

Asseco CEIT Profile



Future accelerated

Companies are reaching out for technical and process innovations, digital factory tools, automation, or artificial intelligence as they realize these are crucial in achieving higher productivity and performance.

Company Profile

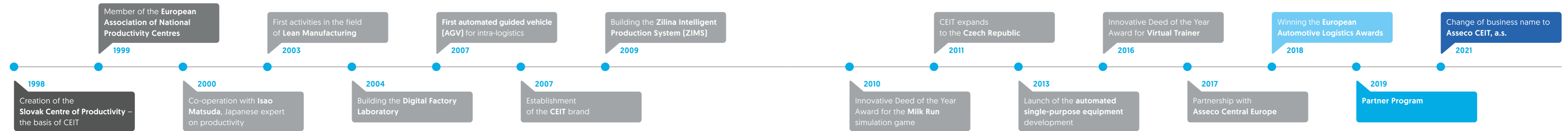
Asseco CEIT, a.s. is an innovative technological company providing companies with comprehensive solutions in the field of technical and process innovations, industrial automation, digitization, and optimization as well as intelligent internal logistics. The mission of this company and its own Research and Development Centre is to support the productivity, efficiency, and growth of competitiveness of industrial clients. The company is based in Slovakia and successfully operates on a pan-European level. Its customers include major industrial companies, especially in the automotive, engineering, chemical and electrical industries. Asseco CEIT, a.s. has been a member of the international Asseco Group since 2017.

Asseco CEIT is a one-stop shop in the field of industrial digitization and is a strong partner for manufacturing and logistics companies using Industry 4.0 tools. It opens the door to the digital and virtual worlds and turns manufacturing plants into smart factories.

Asseco CEIT - Your Partner for:

- Automation of logistics and production
- Optimization of logistics and production
- Digitization of industry
- Engineering services
- Product and process innovations for smart factories

History of Asseco CEIT





Asseco CEIT

Mission

Asseco CEIT's mission is to develop and implement unique solutions for industry and to continuously improve its own concept of smart factories, connecting digital, real, and virtual environments. Asseco CEIT strives to consolidate its significant contribution as a technological innovator on the international market by providing solutions for increasing both productivity and competitive advantages to the world of industry in the field of automation, planning, or optimization.

Having its own R&D Centre gives Asseco CEIT the asset of being a unique company with the huge advantage of offering not only catalogue solutions, but above all solutions customized to individual customer needs. The company's competitive advantage is to provide a comprehensive portfolio of logistics, automation and optimization solutions and services that cover a complete cycle: from idea proposal, idea implementation, to quality after-sales service.

The company's ambition is to come to the market with new, advanced solutions that turn businesses into smart and competitive players.

Asseco CEIT has, at the same time, been building up a quality Partner Program bringing products, services and customer service closer to customers across Europe.

**Industrial
solutions**

Asseco CEIT



AGV systems

Asseco CEIT offers a comprehensive automatic logistics system consisting of intelligent mobile devices, so-called AGVs [Automated Guided Vehicles], peripherals and its own Monitor & Control System [MCS].

- Tractor AGVs
- Underrun AGVs
- Forklift AGVs
- Customer AGV Solutions
- Monitor & Control System

Tractor AGVs

Mobile robots designed to carry loads. Tractor AGVs offer wide scalability and a high degree of customization.



Asseco CEIT tractors are available with contour, laser, or magnetic navigation. They offer wide modularity with a load capacity of up to 6 tons and a maximum speed of 2 m/s. The number of combinations and their high degree of customization make them ideal for use in various internal logistics processes in an industrial environment.

The system of AGV tractors can be connected to the customer's internal information system to ensure a fully autonomous process, thus achieving a higher level of automation, unattended supply of the production line, or the transport of finished products to the warehouse. The advantage of tractors is the possibility of transporting several pallets at once, thus streamlining the flow of material and shortening the cycle time.



Underrun AGVs

Ideal for automating logistics and transporting material placed directly on the mobile robot for a more efficient use of space in production facilities.



Underrun AGVs are easy-to-integrate mobile robots designed for continuous operation. They provide a high degree of customization, allowing for flexibility and scalability. They are compatible with internal logistics as well as complete production lines.

The underrun AGVs are controlled by their own Monitor & Control System. All Asseco CEIT AGV products are CE certified and the line of underrun intelligent mobile robots is also ready for 5G technology. The new range of underrun AGVs complements a wide portfolio of implemented technology with after-sales services based on individual customer needs.



Forklift AGVs

An extremely flexible and versatile solution for handling finished products or interoperation material supply for the production process.



Forklift AGV is an excellent alternative to transporters, manual trucks, or manual forklifts.

Asseco CEIT offers several types of forklift AGVs with different forks for placing handled goods, their configuration being selected according to the physical characteristics of the transported object (weight and overall dimensions), and the nature of the logistics process. High positioning accuracy prevents product damage during handling and minimizes the requirements for automated solution integration.

AGV Pallet Truck
Low Lift AGV
Forklift AGV



Custom AGV Solutions

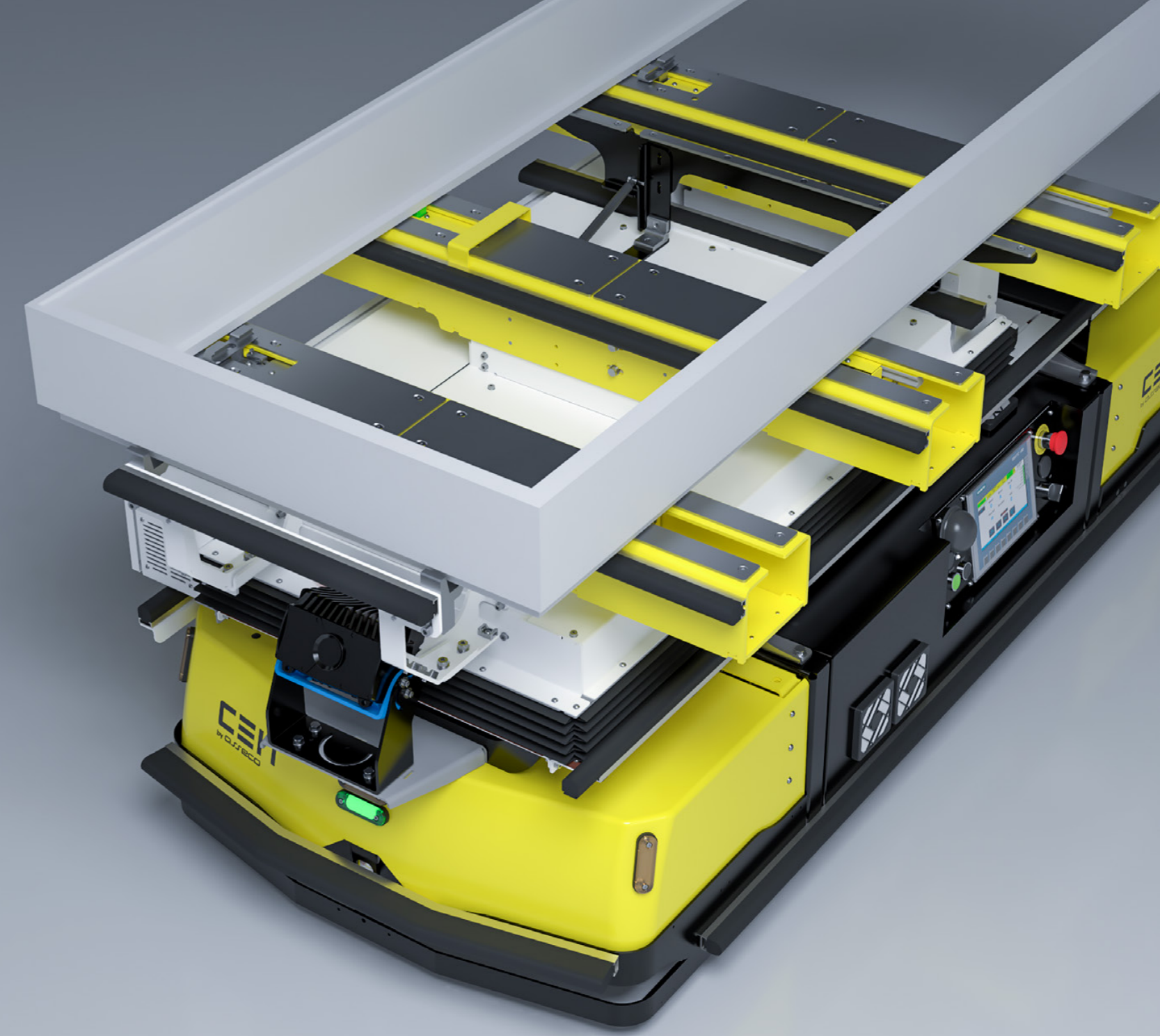
There are cases when none of the standard solutions are suitable for the automation of internal logistics or production.



In such an event, our experienced technical team at Asseco CEIT develops a special tailor-made solution suitable for your individual needs and current situation. It can be a combination of various AGVs and peripherals or a complete automated unit with its own MCS monitoring system.

Advantages of intelligent internal logistics:

- Complete automation and optimization of logistics processes
- Safety and health protection
- Quality and stability of the logistics process
- Cost savings
- Continuous material flow
- Higher productivity in logistics and production



Monitor & Control System

Monitor & Control System [MCS] is Asseco CEIT's own comprehensive control system developed for monitoring and managing intelligent and smart logistics resources. It consists of three main components, namely the Control System, the Monitoring System (AGV Monitor), and the Track & Trace software.

Control System

The Control System is the basic control unit which ensures the transmission of information to the AGV, including its status, activities performed, problem situations and positions within the defined area, while also using this information for decision-making and the subsequent management of individual parts of the logistics process of these resources. The added value of the Control System is the automatic management and control of the logistics process.

Benefits:

- Smart control
- Automatically generated input information for transport from various external devices is automatically sent to the control system
- Sending information from the AGV to other external devices
- Synchronization with just-in-time and on-demand production
- Acceleration and continuity of material flow



AGV Monitor

The AGV Monitor oversees autonomous AGVs and other system elements active in the manufacturing process. The role of the AGV Monitor is to offer employees in the industrial hall the opportunity to monitor the position, activity, operating status of individual mobile robots and other system elements, and to have an overall overview and control over them in real time.

Benefits:

- Monitoring of the position, operation, and operating status of autonomous AGVs and other system elements
- Monitoring of the status of requests sent from an external system
- Real-time graphical visualization of collected data
- Ability to monitor the duration of individual operating conditions over time
- Real-time monitoring of the presence of the AGV at a specific location
- Information about defective material carried by AGVs or static conveyors
- Error notifications and abnormal situations immediately displayed on the warning panel

Track & Trace Statistical Software

Track & Trace provides an insight into the history of production and logistics processes implemented in the industrial halls of various industries. The software records, statistically evaluates and displays the operational activities of individual AGVs, provides a regular report on their overall movement, material transshipment, communication response, correct reading of RFID tags, etc. Track & Trace provides feedback during the production and logistics processes, thus providing a comprehensive overview of the overall situation in the industrial hall.

Benefits:

- Collection, storage and evaluation of historical data and their graphical visualization
- Recording of historical data from the production process to identify bottlenecks in the logistics process
- Regular feedback reporting of operational activities from the production shops
- Statistics on the utilization of autonomous AGVs
- Statistics on the operating conditions and occupancy status of the tractor's peripherals
- Graphical display of historical data related, for example, to specific AGV status information, distance travelled, errors, network response, number of parts produced, the functionality of the server and its components in user-defined time intervals



Optimization and Digitization of Logistics and Production

Asseco CEIT has been implementing complex projects for digitizing production processes since 2006 and today it is one of the European leaders in the field of the development and use of digital factory tools.

Optimization and Digitization of Logistics and Production

Thanks to a set of modern technologies, digital models of all elements of the business can be obtained, be they components, products, technologies, production processes, people, or management systems.



A comprehensive digital image of a real factory and 3D visualization tools allow you to make changes and see their impact before they are implemented.

Digital Factory tools are most often used in the design of new production systems, in the design and optimization of the layout of production and logistics systems or in the detailed design of workplaces. This makes it possible to reduce the start-up period of production to a minimum and avoid costly complications. The Digital Factory is the basis for advanced manufacturing systems in the sense of Industry 4.0.



Optimization and Digitization of Logistics and Production

3D scanning and digitization of objects
Conceptual design
Process simulation
Industrial ergonomics
VR/AR trainings
QRM - Lead time reduction
Location and monitoring of production systems
Data collection and analysis
e-Kanban
TPM (Total Productive Maintenance)
Digital logbook
Intelligent workplace
Intelligent maintenance

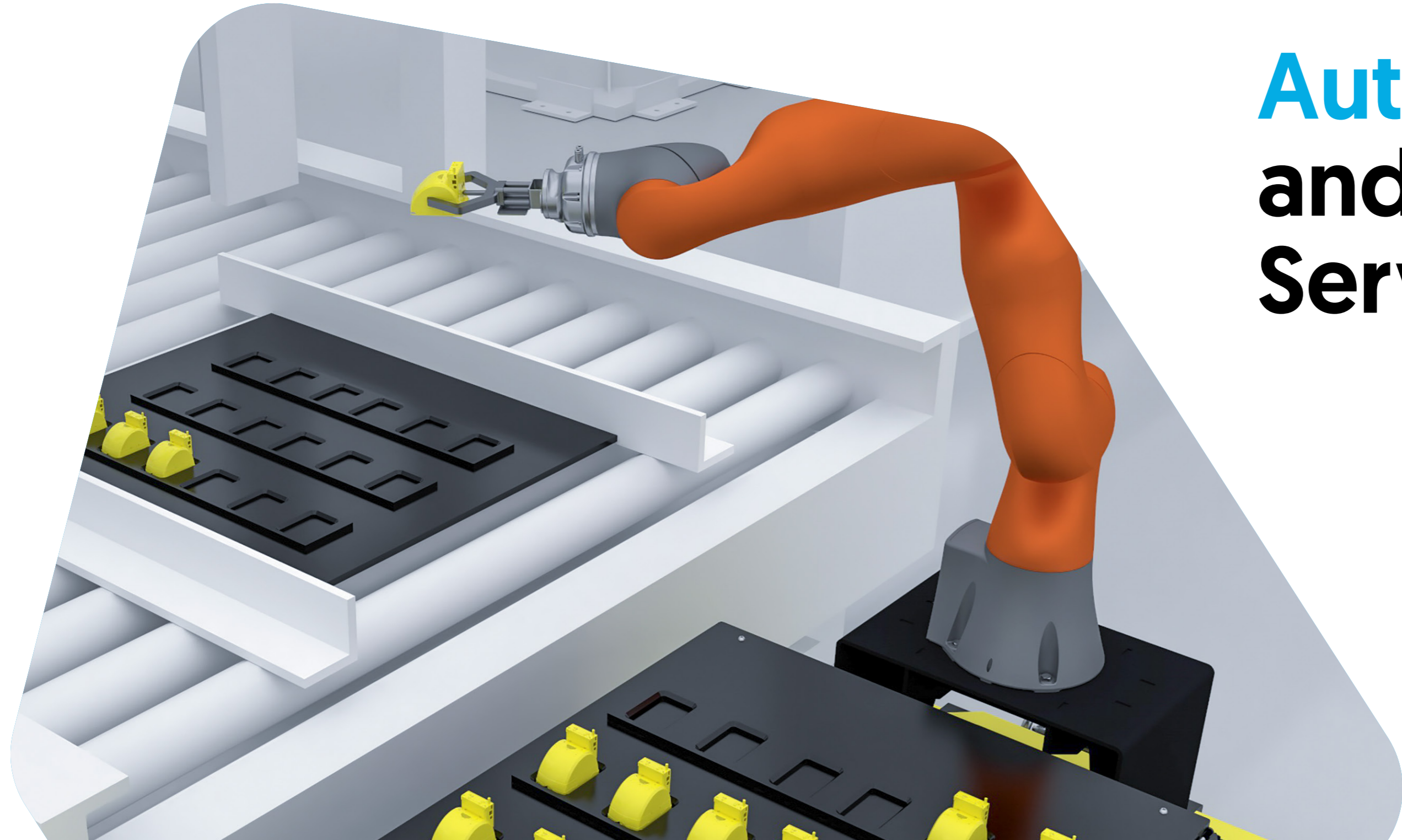


Asseco CEIT develops its own concept of intelligent companies by connecting digital, real and virtual companies. The digital image of a real company allows for planning and seeing the impact of changes before the actual implementation.

Asseco CEIT improves:

- Production
- Logistics
- Internal company systems

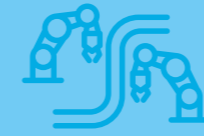




Automation and Engineering Services

Automation and Robotisation of Industrial Production

Industrial automation and robotics are a way of reducing overall production costs as well as achieving greater efficiency and production quality.



This is not only a trend. Industrial automation and robotics are now a necessary condition for increasing the efficiency and productivity of workplaces, technologies, and corporate systems. Asseco CEIT therefore also designs automated workplaces or entire production systems based on customer requirements.

Benefits:

- Significant time savings
- Increased quality
- Eliminated errors and occupational risks
- Improved ergonomics
- Increased operator comfort

Robotic and assembly lines
Collaborative robotics
Special machines and equipment



Engineering Services

Asseco CEIT successfully covers a wide range of solutions aimed at developing new and upgrading existing products mainly for the automotive and consumer industries.



The aim is to place the product on the market in the shortest possible time, to innovate it to achieve higher quality, and to make the production process simpler and more efficient. The priority is to save time, materials and also financial resources.

- Product development
- Prototyping and 3D printing
- 3D scanning, digitization, reverse engineering, and metrology
- Analysis and optimization of product noise
- Workplace noise reduction
- Compressed air leakage detection



Asseco CEIT

Values

Creativity
Excellence
Innovation
Teamwork

Management System in Asseco CEIT

Asseco CEIT takes a responsible approach to ensuring a high standard of quality as well as environmental protection. This above-standard level is provided by more than 250 qualified and experienced employees. The company is certified according to both ISO 9001 and ISO 14001.

ISO certificates:

- ISO 9001:2015
- ISO 14001:2015



References



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