



Industrial Automation



Assembly Lines - Robotic Cells

We have completed numerous industrial automation project from assembly lines to dedicated machines. We integrate industrial robots to the machines when required. We worked with a broad range of robots such as 5 and 6 axis humanoid type robots, SCARA robots and also the conventional XYZ Cartesian robots. If the project requires we integrate collaborative robots into our machines

We design and integrate robotic cells with FANUC, TOSHIBA, Universal Robot, FESTO, DOOSAN and other manufacturers products.

Special Machinery - Test Machines

Processes often require dedicated custom designed special machinery with special integrated functions such as measurements of physical parameters or functional testing. We have experience in this area as well. We have interfaced quality control machines to MES systems.

Our testers include: Leak testers, resistance meters, force and displacement sensing, vision based part checking post assembly for quality control purposes.

Cleaning, Tester, Cold Forming, Screw Driving, Welding



Transport Systems

Transport systems are a key component of any manufacturing, assembly and storage process, we have a significant experience in designing, building and installing transport systems with auxiliary functions such as labeling, vision system measurement, code reading (Barcode, QR, 2D code) and marking. Our experience ranges from the fast transport of small components to the processing of heavy 20-100kg parts, and designing conveyors in high temperature oven environments.

Heavy Duty, Elevator, AGV interface, Conveyors



Services Overview

We are a turn-key solution provider for industrial automation and intralogistics projects. Having over 30 years of experience in designing, manufacturing and integrating automated machinery and over 4 years of experience in mobile robotics and Industry 4.0 projects, makes us a strong candidate for your next industrial automation project.



Intralogistics Systems - Industry 4.0

With the appearance of Mobile Robots there is a need to fundamentally rethink the management of machines and operators in order to drive efficiency and reduce costs. We invested heavily in not only the AMR technology, but to Manufacturing Simulation Software as well that enables us to analyze different manufacturing scenarios to get the best result.



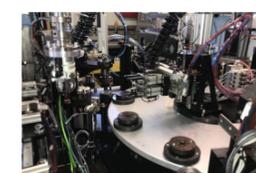
Autonomous Mobile Robots (AMR)

Our companies' newest direction is the integration of Autonomous Mobile Robots into the factory production. We have integrated individual and fleets of robots for a variety of factory intralogistic applications. We have developed a range of custom made "Top Modules" for robots that enables their seamless integration to the plant for maximizing ROI.



Industrial Robots - Industrial Vision Systems

We integrate industrial robots from FANUC, TOSHIBA, SMC for part handling and pick and place applications and control them via industrial vision systems from KEYENCE, OMRON or Scorpion Vision if it's required. References include custom end effector developments, precision positioning of electronics components and also the handling of large assemblies weighing over 20kg.



Industrial Automation

We offer turn-key solutions for your technological problems, such as custom made equipment: rotary indexing tables, assembly lines with conveyor systems for the automotive, electrical and machine industry. Our references can be found in Europe, Asia and America. Our main customers are: HALDEX, DENSO, GE, KNORR BREMSE, JABIL etc.



Special Machinery

Our main field of activity is to develop and design special machinery, to provide tailor made turn-key solution for our partners. We have developed several solutions for measuring and testing equipment, such as Leak Testers, Force Measurements, etc. We also produce Industrial Cleaners, Washing Machines, which can all be integrated into complex systems.



Industry 4.0 Products - Software

Without a doubt the future of manufacturing is increasing automation and robotics, having decades of experience designing and building systems for our clients we have identified several requirements that did not exist before, so we developed them. That includes hardware and software solutions that are an essential part of the new generation of factories.



Intralogistic Mobile Robots



P10 Pallet moving robot 1000 kg

The P10 is a cost effective solution for applications requiring the moving of pallets. It's advantage is that it can pick up the pallets directly from the floor. The robot's robust SLAM navigation avoids the formation of robot traffic jams. The "Multi-Differential Steering" technology enables it to move sideways, which is beneficial if it needs to fit in tight spaces. The charger can be integrated into a docking station to enable the robot to charge itself while waiting providing all day long standby. The robot can achieve speeds up to 1 m/s.



C4060 Crate moving robot 100 kg

Intralogistic applications usually require the moving of smaller pallets, crates, products, the C4060 was developed to provide a cost effective solution for these requirements. The highly modular and customizable design of the robot allows the design of custom made top modules providing a seamless integration to factory environment. Due to its small footprint it can fit into tight spaces.

Forklift Robots 1-5m lift height 1-2t

These robots are capable of autonomously handling larger payloads up to 2t of weight and they can deliver the pallets to a maximum height of 5m. Their laser based navigation ensures that integration is seamless to the facility. These robots can also be combined with top modules to interface them to existing conveyors and transport systems. They can be integrated to a factory ERP system if requested.



Service Robots



UV-C Disinfectant Robot

We are developing a UV-C disinfectant mobile robot to help in fighting viruses such as COVID. Our solution is a vision based artificial intelligence solution that automatically shuts off the UV-C light source if it finds a person in its field of view is detected with one of its four cameras. Furthermore the algorithm was optimized to also detect people in masks, and can be customized to have a sound alarm, to warn people that nearby UV-C disinfection is taking place.



Interior Cleaning Robot

This sanitizer robot offers a complete solution for cleaning and disinfection in inside spaces. In addition to cleaning the floor, it also disinfects the air using the built-in ultrasonic spray unit. The 3 ultrasonic nozzles form a mist of mist about 0.85 meters from the ground, which consists of 5 micron disinfectant molecules. When spread in the air, they destroy pathogens that have adhered to both the air and the surface of the surrounding objects. It charges the battery automatically and requires minimal human intervention. It has an 18 L waste water tank and is capable of achieving 1 m/s



Exterior Cleaning Robot

This sweeper robot is an outdoor cleaning robot designed for cleaning sidewalks, urban areas and parks. It works in both autonomous and manual modes. The robot is able to avoid obstacles and monitors its surroundings with laser scanning sensors, thus guaranteeing safe work. It has a 4-6 hour battery life and a 60 L waste capacity.