



# AUTOMATIC DAMAGE DETECTION SYSTEM

A real-time tool for detecting damaged containers







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Visy Automatic Damage Detection System is the first commercially available solution for automatic container condition inspection. The solution uses modern AI with vision technology to provide a real-time tool for detecting damaged containers. Non-stop operation, online monitoring, and automated alerts allow damage inspection without interrupting traffic.



Clears liabilities for damaged containers Decreases truck turnaround time



Enhances safety and security

## **Operate without interruptions**

Visy ADDS automatically recognizes structural and surface deformities in containers, such as dents and bulges, when trucks drive through detection portals. Trucks no longer need to stop for manual damage inspections, which cuts the time spent at gate transactions and significantly decreases turnaround times. This also allows terminal operators to move manpower from the yard to the office. Smooth and automated data exchange with TOS and other third-party systems accelerates gate processes, and the system can be easily scaled alongside expansions in terminal operations. Visy ADDS makes the damage inspection process transparent for all parties.



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## Protect your revenue and improve safety

Visy ADDS brings unprecedented advantages for entire supply chains by automating the container damage inspection process. The solution enables streamlined container repair services and helps terminal operators to shed insurance liabilities and damage claims for containers that arrive to the terminal already damaged. Visy ADDS also enhances the overall safety of facilities by preventing accidents and other hazardous incidents; damaged containers are stopped before they enter automatic handling stages, which helps to protect the goods inside and prevents additional damage when the containers are lifted and stacked.



Heatmap view provides an advanced tool for damage observation

### Implementation to existing OCR Portal equipment

Visy ADDS is inserted to Visy IRIS OCR portals as an additional feature, with only a few extra additions to the existing equipment. The effective combination of Visy's OCR and ADDS features provides automatically captured container condition data, as well as other identifiers such as license plate numbers, container IDs, dangerous goods labels, door orientation, and seal presence.

The portal solution combines Visy's industry-leading computer vision and OCR software with line scan and area scan camera technologies. The system captures high-quality images and recognizes container damage and identifiers in any environmental condition. Visy IRIS OCR portal is equipped with laser scanners and efficient illuminators to facilitate reliable 24/7 operation and to maintain a high recognition rate.





#### Features

- Detects structural and surface deformities in containers (dents, bulges)
- Non-stop operation, no interruptions to traffic or workflow
- Easy to integrate into existing OCR portals
- Also detects license plates, container IDs, dangerous goods labels, seal presence, and door orientation
- Extensive data exchange and interfacing with TOS and other third-party systems

## **Portal equipment**

- Portal frame
- ADDS cameras
- Line scan cameras
- Laser scanner
- Portal illuminators
- Recognition PC
- Network equipment and power source



We deliver versatile automation solutions to create comprehensive identification and access control ecosystems. Our product & solution selection for ports and terminals is wide to match the diversity of our customers' requirements and preferences, and to cover every part of the terminal where identification or tracking of containers, vehicles, and cargo is needed.

Automated access control and container identification in every turn ensures a smooth traffic flow and increases profits through enhanced operational efficiency. Our global highquality partner network minimizes reaction time and our experience of three decades in the port and terminal industry guarantees top-class solutions and support worldwide.

**Implementation & delivery of our solutions is reliable without exception.** With our professional project management and skilled team, we deliver customized and demanding solutions designed to achieve the highest possible advantages of process automation.





## About us

Visy is a pioneer in optical character recognition (OCR), applied AI, and deep learning for camerabased automation and access control solutions. Our expertise is based on over 25 years of experience in research and development of industry-leading technologies, and we have established a strong position as one of the top global vendors in gate automation and OCR solutions.





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