movizon

transforming intralogistics

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LOOK NO FURTHER: **movizon CONTROL** MAKES YOUR AGV SMARTER.

✓ Manufacturer-independent control system
✓ Long-term and complex expansion of your AGV fleet
✓ Use the right AGV for every process

✓ Agile adaptations without system interruption
✓ JavaScripting creativity without limits
✓ Program your own logics and processes

TRULY MANUFACTURER INDEPENDENT

FLEXIBLE & CUSTOMISABLE

REAL-TIME CAPABILITY IN THE CLOUD

MODULAR – EXPANDABLE & SCALABLE

✓ Data exchange every 100 ms
✓ Real-time control
✓ Live overview

✓ Flexibly expandable range of functions
✓ Optimal fleet management
✓ Our software grows with your needs

NEUES REFERENZPROJEKT

Höhere Effizienz, stärkere Transparenz und ein nachhaltiges AGV-System bereits im ersten Projektabschnitt!

Jetzt Success Story ansehen

Project No.1

Company in the chemicals sector

The challenge

✓ Complex location with established infrastructure and industrial facilities

✓ Optimization of internal transport processes

✓ Integration into the site IT systems necessary

✓ Outdoor operation with free choice of route

✓ Desired use of tank containers with a load capacity of 66 tonnes

✓ System should be sustainable and expandable in the long term

Exemplary illustration of an Underride AGV with tank container of the company VDL Steelweld

Sector	Project start	Route network	Navigation
Chemicals	Current project	> 90 km	Transponder
AGV type	AGV weight	AGV quantity	Integrations
Underride AGV, transponder-navigated	78 t payload AGV > 100 t total weight	8	SAP EWM, crane system, traffic lights, barriers

The solution approach

✓ Feasibility study carried out in collaboration with VDL Steelweld on behalf of the customer

✓ Development of a technical implementation of the logistics concept required by the customer (Solution Design Document)

✓ Interface design to SAP-EWM and SAP-ERP

✓ Interface design to the environment (crane system, traffic lights, barriers) via UDP

✓ Optimization of throughput time from 22 hours to 1 hour and enabling just-in-time delivery

✓ Full automation of dispatching and order planning

movizon CONTROL in operation – The result

✓ Internal transport processes are flexible and can be individually expanded in the future

✓ Outdoor transport ensured in a complex network location

✓ Dynamic networking of AGV, SAP and the physical infrastructure

✓ Expansion and scalability of processes guaranteed

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Project No.2
Company in the automotive sector

The challenge

✓ Increased need for internal transport due to growth of the client

✓ Deployment of AGV with hybrid navigation required due to on-site conditions

✓ Complete automation of outdoor goods transport between loading and unloading

✓ Control and coordination of the entire process flow

✓ Interface development to existing IT and infrastructure systems necessary

Exemplary illustration of an autonomous truck on swap body

Sector	Project start	Route network	Navigation
Automotive	2018	4 km	Transponder und DGPS
AGV type	AGV weight	AGV quantity	Integrations
truck	Max. 20 t payload	7	WMS, material-flow monitoring, traffic lights, high-speed doors, automated loading ramps

The solution approach

✓ Simulation with movizon CONTROL to determine the required number of vehicles for the intended transport volume

✓ Implementation of customer-specific adaptations through cooperation with our partner and shareholder, Götting KG

✓ Determination of necessary processes

✓ Extensive tests and individual optimisation of the system

movizon CONTROL in operation – The result

✓ Outdoor transport successfully automated

✓ Efficient handling of the internal transport of goods from loading to unloading of the AGV

✓ Connection to the goods-management system for automated order control

✓ Connection to material-flow system for central monitoring of the entire plant

✓ Guarantee for future extensions and optimisations of the AGV system

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Project No.3

Company in the industrial-truck sector

The challenge

✓ Enable cost savings despite predefined cycle times

✓ Staff should be deployed more efficiently and monotonous work avoided

✓ Control system should be expandable and allow for future integrations

✓ Live visualization of the AGV required

Illustration of an AGV of the company A&A Logistik

Sector	Project start	Route network	Navigation
Industrial-truck production	2014	550 m	Optically track-guided
AGV type	AGV weight	AGV quantity	Integrations
A&A AGV	50 kg payload	40	SAP (2016)

The solution approach

✓ Development of a requirements specification

✓ Determination of the necessary processes for AGV-based automation of production

✓ Alternative to in-house software in order to realise the targeted cost reduction

movizon CONTROL in operation– The result

✓ Personnel is deployed more efficiently

✓ Flexibility and reliability of production increased through AGV-based automation

✓ Process stability thanks to reliable control system

✓ Future connection of a WMS facilitated

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Project No.4
Company in the automotive sector

The challenge

✓ Make logistics processes leaner and more efficient

✓ Save costs in the long term

✓ Ensure expansion of processes and extension of logistics areas in the future

✓ High degree of automation

✓ Flexible process design

✓ Interaction of autonomous vehicles with the environment (warehouse, machines, lift, peripherals)

Exemplary illustrations of track guided KATE from Götting KG
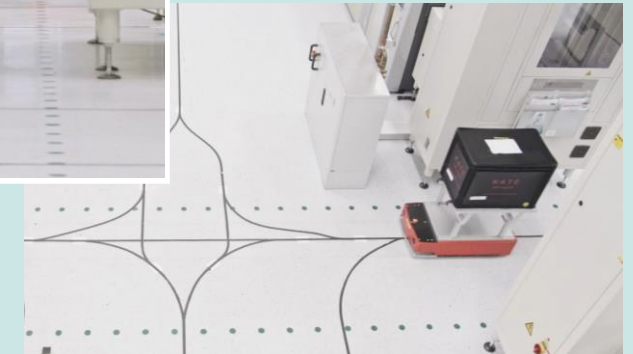
Sector	Project Start	Route network	Navigation
Automotive	2016	1.000 m	Optically track-guided
AGV type	**AGV weight**	**AGV quantity**	**Integrations**
KATE from Götting KG	50 kg payload	> 50	Warehouse, machines, lift, periphery

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The solution approach

✓ Implementation of fully automated production

✓ Use of KATE AGV from Götting KG, our shareholder and partner

✓ Simulation of the AGV systems with movizon CONTROL

✓ Realisation of the logistics processes with KATE AGV from Götting KG

✓ Training of employees at worldwide locations in handling and scripting of software and hardware

movizon CONTROL in operation – The result

✓ Data exchange between all systems possible

✓ Manual interventions in the automated process minimised

✓ Economic success through leaner logistics processes

✓ Flexibility and expandability for extending logistics to other areas

✓ Scalable and manufacturer-neutral software enables implementation of further processes

✓ AGV, warehouse, machines and peripherals connected

✓ Customer can adapt the software individually to his needs through the know-how of his employees

Project No.5
Company in the food sector

The challenge

✔ Cost savings in the long term

✔ Reliable automation of production-critical transports

✔ Transport of perishable food

✔ Ensure continuous cooling

✔ Year-round outdoor transport

Exemplary illustration of an automatic truck in outdoor operation under difficult weather conditions

Sector	Project start	Route network	Navigation
Food	2018	1.500 m	Transponder
AGV type	**AGV weight**	**AGV quantity**	**Integration**
Truck	Max. 17 t payload	1	Traffic light

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The solution

✓ Input and order control carried out via a user interface from movizon CONTROL

✓ Fully automatic fuel monitoring

✓ Traffic control set up between manual and automated vehicles

✓ Realization of reliable logistics transports with a passive cold chain

movizon CONTROL in operation – The result

✓ Ensuring the refrigeration temperature of food that needs to be refrigerated

✓ Year-round outdoor transport possible

✓ Complete visualization of the automated processes

✓ Possibility of unlimited expansion without restriction through manufacturer-dependent vehicles