

VISY

VISY
30-YEAR ANNIVERSARY
1994-2024

HOW TO HAVE BULLETPROOF YARD INVENTORY



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LinkedIn

Stand C44

TOC
EUROPE



GATE AUTOMATION AND OCR SOLUTIONS

Expand your vision

- ✓ Digitalization strategies for repeatable, scalable, and profitable operations
- ✓ 6,000,000+ access control events per day
- ✓ Billions of OCR events – DATA!
- ✓ The most trusted OCR provider

VISY
Expand your vision



**A global vision of
safety & security,
efficiency & sustainability**



Is my yard inventory perfect?



Copyright: The Simpsons / The Walt Disney Company

“Misplaced” boxes cost operators BILLIONS

- ✓ Labor
- ✓ Administrative
- ✓ Insurance
- ✓ Operations: wear/tear on CHE, fuel costs, etc.
- ✓ Inefficiency: Knock on effect of planning issues
- ✓ Impact on customers, consumers, reputations and relationships





Copyright: Marvel / The Walt Disney Company

Searching...

...But there's chaos



What is the common denominator in every box lift?



Copyright: The Simpsons / The Walt Disney Company





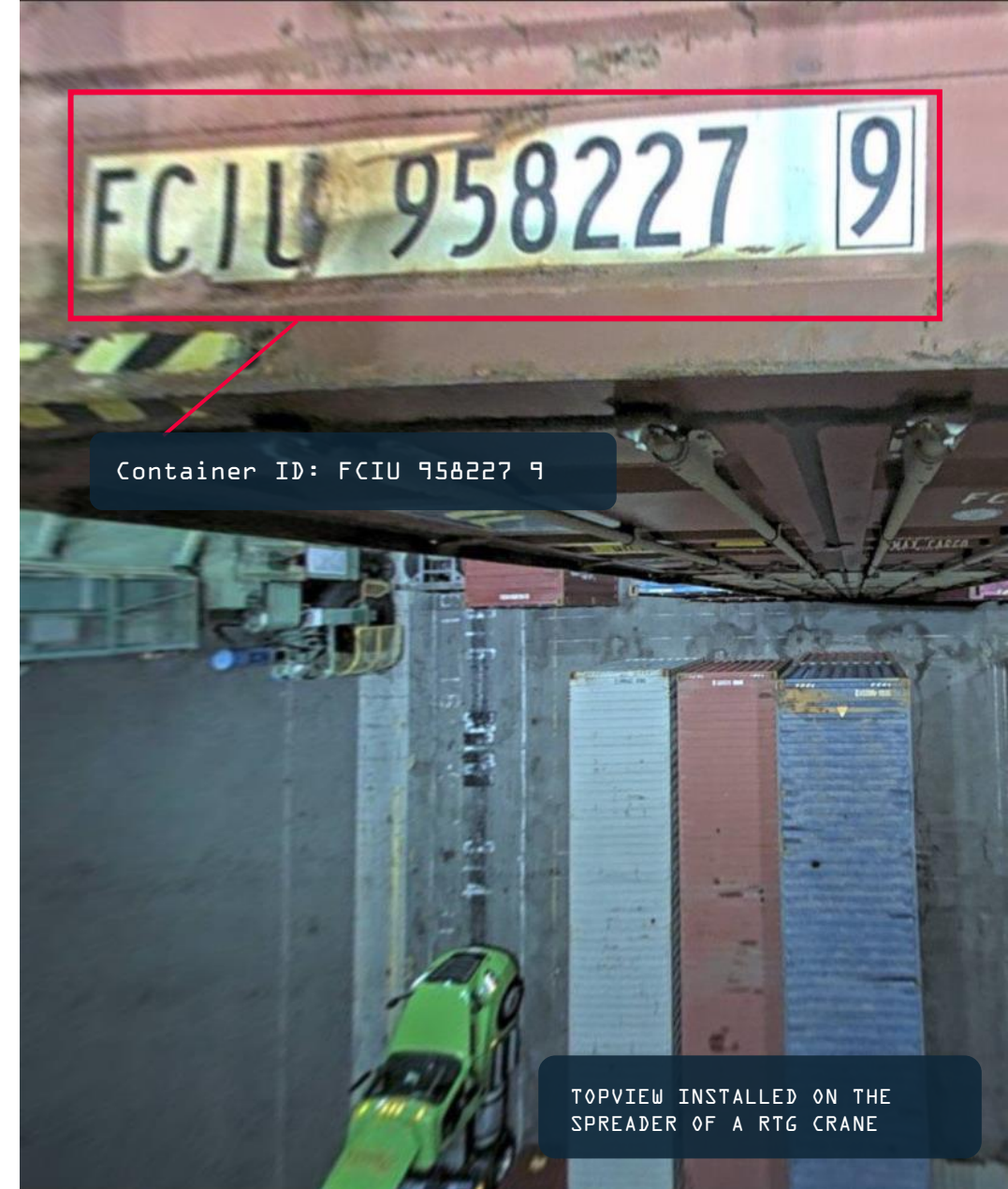
Copyright: The Simpsons / The Walt Disney Company



Visy TopView – Smart Spreader

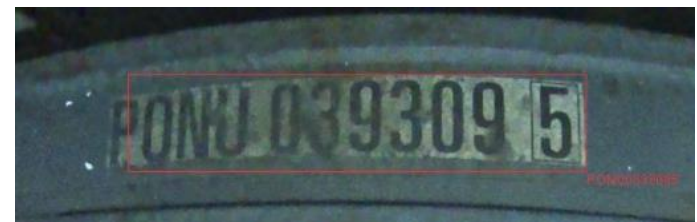
AI Camera System

- ✓ Spreader becomes Smart Device
- ✓ All Equipment
 - RMG / RTG / ASC
 - Lift trucks
 - Strads
 - STS / MHC
- ✓ All spreader types
 - Single
 - Twin
 - Tandem
 - Quad



Deep Learning / AI Vision Technology

- ✓ Visy in-house software
- ✓ High recognition rate of 99%
- ✓ Visy DNN correctly recognizes bad container IDs faster and more accurately than humans
- ✓ 90% is easy – 99% is difficult
- ✓ What impact does 9 percentage points have?



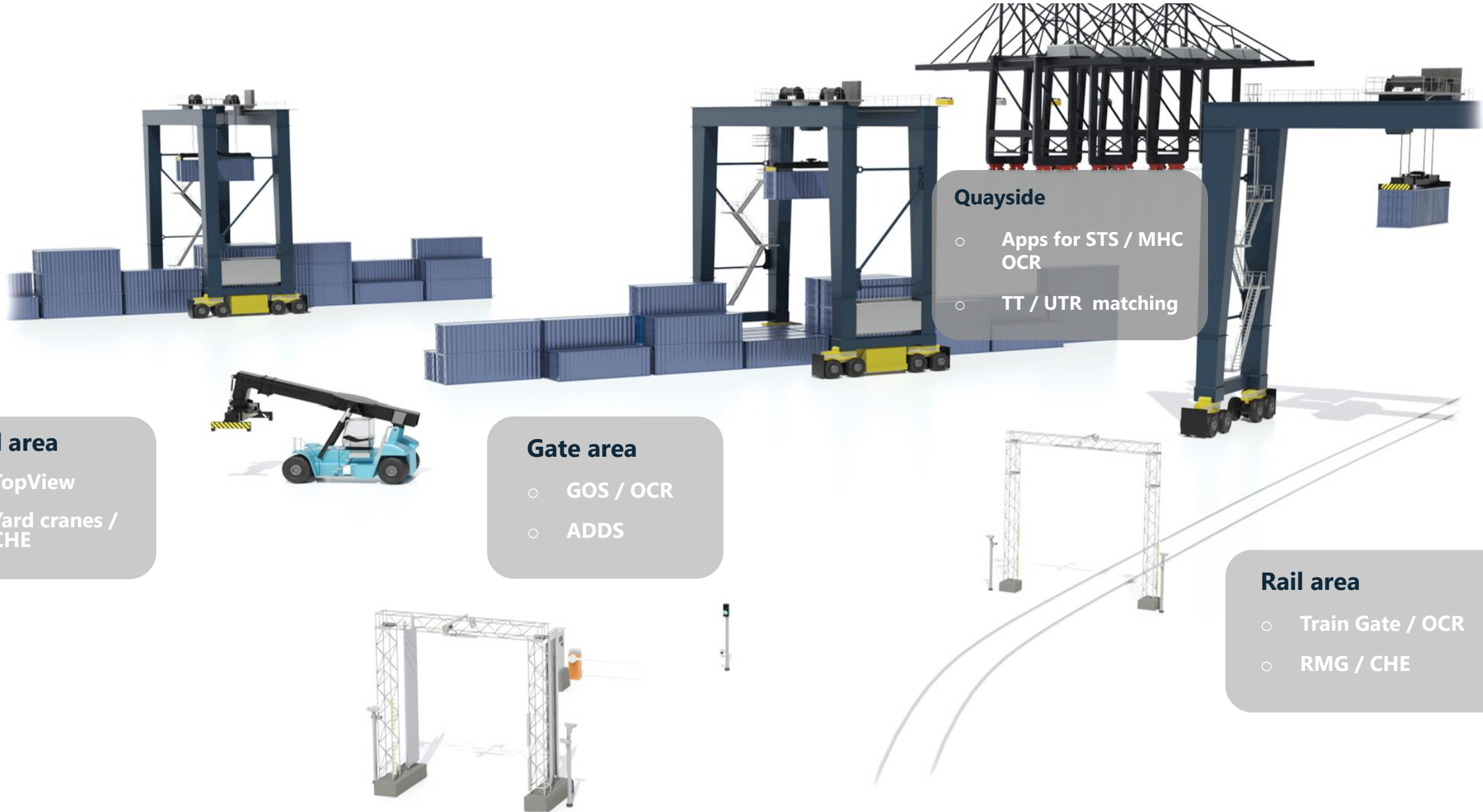
AI is faster and more accurate than us



Dalmatian or Ice Cream?



Owl or Apple?



Yard area

- TopView
- Yard cranes / CHE

Gate area

- GOS / OCR
- ADDS

Quayside

- Apps for STS / MHC OCR
- TT / UTR matching

Rail area

- Train Gate / OCR
- RMG / CHE

**Digitize
data collection
processes**

**One source
of truth**

**Keep
people out
of harm**

**OCR read
rates over
99%**

**Decrease
handling times to
reduce carbon
emissions**

OUTCOME FOCUS MEASURE SUCCESS

**Increase STS
Gross Moves
per Hour**

**Decrease cost
per lift/move**

Decrease TTT

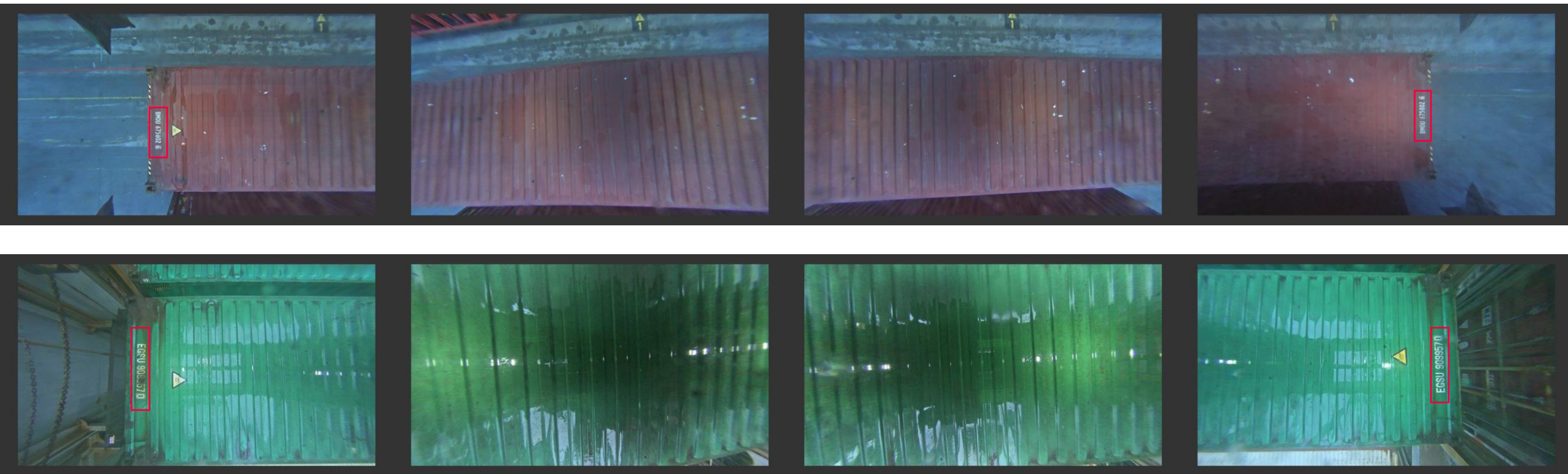


OCR read rates
≥99%

Visy TopView on Bromma spreader

- ✓ **Most popular Spreader OCR – First in the market**
- ✓ TopView captures images of container roof to verify:
 - Container ID; Condition
 - Lift type (single, twin, hatch cover)
 - Twin-20 detection
- ✓ **Digitize and share data – TOS & PDS**





- ✓ Before a spreader locks in the container, the system captures the images
- ✓ Event info is verified for workorder – Box ID / location / lifting task / TT
- ✓ Visy Automatic Damage Detection System detects damages on container roofs



Visy TopView Reach Stacker



AI overcomes:

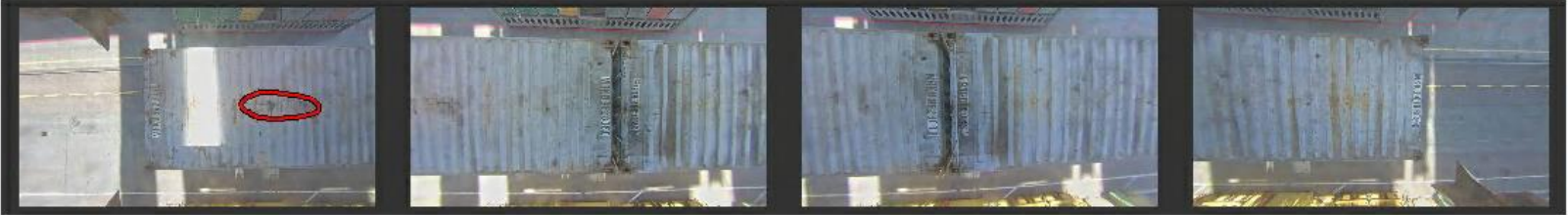

- Busy images
- Steep angles
- Multiple containers
- Damaged codes



Visy Crane Gate 4.13.0

File View Cameras Search Settings Shortcuts Tools Administration Windows Help

Event Permit Access Alt. Permits (0) Passengers Top Containers Exceptions

Event Permit Access Alt. Permits (0) Passengers Landside Containers Exceptions

All (0) Allowed (0) Denied (0) Query (7) Event Monitor

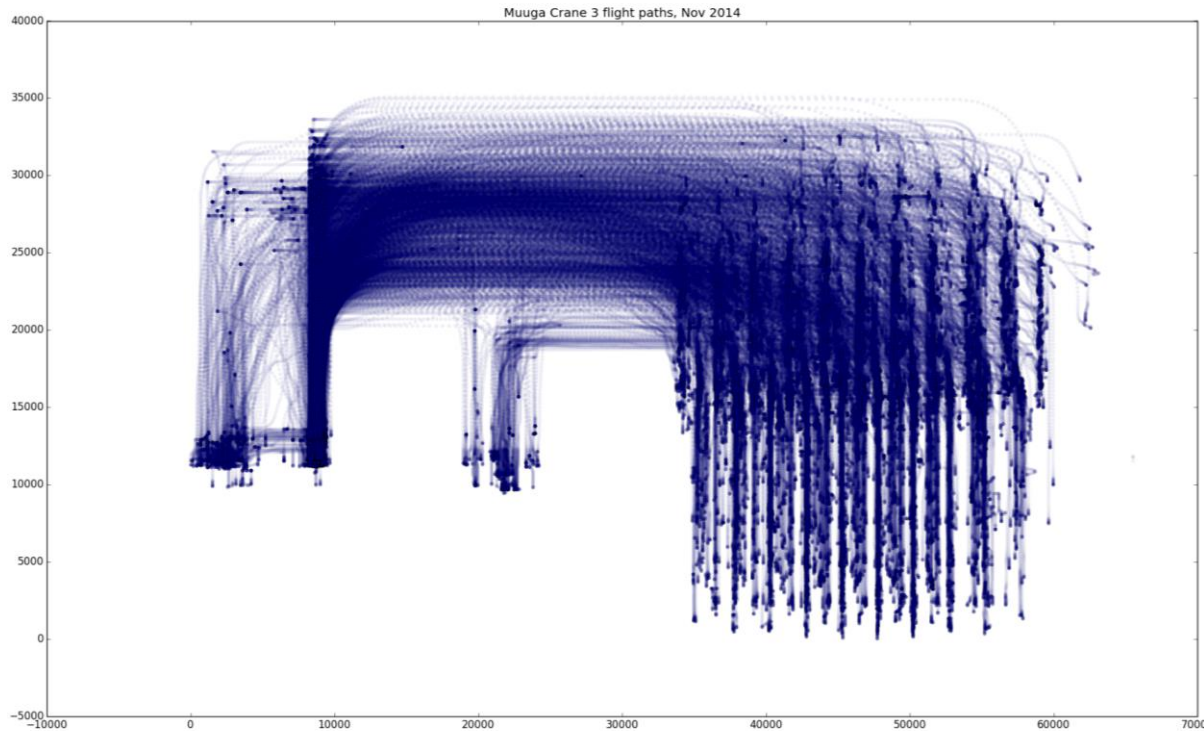
ID	Time Stamp	Date	Time	Checkpoint	Container 1	Container 2	ISO 1	ISO 2	Bundl...	Dam...	Dam...	Com...	Even...	Orien...	Orien...	Move...
534547	18.04.202...	18.04.2023	13:00:23	K11 - ZPMC	MRKU9628060 / 22G1	MSKU4186054 / 22G1	22G1	22G1		Yes	100			Normal	Normal	Load
534546	18.04.202...	18.04.2023	12:54:05	K11 - ZPMC	SUDU7695980 / 22G1	MRKU8974094 / 22G1	22G1	22G1		Yes	100			Normal	Normal	Load
534545	18.04.202...	18.04.2023	12:52:01	K11 - ZPMC	MRSU4324215 / 45G1		45G1				0			Normal		Load
534544	18.04.202...	18.04.2023	12:50:16	K11 - ZPMC	HASU4995804 / 45G1		45G1			Yes	56			Normal		Load
534543	18.04.202...	18.04.2023	12:48:49	K11 - ZPMC	MRSU3173686 / 45G1		45G1				0			Normal		Load
534542	18.04.202...	18.04.2023	12:47:15	K11 - ZPMC	SUDU8691377 / 45G1		45G1				0			Normal		Load
534541	18.04.202...	18.04.2023	12:45:27	K11 - ZPMC	CAIU4826667 / 45G1		45G1				0			Normal		Load

✓ Lifting events in Visy Platform - data exchange with PDS or TOS

- Verify every move & Exception handling tool
- Command center images for multiple purposes
- Digitized ID, ISO code, damage score, move type

Innovating the smart spreader since 2014...

...now 100's in production



3D Container Yard

ID	Name	Area Code	Contnr
1	C-alue	C	727
2	D-alue	D	671
3	E-alue	E	828
4	F-alue	F	784
5	G-alue	G	837
6	H-alue	H	188
7	I-alue	I	44

Filter yards

Container	Shed code	Slot code	Slot occupation	Slot length	CC
CR-10632733	020C	020C010A	EIE		
TCU5655236	059C	059C11129	EIE		
MSKU4272733	064C	064C11A	EIE		
TCL10002037	064C	064C15A	EIE		
PSCL4646511	017C	017C0304A	EIE		
MRKU7266004	064C	064C13E	EIE		
CR-10331890	031C	031C03049	EIE		
KFP11576680	012C	012C1112A	EIE		
CR-10374232	059C	059C1112A	EIE		
RRKU012410	012C	012C11129	EIE		
MRKU128851	020C	020C0102A	EIE		

Filter containers

Event Number	Date	Identification	ISO Code	Yard	Rc
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3D Views: The interface includes two 3D renderings of a container yard. The top view shows a dense grid of green containers with 'VIST' markings, with a white container in the center. The bottom view shows a similar grid from a different perspective.

10:05 - Load
MEDU6830348 22G1

Breakdown **Boom Up**

MENU **DAY**

SEQ	QUEUE NAME	BAY	MOVE	MOVES
1	MAJE-disch-35B	B 35	DSCH	193
2	MAJE-load-35B	B 35	LOAD	22

CURRENT **PLANNED** **DUAL**

Tier **Waterside** Row

088 087 086 085 084 083 005 004 003 002 001

002 001

Bay View **List View** **Sightseeing**

Landside

10:05 - Load
MEDU6830348 22G1

Breakdown **Boom Up**

MENU **DAY**

SEQ	QUEUE NAME	BAY	MOVE	MOVES
1	MAJE-disch-35B	B 35	DSCH	193
2	MAJE-load-35B	B 35	LOAD	22

SEQ	MOVE	CONTAINER	TYPE	POSITION	SPECIAL	PM
3	LOAD	MEDU2676872	22G1	35 06 02		
4	LOAD	MEDU6371681	22G1	33 06 02		
5	LOAD	MEDU3001533	22G1	35 04 04		
6	LOAD	XINU1156811	22G1	33 04 04		
7	LOAD	TCLU7390362	22G1	35 06 04		
8	LOAD	TEMU1735438	22G1	33 06 04		
9	LOAD	MEDU3740596	22G1	35 04 06		
10	LOAD	FCIU5933760	22G1	33 04 06		
11	LOAD	XINU1154697	22G1	35 06 06		
12	LOAD	DFSU3142050	22G1	33 06 06		
13	LOAD	MSCU5857688	42G1	34 04 08		
14	LOAD	MRSU4440468	45G1	34 06 08	06	
15	LOAD	MSMU4853332	45G1	34 04 10		
16	LOAD	CAAU5305172	45G1	34 06 10		
17	LOAD	MRKU5283313	45G1	34 04 12		

Bay View **List View** **Sightseeing**

Landside

Data Utilization: Automatic loading confirmation

Back

Crane Id
 Work Queue
 Sequence
 Move kind
 Lift type
 Container **MRKU2286556**
 ISO Code **45G1**
 Current Location
 Current Position **B 18 02 12**
 Planned Location
 Planned Position
 Full Yes
 Sealed No
 Hazard No
 OOG No
 Reefer No

Breakdown

Boom Up

SEQ	QUEUE NAME	DUAL BAY	MOVE	MOVES
A 01				
A 03				
A 05				
A 07				
A 09				
A 11				
A 13				
A 15				
A 17				
A 19				
A 21				
A 23				
A 25				
A 27				
A 29				
A 31				
A 33				
A 35				
A 37				
A 39				
A 41				
B 01				
B 03				
B 05				
B 07				
B 09				
B 11				
B 13				
B 15				
B 17				
B 19				
B 21				
B 23				
B 25				
B 27				
B 29				
B 31				
B 33				
B 35				
B 37				
B 39				

MENU

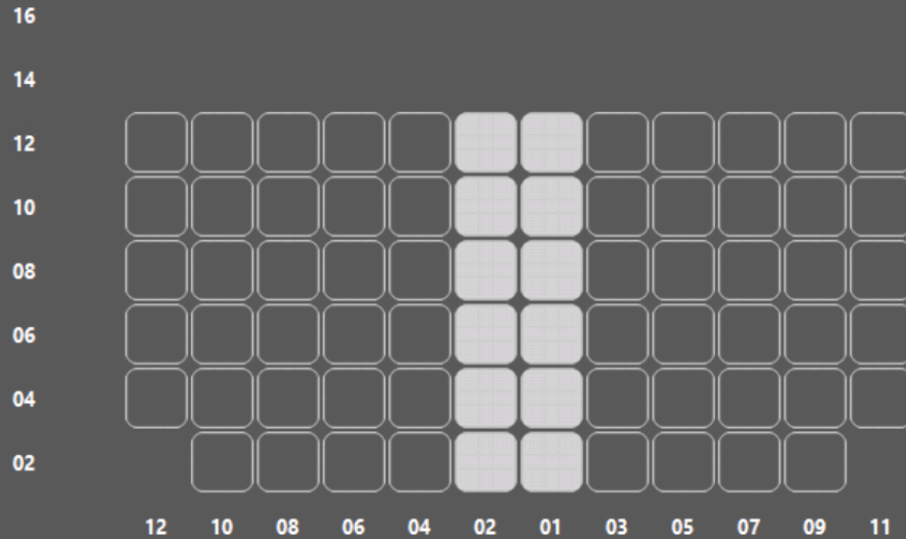
DAY

17 19

Waterside Row

CURRENT

PLANNED



Bay View

List View

Sightseeing

Landside

Data Utilization: Automatic loading confirmation

Closing thoughts

- ✓ Demand more from Vision Tech
 - $\geq 99\%$ Box ID
 - AI: See, Digitize, Share
- ✓ Single Platform – One truth
 - Seamless integration to PDS or TOS
- ✓ How do you measure success?
 - Outcome focus KPIs





VISY TOPVIEW – SPREADER OCR

CONTAINER ID: ICOU 401331 8

Transform your operations...
...Never misplace a box



Expand your vision



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