VISY

Automatic Container Damage Detection 2.0

Turning every Glance into Insight, and every Insight into Action

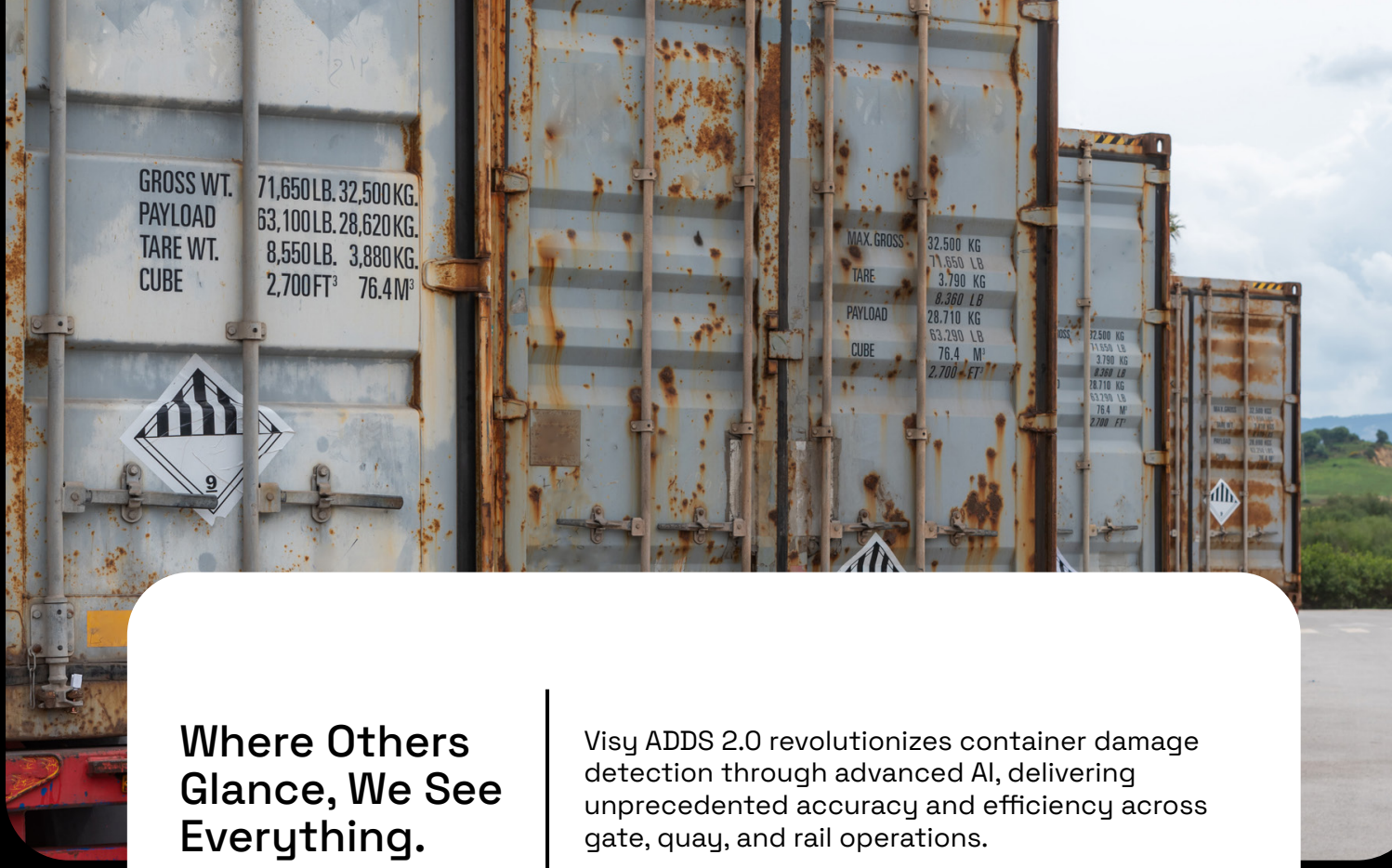
New AI model

New Damage Classes

New Approach

Expand
Your vision

Imagine a terminal with no missed ID.
Every box condition recorded.
Everything digitized and shared.
Pure, continuous precision – 24/7.
ADS
Expand
Your vision



Where Others Glance, We See Everything.

Visy ADDS 2.0 revolutionizes container damage detection through advanced AI, delivering unprecedented accuracy and efficiency across gate, quay, and rail operations.

Insight → Action

Automatic Container Damage Detection
ADDS inspects the container within seconds. If a damage over the threshold is detected, the system sends an alert to the operator.

Damage Sensitivity Thresholds
ADDS is configured per customer requirements, different sensitivity scoring for different damage classes - you say, we set.

Validation
With the help of images and given damage location, the clerk can decide whether to send the container for exception handling, e.g. repaire station or deny access.

VISY

This publication is for general informational purposes only. Visy reserves the right, at any time and without notice, to alter or discontinue the products and/or specifications referenced herein. While we strive to ensure the accuracy and timeliness of the information provided, we make no representations or warranties of any kind, expressed or implied, about the completeness of the information.

ADDS 2.0

Automatic Container Damage Detection

ADDS 2.0 is truly integrated into customer operations, enabling condition monitoring at high-volume inspection points without disrupting container flow. It doesn't just detect damage – it augments and supports human decision-making in condition inspection and enables you to implement streamlined condition checks to catch boxes that don't meet transportation standards. Thus, ADDS 2.0 empowers your team to focus on complex decisions while automatically handling routine inspections, ensuring continuous precision 24/7.

Unlike static inspection systems, ADDS 2.0 features a Deep Neural Network (DNN) architecture custom-built to match each customer's operational needs. Visy's AI experts collaborate directly with clients to fine-tune performance – choosing the damage class palette, adjusting sensitivity, and implementing terminal-specific detection rules. These updates are seamlessly developed and deployed, ensuring a long-term solution.

The Way of Thinking

Visy ADDS' AI augments and supports human decision-making in condition inspection rather than replaces it. ADDS empowers your team to focus on complex decisions while automatically handling routine inspections that make most of the traffic.

Copyright ©2025 Visy Oy

What's New in ADDS 2.0

New AI model

Our enhanced AI-engine delivers unmatched accuracy, setting the benchmark for reliability and precision in image-based container damage detection.

Refined Sensitivity Controls

Customizable scoring per container side and damage type allow you to focus on what matters most to your operation.

Site-Specific Configuration

- Damage classes – Select from Visy's Standard Damage Classes
- Adjustable alert threshold
- The AI-engine is trained using your site's traffic data to optimize accuracy
- Continuous improvement from real-world operations for above according to need

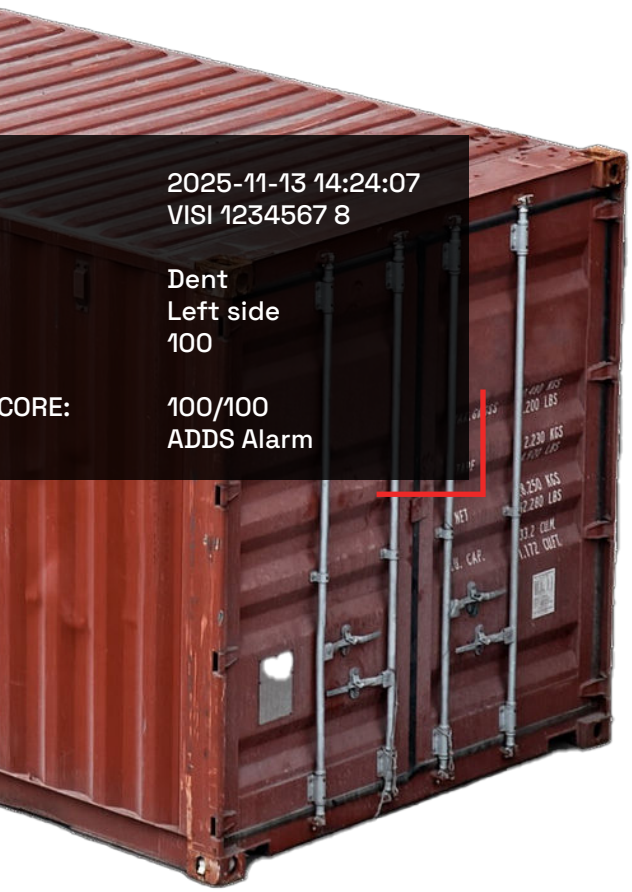
New Damage Classes

- Holes and punctures
- Open/damaged handles (door damage)
- Bent door bars
- Missing air-conditioning covers
- As well as the classes already presented in the ADDS 1.0: Dents, bulges, rust, scratches
- Do you believe you have a viable damage that is not currently supported? Suggest one and it might be included in the next ADDS upgrade!

Built-in Scoring

0-100

Lets you choose exactly which events should trigger alarms.



Real-World Performance Across Operations

Real-Time Intelligence

Instant damage detection the moment containers enter your terminal. No delays, no backlogs, no surprises.

Streamlined Workflows

Automatic prioritization ensures your teams focus on what matters most. Less downtime, maximum throughput.

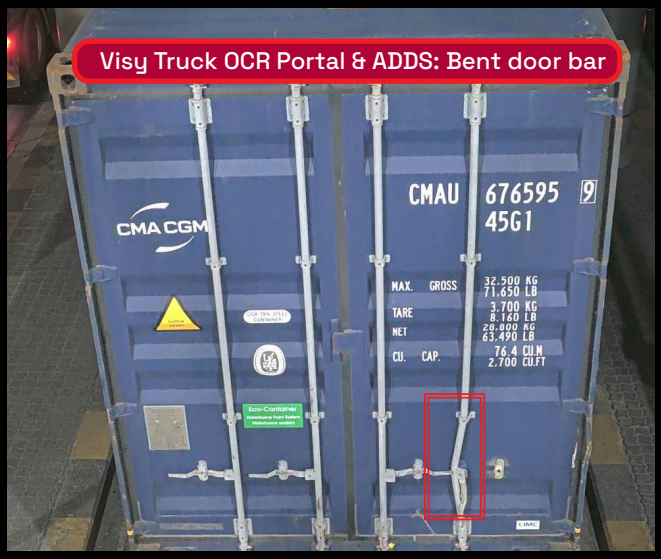
Digital Evidence

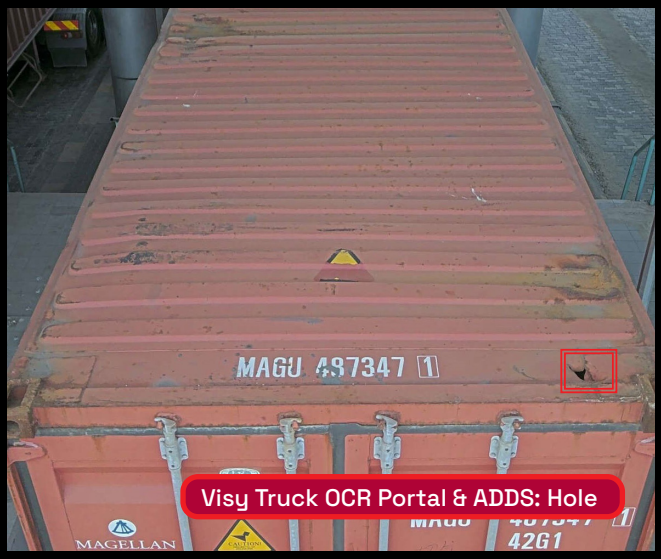
Clear, consistent documentation eliminates subjective disputes. Protect your interests while maintaining customer relationships.

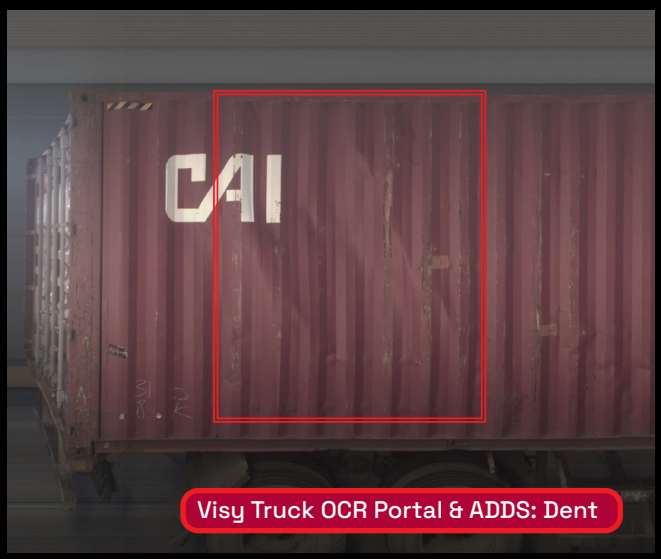
Copyright ©2025 Visy Oy

Built to Fit Your Terminal

Configure ADDS to Focus on the Relevant Containers for Your Business







Customer-oriented Approach

By customer-oriented, we mean built with your business in mind. Every part of the system is designed to support your operations efficiency effectively – based on Visy's long experience in delivering solutions that work in real-world environments.

We don't believe in one-size-fits-all products. Instead, ADDS 2.0 is founded on flexibility and scalability – allowing us to configure key features to suit your operational needs while following best practices proven across the industry.
From defining damage scoring to prioritizing system functions and managing data for claims, you can rely on a solution shaped by Visy's expertise to align with your goals.

Initial calibration period to optimize sensitivity settings

Site data is used to train the model for optimal performance

Compatible with Visy OCR suite and with limited Visy approved imaging solutions

Exception Rules & Refined Sensitivity Controls

Damage types with low relevance

Minimizing exceptions due to damages not considered critical
Damage scores typically 1-60

Classes such as
Rust, scratch, minor dents and bulges

ADDS auto processing

Damage types that can be an issue if prevalent enough on the container

Optimizing the effect of common, subjective damages present on high number of containers
Damage score 50-100

Classes such as
Dents, bulges, high number of scratches, open handles

Multiple minor → **ADDS Alarm** → Manual

Damage types that must always be repaired if detected

Amplifying relevance of critical damages, scoring typically to 100
Considered critical due to terminals own quality assurance and/or ISO standards

Classes such as
Holes, missing air covers, bent door bars, door damage, major dents and bulges

Major → **ADDS Alarm** → Manual

ADDS in Action

Delivering Results in Real Operations

Gate Operations

- Trucks flow continuously without stopping for manual inspection
- All visible container sides captured via line scan and area cameras, or other imaging solution approved by Visy
- Instant alerts when damage exceeds threshold

Visy Truck OCR Portal

Crane Operations

- Container sides are imaged for damage inspection during lifts with PTZ cameras
- Visy TopView captures complete roof image for damage inspection
- Prevents damaged containers from entering vessel or stack

Visy Crane OCR

Visy TopView

Rail Operations

- Damage inspection as wagons pass through portal with line scan imaging
- High-speed capture of multiple containers per wagon
- Identifies issues before containers enter the terminal

Visy Train OCR Portal

Copyright ©2025 Visy Oy

#1 Use case

Customer using ADDS as part of the Visy Access Gate GOS Platform

Unified Platform | Gate | Quay | Rail | Consistent Standards | Visy Access Gate GOS

Automatic ID & Damage: Visy Truck OCR Portals identify trucks and send IDs and damage data to Visy GOS before they reach the gate.

Full Visibility: All transaction data – including images and damage scores – is shown and can be edited in the Visy Access Gate GOS user interface.

Automatic Alerts: If damage score exceeds a set threshold, the system alerts and creates an exception event for review, and denies automatic entry.

Quick Review: Clerks check the images and confirm damage.

Action: Confirmed cases trigger a manual inspection when the truck arrives at the main gate.

#2 Use case

Customer with ADDS integrated into in-house GOS

Gate | Consistent Standards | Integrated with in-house GOS

Data transfer: Visy delivers complete OCR data, detected damages and classes, and an overall damage score for each event.

Process Automation: The in-house GOS system uses this data to automate transactions according to the exception rules set in it based upon data supplied by Visy.

CONTAINER ID:	VISU 1234567 8
TIMESTAMP:	2025-10-24 14:23:58
DAMAGE CLASS:	Scratch
LOCATION:	Right side
SCORE:	36
DAMAGE CLASS:	Bulge
LOCATION:	Roof
SCORE:	41
TOTAL DAMAGE SCORE:	41/100
STATUS:	ADDS Auto Processing

Copyright ©2025 Visy Oy

Business Impacts of ADDS, OCR and Gate Automation

ADDS pays for itself through efficiency gains while opening new revenue streams

Before ADDS

Average Transaction Time
45 sec
All manual inspections

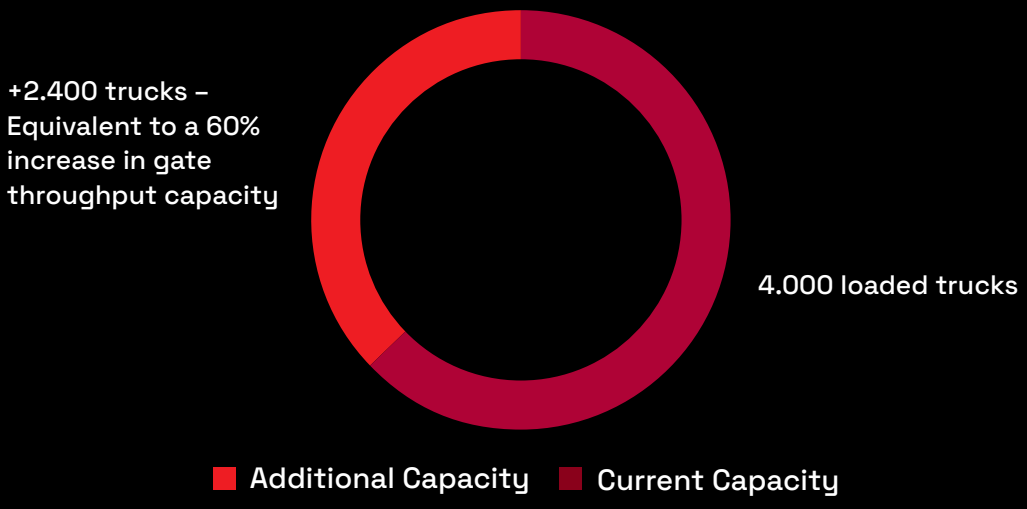
→

After ADDS

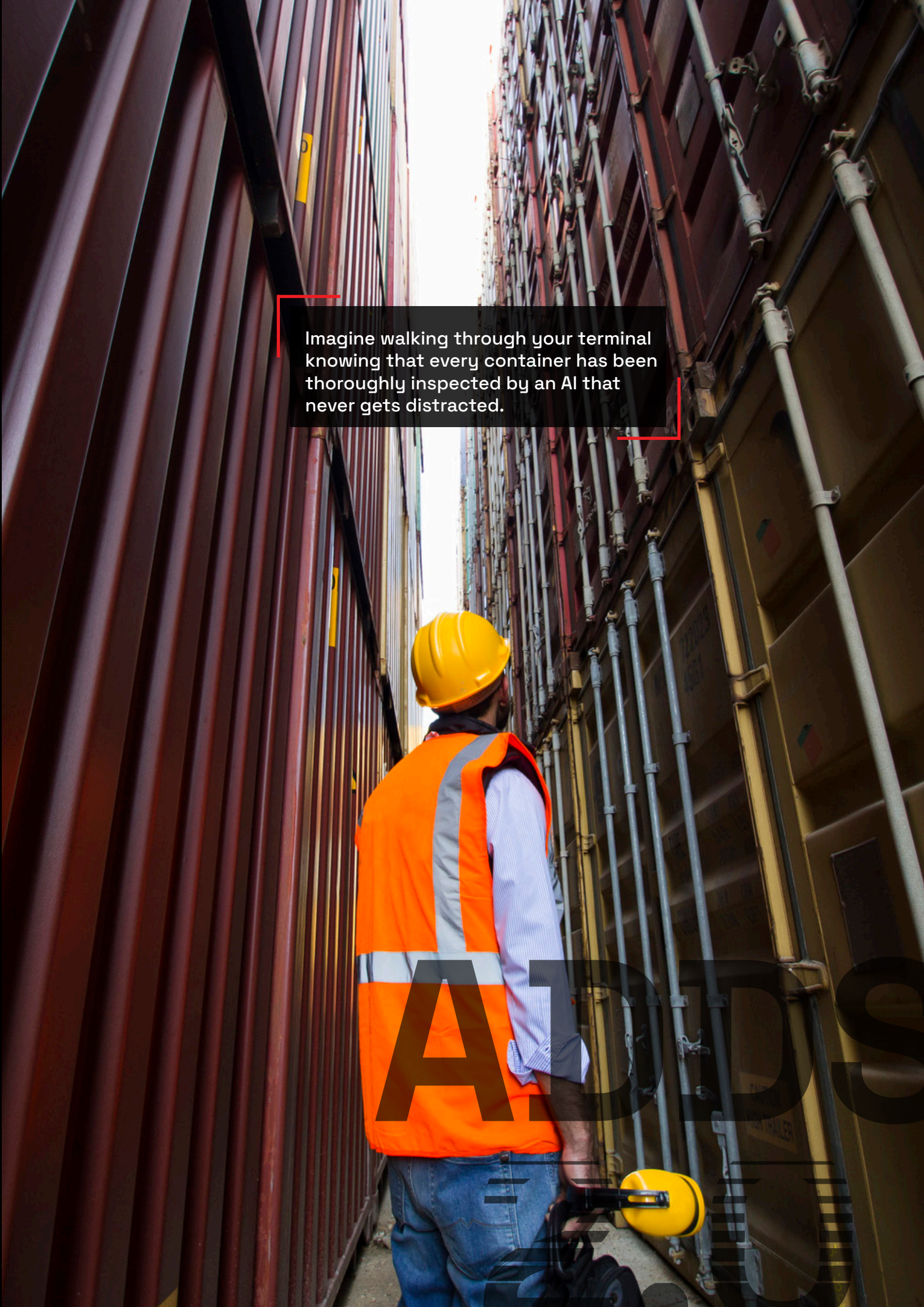
Average Transaction Time
27 sec
60% of total transactions automated

* Each automated event saves ~30 sec

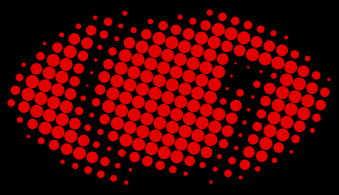
Gate Capacity Increase Achieved with OCR and ADDS



* 40% manual includes all types of exceptions
* Calculation is based on transaction times and automation percentages received from one Visy customer site



Imagine walking through your terminal knowing that every container has been thoroughly inspected by an AI that never gets distracted.



VISY

www.visy.fi | sales@visy.fi