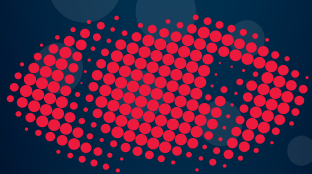


ENHANCING AND STREAMLINING
THE SAFE FLOW OF CARGO



VISY



GATE OPERATING SYSTEM WITH OCR

Expand | your vision

FOR EFFICIENT, SAFE, AND SUSTAINABLE TERMINAL OPERATIONS

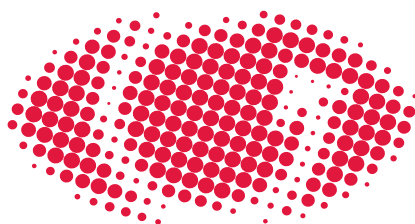
Gate automation with AI-based OCR solutions

The future-proof partner for all smart gate, access control, and terminal automation needs. With Visy systems, our customers identify and manage all traffic of cargo, vehicles, and people in demanding environments of container terminals all over the world.

We are dedicated to build ever better, more efficient, and easier-to-integrate system solutions with our world-leading AI-based OCR technologies.

**No-nonsense solutions
with long-term commitment
and care for our customers.**

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vision



VISY

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One platform
for all terminal
automation



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Enhancing Efficiency with Gate Automation

Traditionally, gate operations in container ports and ferry terminals have been labor-intensive and prone to bottlenecks. Manual processes for verifying credentials, inspecting vehicles, and recording data can lead to long queues and delays, especially during peak hours. However, with a gate automation system, these processes can be streamlined and accelerated, leading to significant gains in efficiency.

Gate automation solutions leverage technologies such as RFID, OCR (Optical Character Recognition), and management tools to automate the identification and authentication of vehicles, cargo, and drivers. By integrating these technologies with backend systems such as a TOS and a Vehicle Booking System, ports and terminals can achieve seamless data flow and real-time visibility into gate activities.

In addition to enhancing efficiency, gate automation plays a crucial role in strengthening security at container ports and terminals. Access control systems only allow entry for authorized personnel and vehicles, preventing the risk of unauthorized access and security violations.

Benefits of Gate Automation

- ✓ Real-time monitoring and reporting capabilities provide stakeholders with insights into gate activities
- ✓ Increase handling capacity and traffic volumes
- ✓ Reduce operating costs
- ✓ Prevent unauthorized vehicles from entering the premises
- ✓ Automated compliance checks ensure adherence to regulatory requirements and industry standards
- ✓ Improve safety and security of people and assets

Implementation Considerations

- ✓ Choose a gate automation solution that is easily scaled to accommodate future growth and evolving operational needs
- ✓ Design and build the gate layout and solution to maximize the benefits of gate automation, while minimizing or completely eliminating operational disadvantages
- ✓ Ensure seamless integration with existing systems such as the TOS to facilitate data exchange and process synchronization
- ✓ Have a robust maintenance and support framework to ensure the continued reliability and performance of your system
- ✓ Provide comprehensive training to staff on the use of new systems and procedures to maximize adoption and effectiveness



**In addition to enhancing efficiency,
gate automation plays a crucial role
in strengthening security.**

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VISY ACCESS GATE | GATE OPERATING SYSTEM (GOS)

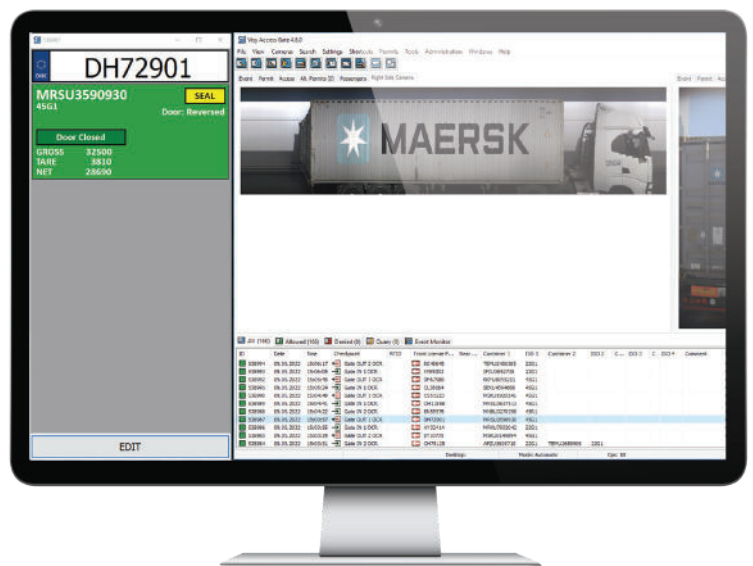
Modular access control system for traffic management

Visy Access Gate GOS is a modular access control environment that efficiently manages all traffic in the gate area. From vehicle identification to cargo registration, the system's intelligent features and integrations ensure smooth and streamlined processes, enabling terminals to handle vast transaction volumes with ease.

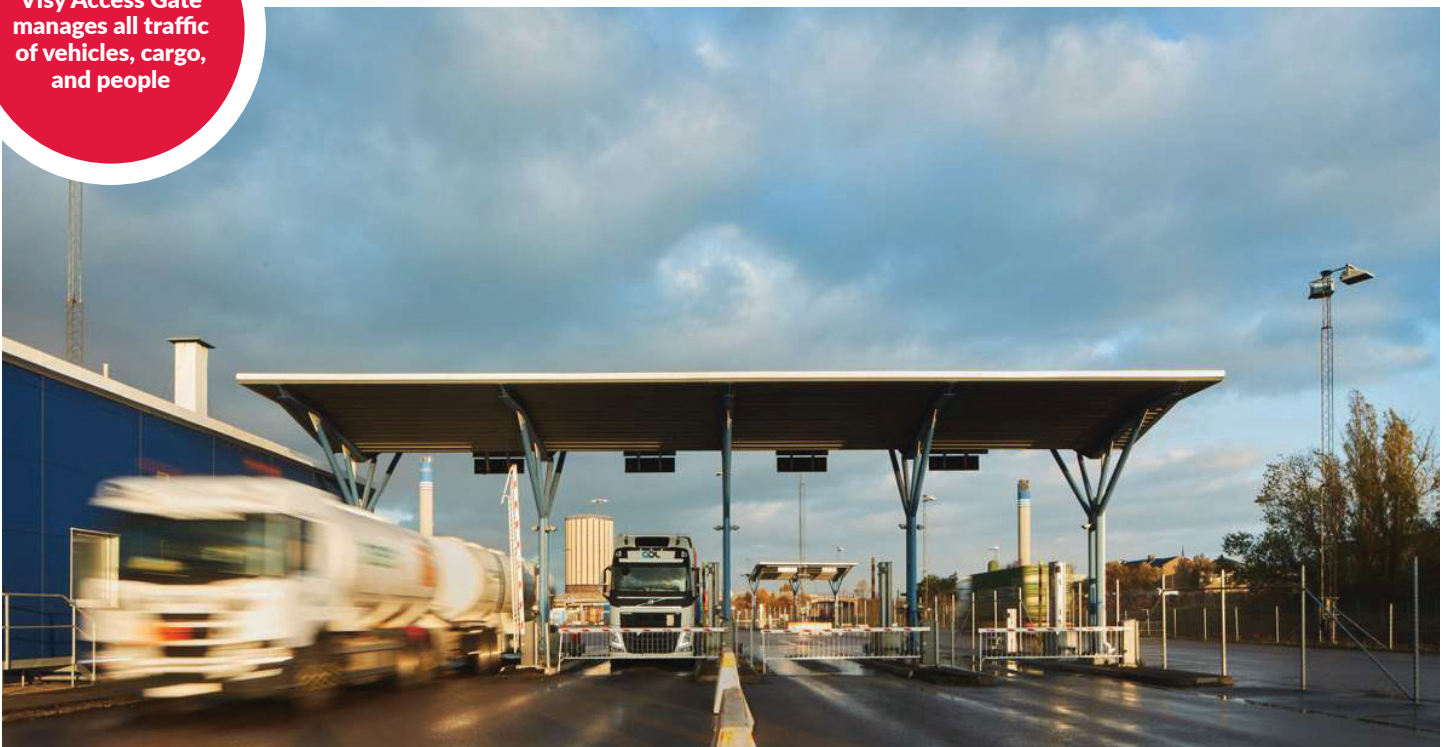
Beyond efficiency, Visy Access Gate GOS prioritizes security with advanced authentication protocols. By deploying cutting-edge recognition technologies and management systems with TOS integration, the solution provides smooth visitor transactions and control of all gate activities.

With the Visy Access Gate user application operators can:

- ✓ Grant and maintain permits
- ✓ Create ID cards and add identifiers to the permits such as RFID numbers, license plate numbers
- ✓ Monitor incoming access events
- ✓ Edit access events
- ✓ Open checkpoints manually
- ✓ Create and print reports
- ✓ Configure sub-systems, such as Visy Vehicle Booking System
- ✓ Monitor TOS requests and responses to gate in and out events

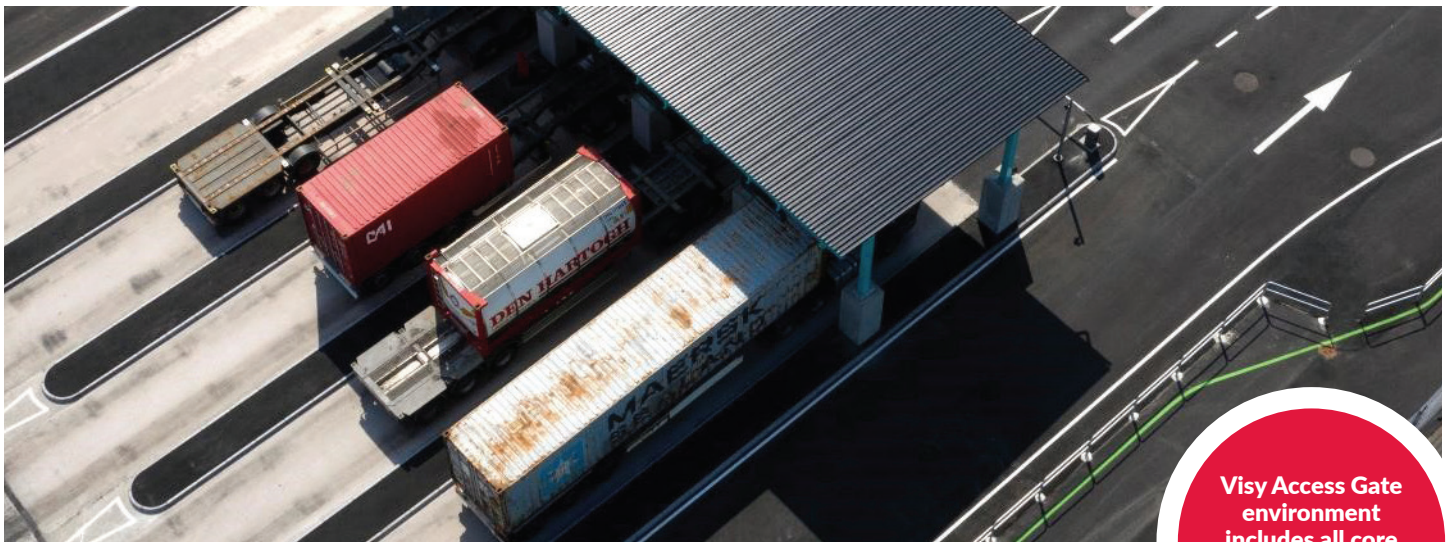


Visy Access Gate manages all traffic of vehicles, cargo, and people



All functions in seamless connection with GOS

- ✓ Vehicle Booking System
- ✓ Kiosks
- ✓ Truck OCR Portals
- ✓ Gate equipment including LPR/ANPR cameras, barriers, traffic lights, displays
- ✓ Integration to TOS with existing deployments



Visy Access Gate environment includes all core elements of gate automation

Features

- ✓ Desktop and web user applications
- ✓ Integration to all Terminal Operating Systems (existing deployments for Navis, Tideworks,
- ✓ Oracle database
- ✓ Multiple communication standards (TCP/IP, SOAP, FTP, jms, web services, ...)
- ✓ Gate processes designed according to the customer operations
- ✓ Real-time process monitoring and visual overview of checkpoints
- ✓ Multilingual support for kiosk and operator screens



Visy Driver Kiosks

Driver kiosks are integrated into the Visy Access Gate environment. Kiosks are an integral part of the transaction journey, from entry to exit, where drivers submit booking information and verify task details such as container ID and job type (pick-up/drop-off), and acknowledge the area's safety regulations. Kiosks also utilize information gathered by Visy Truck OCR Portals to compare the information with the booking details.

The kiosk communicates with Visy Access Gate and the TOS to authenticate information, enabling informed decisions on whether to grant or deny access.



Features (optional)

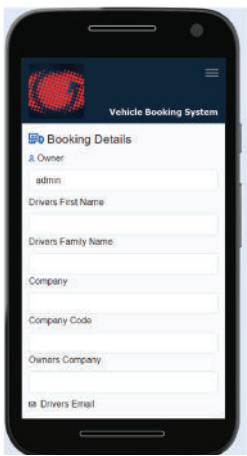
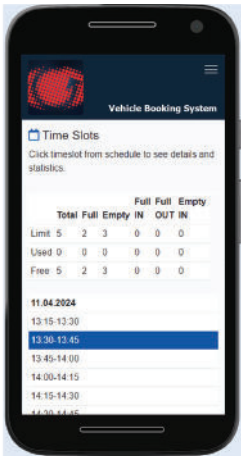
- ✓ Customized kiosk software
- ✓ Touch screen
- ✓ RFID reader
- ✓ Barcode reader
- ✓ Intercom connection to the gate clerk
- ✓ Printer
- ✓ Camera

VISY VEHICLE BOOKING SYSTEM

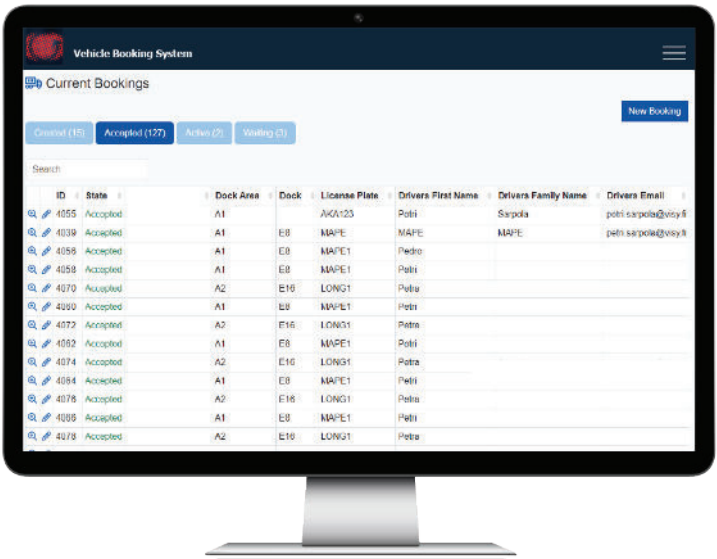
Discover enhanced customer experience with VBS

VBS is a solution for truck drivers and freight operators to manage their terminal visits and gain access permits. The web-based application can be used with a mobile device or desktop to book new appointments and access information about reserved/executed ones.

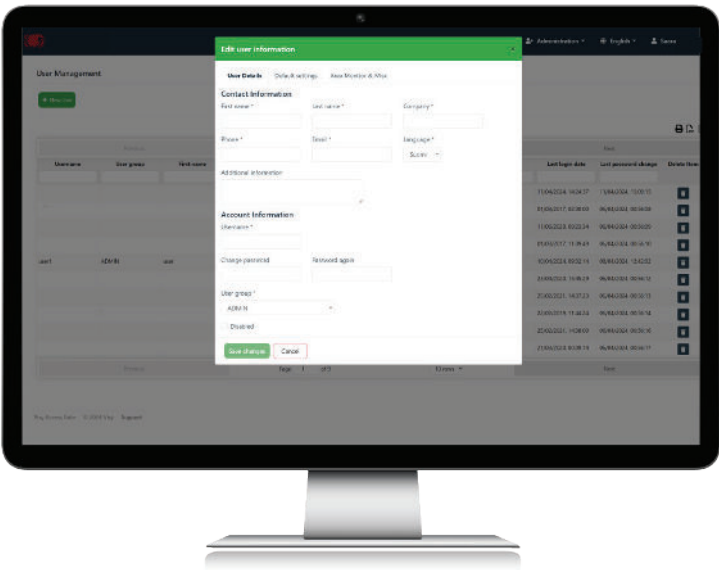
Terminals aim for predictable, scalable, and repeatable operations to operate at an optimal performance level and to have the right resources that meet the demand. To help customers reach their targets, Visy offers the Vehicle Booking System.



With VBS drivers review available timeslots for container delivery or pickup, and book the appointments.



Freight and hauling companies have a web application to manage the booking information.



With Visy Access Net operators can:

- ✓ Set available booking slots
- ✓ Review current bookings
- ✓ Edit bookings

CONTAINER OCR | VISY TRUCK OCR PORTAL

Advanced cargo data collection solution for road transportation

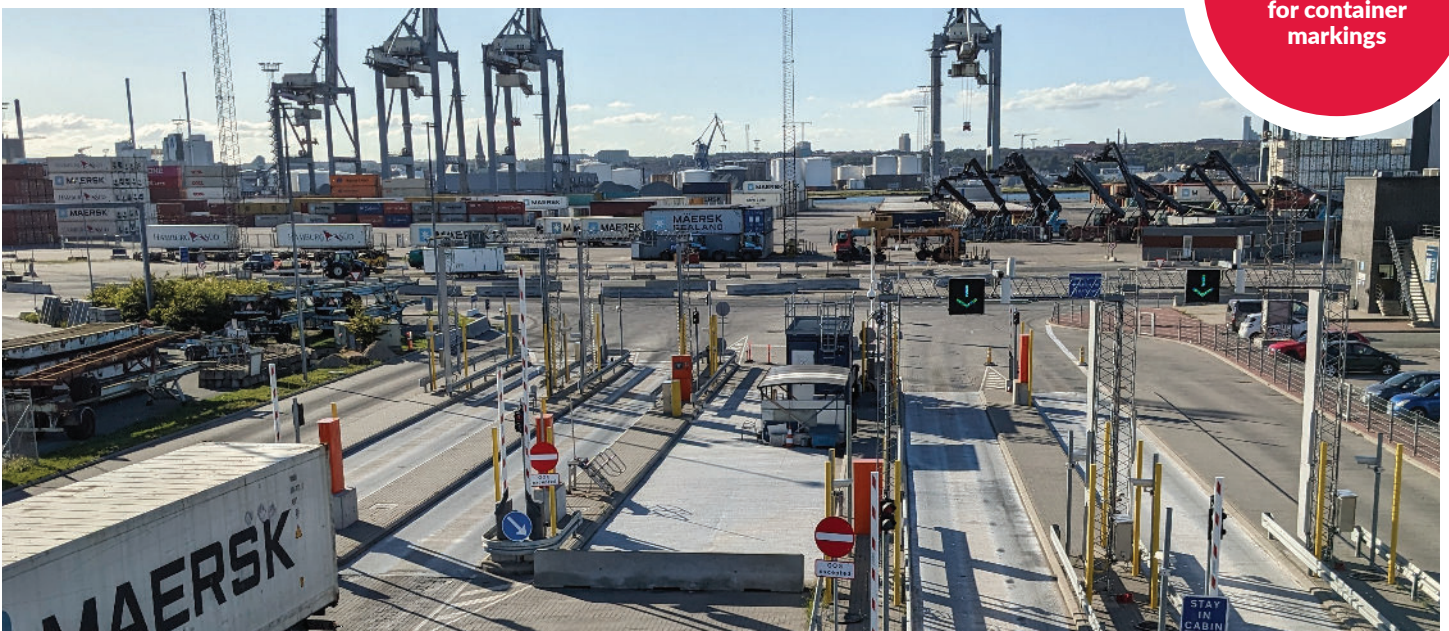
Visy Truck OCR Portal automatically recognizes and images containers, trailers and vehicles that are entering or leaving a facility, without the need to interrupt traffic. The Container OCR portal is a unique solution with exceptional real-life accuracy of 97-100% correct recognitions even with driving speeds of up to 50 km/h.

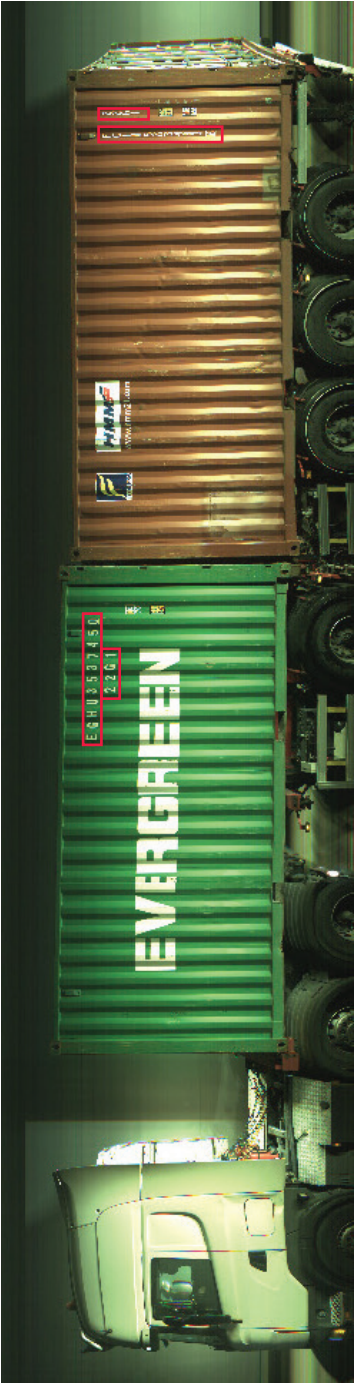
The practical yet intelligent solution exchanges extracted identification data with operating systems (TOS, GOS and other third-party systems) thus ensuring smooth flow of traffic at terminals' gate areas.

Features

- ✓ Container OCR: In-house recognition software for attributes such as container IDs, ISO codes, IMO/ADR labels, gross weight, seal presence, door direction
- ✓ Trailer OCR: ILU-codes
- ✓ In-house ANPR/LPR software for license plates (wide range of nationalities)
- ✓ Exceptional recognition rate accuracy of 97-100%
- ✓ Measuring vehicle & cargo volume with laser scanners and WIM scales
- ✓ Robust portal frame with line scan and area cameras, laser scanners, illuminators, and electrical cabinets
- ✓ Non-stop traffic flow, supports speeds of up to 50 km/h with small footprint
- ✓ Extensive data exchange and interfacing with third-party systems such as TOS

Visy has
market leading
recognition rates
for container
markings







With Visy technologies, terminals can expedite time consuming tasks such as checking the container condition.

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VISY ADDS – AUTOMATIC CONTAINER DAMAGE DETECTION

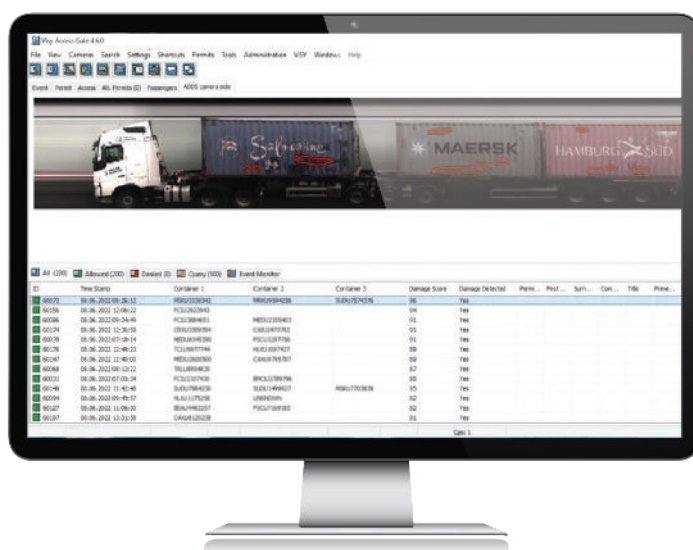
AI-based image processing software to detect anomalies

Visy ADDS automatically identifies structural and surface deformities in containers, including dents and bulges, as trucks pass through imaging portals. The innovative solution facilitates real-time container inspection, enabling terminal operators to mitigate insurance liabilities and damage claims while providing invaluable data to container owners. Unlike traditional damage detection systems that merely offer images for retrospective review, Visy ADDS proactively gathers data and promptly notifies operators of any container damage, ensuring swift and informed action.

Visy ADDS seamlessly integrates with the entire suite of Visy OCR Solutions.
Learn more at www.visy.fi

With Visy Access Gate user application (desktop and web) operators can:

- ✓ Review event pictures with markings of damages
- ✓ Easily locate the damaged areas
- ✓ Get alerts for critically damaged containers
- ✓ Filter the events with detected damage



Visy ADDS event pictures with marked damage.



VISY AREA

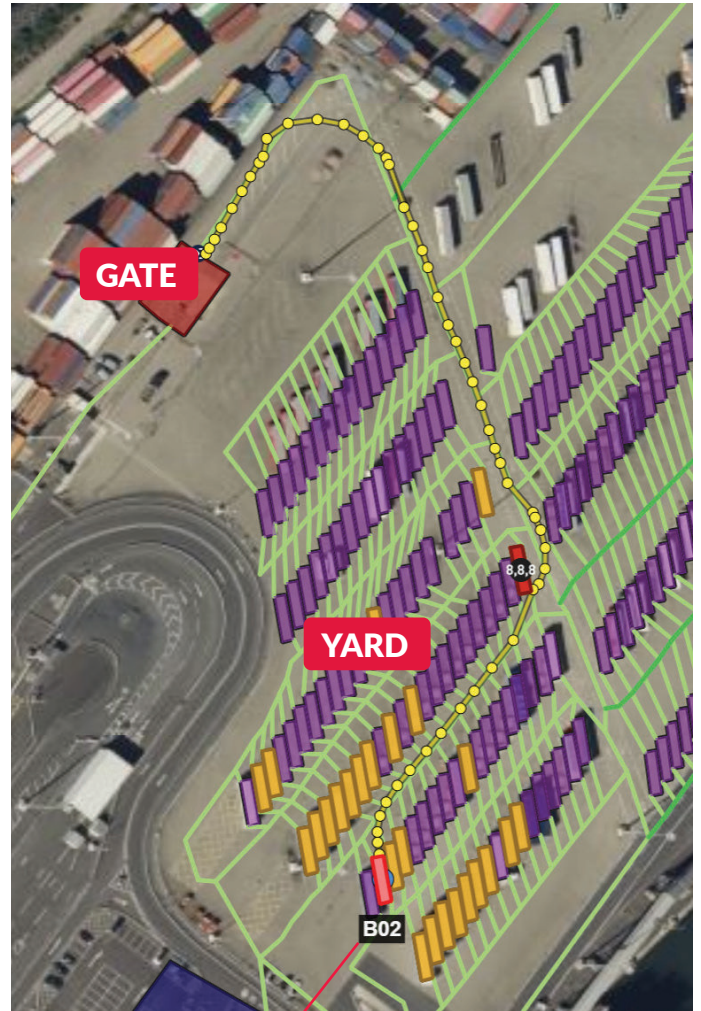
AI-based vehicle location track-and-trace system

Visy AREA is a cutting-edge yard monitoring solution that utilizes cameras mounted at a height to provide an overview of the area. The AI-based system tracks and traces targets of interest within the area to give you real-time information about vehicle locations.

For comprehensive data management in the Visy database, tracking begins at the gate. The license plate number, container information and all other relevant data follows the tracked trailer across the yard.

Features

- ✓ Visy AREA is an AI-based system to track and trace vehicle locations
- ✓ After the vehicle is recognized at the gate area by the license plate recognition cameras, Visy AREA is triggered and the tracking begins
- ✓ The area and parking slots are precisely defined in the system to have accurate location information
- ✓ In ferry terminals, Visy AREA is used to keep track of the trailer locations which reduces vessel loading time by half



Units				
<input type="text" value="Booking number or primary reference"/>		Statuses: Reserved, Allocated...		Areas: A, B, C, D
Order no	Primary Ref.	Allocated position	Actual position	Status
83392194	PTB087	A02 (24/04 12:01)	A02 (24/04 11:03)	✓
83446562	UPL190	A03 (24/04 11:41)	A03 (24/04 10:43)	✓
83418617	OP1	A04 (24/04 12:47)	A04 (24/04 11:59)	✓
81549643	F204	A05 (24/04 12:49)	A05 (24/04 11:51)	✓
82290897	WNA304	A06 (24/04 13:08)	A06 (24/04 12:10)	✓
83367218	TIP12	A07 (24/04 13:20)	A07 (24/04 12:23)	✓
83445028	SP121	A08 (24/04 13:43)	pending	
81549645	RT625	A09 (24/04 14:26)	A09 (24/04 13:29)	✓
81549644	P408	A10 (24/04 14:41)	A10 (24/04 13:43)	✓
82993601	CRF120	A11 (23/04 02:29)	pending	
81549641	RT632	A12 (24/04 15:01)	A12 (24/04 14:03)	✓
81537979	SP119	B01 (24/04 10:50)	B01 (24/04 09:53)	✓
83444660	CBH3	B02 (24/04 13:09)	B02 (24/04 12:11)	✓
81558579	SP1000	B03 (24/04 13:33)	B03 (24/04 12:36)	✓

A Visy AREA visualization in Surikat TOS. (surikat.se)

Other visualizations and TOS integrations can be done according to the customer's TOS and requirements.

Visy AREA gives you an overall
view of the locations of vehicles.

Expand your
vision

Vehicle: ABC123
Location: West parking area
Container 1: MTBU12345 5
Container 2: MTBU12346 5

Vehicle: BCC332
Location: West parking area C16
ISO Tank container 1: BAFU98878
ISO Tank container 2: BAFU98877

Vehicle: AAB123
Location: West parking area B16
Container: MSKU567894 6



Professional services complement
the solution offering with proactive care
and continuous improvement.

Expand your
vision

Services

PROFESSIONAL SERVICES

Visy's global high-quality partner network minimizes response times and our experienced project management team ensures top-class solutions, delivery, and support worldwide.

- ✓ Project management
- ✓ Software customization
- ✓ Simulations
- ✓ Integrations
- ✓ Consulting

OPERATING WITH VISY

Visy's customers are united by their drive toward continuous development of operations and their desire to gain the benefits of advanced pioneering technologies.



GLOBALLY LOCAL



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