modules, mostly supporting the main managerial overview of production, security and user comfort.

- System security (users and roles) - authentication and authorisation.
- DMS – document and drawing sets management.
- Reporting (print reports and analyses).
- Notification system.
- Automatic distribution of print reports.
- KPI - performance indicators.
- User filters, views and headings.
- Change audits.

www.infopanels.eu

COMPANY DATA VISUALISATION

The InfoPanels system is an exceptionally effective tool for a fast, simple and reliable data presentation. Thanks to its variability, it is mostly used in industrial businesses, in offices, schools, shops or hotels.

In the production, the screens can display the current order status, plan performance, operating information for employees or representative welcome to important company visitors.

- **Controlling all displays from one place.**
- **Option to create own screens.**
- **A large number of data sources.**
- **Data presentation in real time (KPI, OEE…).**
- **Support of all commonly used multimedia formats.**
- **Passive and interactive use.**
- **Option to connect to company systems.**
- **Planning content in an easy-to-navigate calendar.**

VYUŽITÍ

- Industry and production
- Shopping and business centres
- Authorities and institutions
- Transportation hubs and information centres
- Hotels and congress centres
- Educational institutions
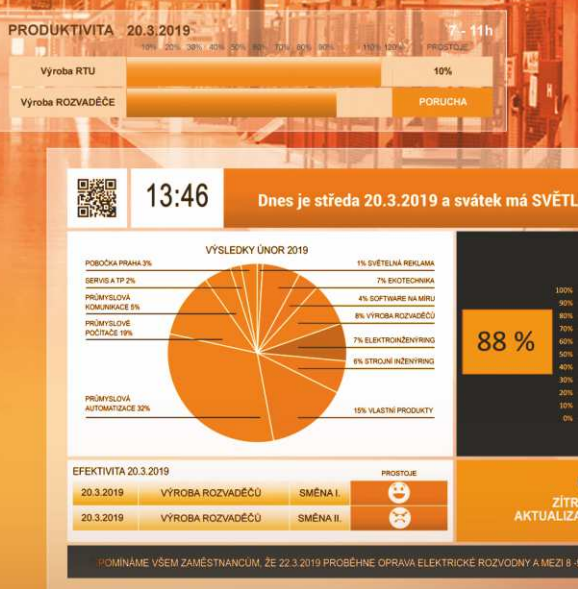
SELECTED IMPLEMENTATION

Implementation of the InfoPanels systems at KENDRION

Kendrion is a major worldwide supplier of components in industry and automotive. In their Prostějov branch, the InfoPanels system provides::

- management of requests for the preparation of production material,
- quality management processes,
- company maintenance process management,
- keeping employees up to date with changes in documentation, visits and product news.

The InfoPanels system has been implemented with the objective of automatic and unattended acquisition of information from various systems of the company and to provide a uniform method for displaying such information on the premises of the company.
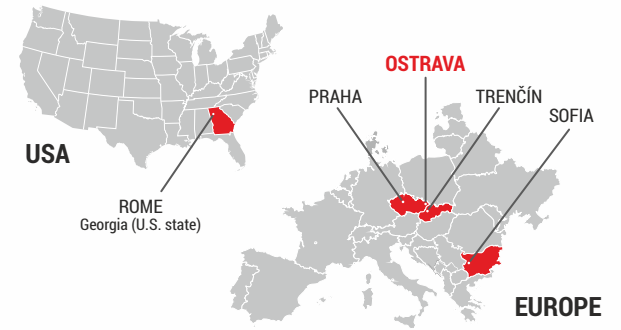
⧉ELVAC

ELVAC a.s.   **ELVAC SK s.r.o.**   **ELVAC SOLUTIONS s.r.o.**   **ELVAC USA LLC**   **ELVAC EKOTECHNIKA s.r.o.**   **DENESA s.r.o.**

ELVAC is a group of Czech-based companies that provide commercial-technical and engineering-supplier services in industrial automation, industrial and special PC systems, power electronics and single-purpose machines. The Company is also active in the field of ecology and software development.

Today, ELVAC operates in the Czech Republic, with headquarters in Ostrava and a regional centre in Prague, in Slovakia with a head office in Trenčín, in the United States with a head office in Rome (GA), and in Bulgaria with a head office in Sofia.

OSTRAVA

PRAHA   TRENČÍN

SOFIA

USA

ROME
Georgia (U.S. state)

EUROPE

WE HAVE BEEN ON
THE MARKET FOR MORE THAN **30** YEARS

www.elvac.eu

ELVAC SOLUTIONS

Besides the Czech Republic and Slovakia, **ELVAC** products are now also available in Poland, Romania, Bulgaria, Georgia, Macedonia, Turkey, China, Mexico, or the USA and in other countries.

ELVAC places great emphasis on developing its own products and implementing turn-key solutions. The evidence lies, among other things, in the commercially successful product series for power engineering, as well as in unique single-purpose machines and robotic workstations for the automotive industry. The Company delivers machine vision applications and technology for artificial intelligence and deep learning. Most of the projects by the machinery and automation divisions include Industry 4.0 elements.

ENVIROMENTAL TECHNOLOGY

SOFTWARE

INDUSTRIAL COMPUTERS | **WHOLESALE**

AUTOMATION

POWER INDUSTRY SYSTEMS

DEVELOPMENT AND PRODUCTION

MECHANICAL DESIGN

INDUSTRIAL NETWORKS

CONTROL AND MONITORING

ADVANCED PRODUCTION PLANNING

DATA VISUALIZATION

COMPANY MAINTENANCE

COMPANY SYSTEMS

aps
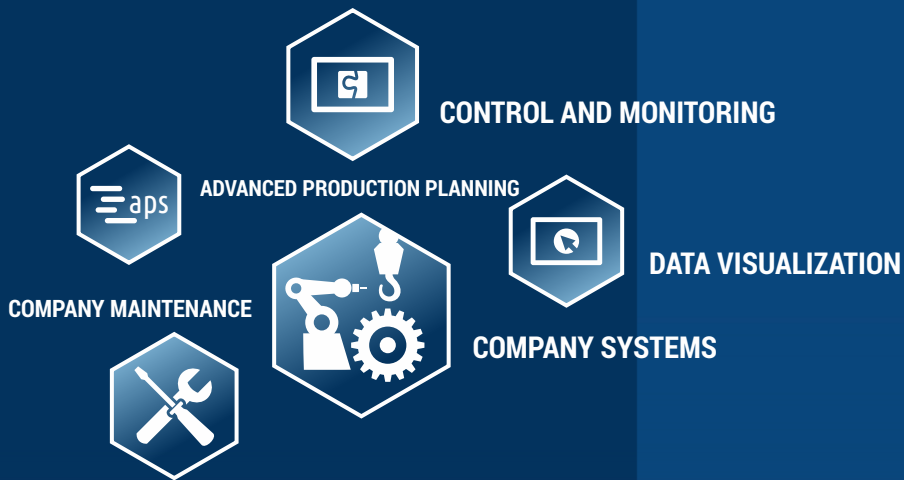
ELVAC

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