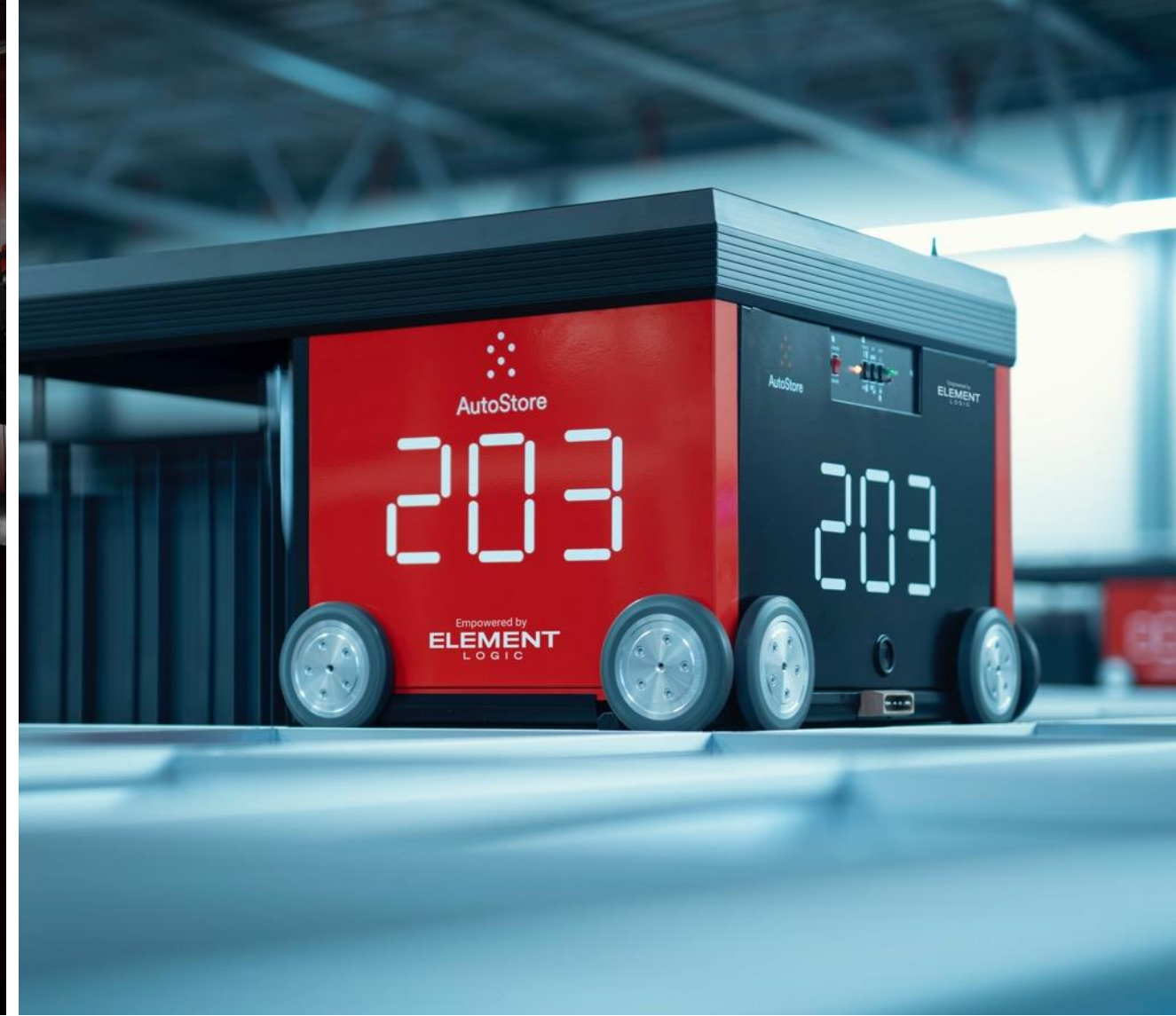


# We are Element Logic

We are Element Logic

**World`s first  
AutoStore partner**



Automation – The Element Way

**ELEMENT**  
LOGIC

# Agenda

- Element in a nutshell
- Design for the future
- eSuite Software – You are covered
- Automation technology By Element



# Introduction – Element Logic

- Established in 1985 and **privately owned**
- **System integrator** of material handling solutions
- **Specialists on AutoStore** and system integration
- Represented in **Norway**, Sweden, Denmark, Finland, Germany, BeNeLux, Poland, France, Spain, Italy, Czech, UK and USA
- 900+ employees and **growing**
- **380 ++ installed AutoStore systems**
- Income of approx. 500 000 EUR in 2023

# ELNO

in a nutshell

69

installations (2 on Iceland)

59

customers

57

has eManager

Average installation in Norway:



20 robots



5 ports



25 000 bins

35% classified  
as C1 projects

BL: 30



R5: 1 442



Carousel ports: 382



Conveyor ports: 136



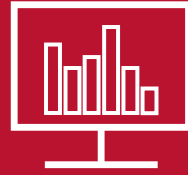
Relay ports: 1

Swing ports: 4



Bins: 1,8 mill

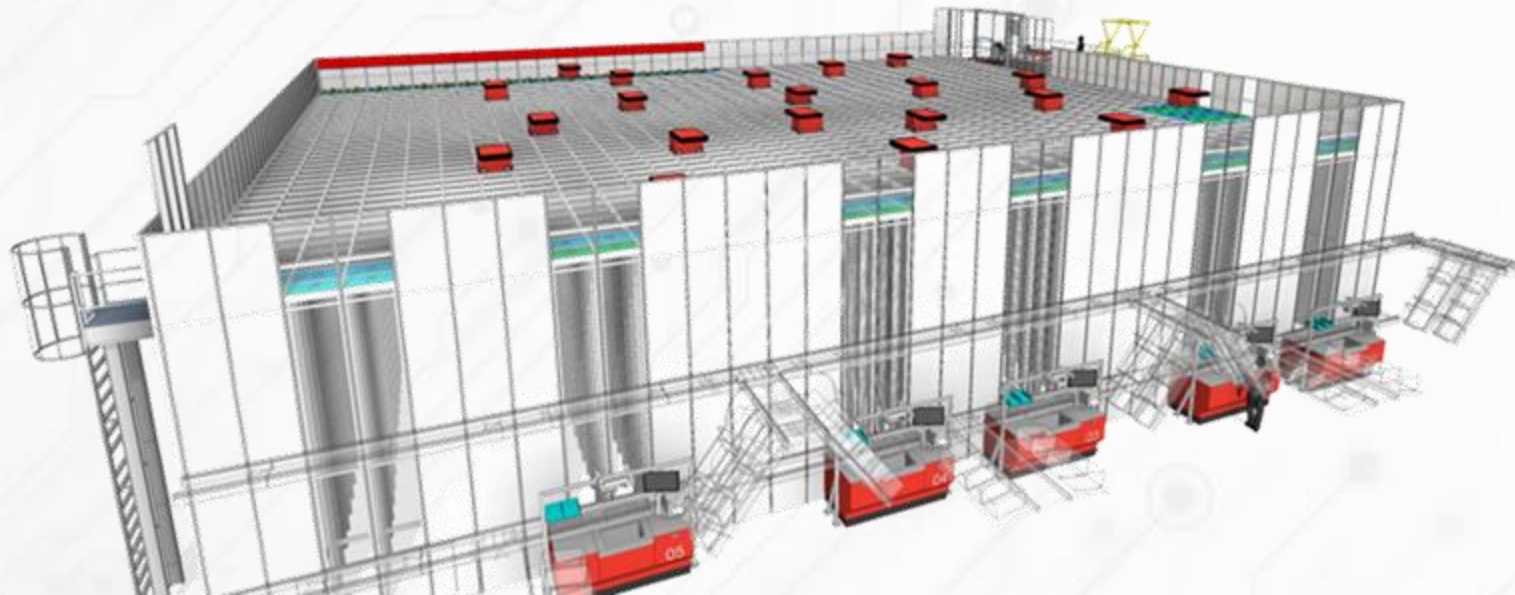




# Designed for the future

*Futureproofing your Investment*

# Levels of automation



From stand alone to complex automation, ready from **start**

# 1st. Level of automation

## Stand-alone workstation



### Description

The first level of automation is a stand-alone workstation which provides the maximum flexibility for the workstation design. The setup offers sufficient room for pallets, packing tables or putwall-frames to implement the right picking strategy for your business.



### Shown setup of configuration

- Overhang with mezzanine
- Pick-by-light bin pointer
- Workstation equipment frame
- Put-to-light labels
- Putwall-frames



# 2 nd. Level of automation

## Workstation with automated downstream transportation



### Description

The next level of automation upgrades the solution with a takeaway conveyor technology. This automates the passing on process and increases the efficiency of the picking operator.

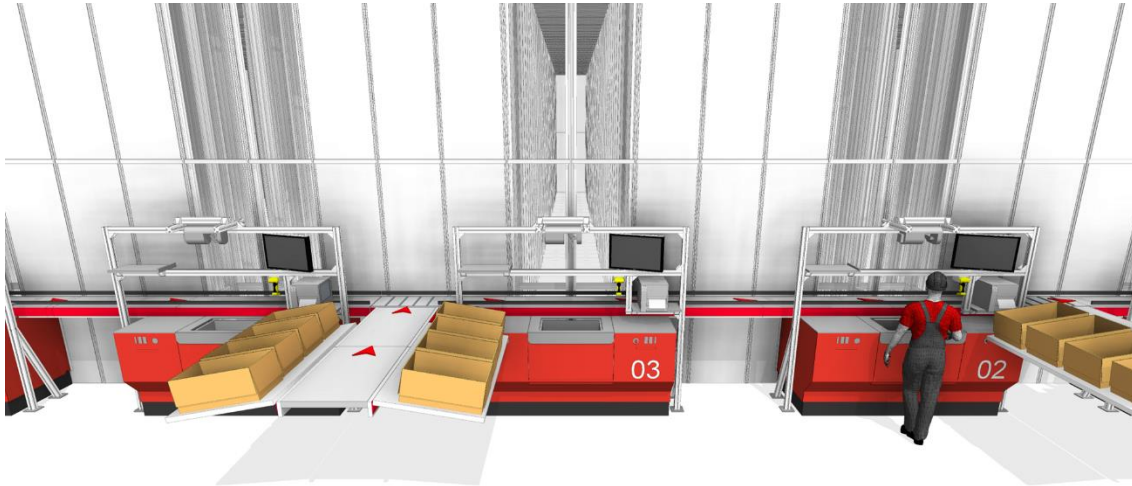


### Shown setup of configuration

- Overhang with mezzanine
- Workstation equipment frame
- Multi-order-picking conveyor
- Pick-by-light bin pointer
- Put-to-light labels
- Downstream transportation conveyor

# 3 rd. Level of automation

## Workstation with automated downstream transportation



### Description

The next level of automation upgrades the solution with a takeaway conveyor technology. This automates the passing on process and increases the efficiency of the picking operator. For order structures with possible batching factors, the multi-order picking option can maximize the efficiency of your workstation.

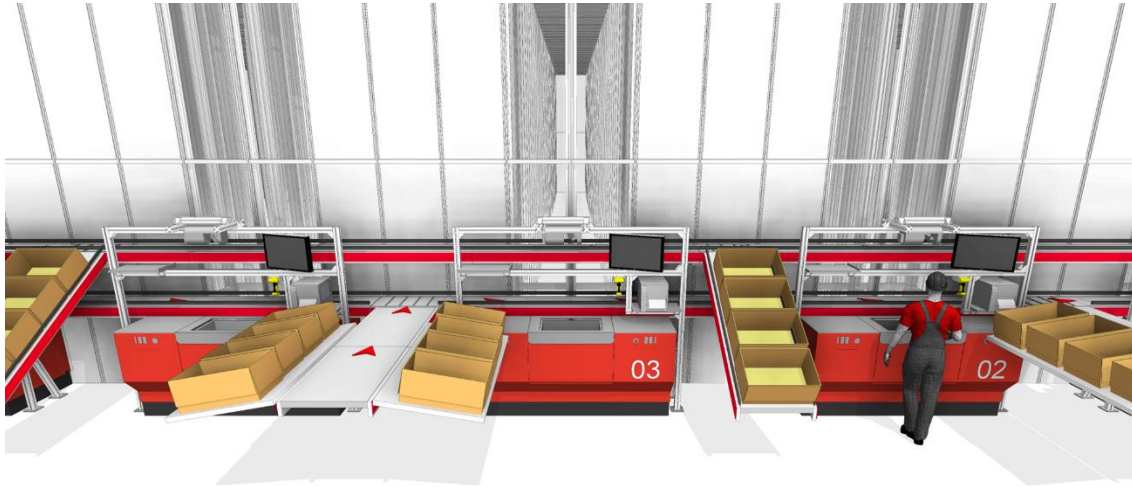


### Shown setup of configuration

- |                              |                                     |                           |                                     |
|------------------------------|-------------------------------------|---------------------------|-------------------------------------|
| Overhang with mezzanine      | <input type="checkbox"/>            | Pick-by-light bin pointer | <input checked="" type="checkbox"/> |
| Workstation equipment frame  | <input checked="" type="checkbox"/> | Put-to-light labels       | <input checked="" type="checkbox"/> |
| Multi-order-picking conveyor | <input checked="" type="checkbox"/> | Downstream transportation | <input checked="" type="checkbox"/> |

# 4 th. Level of automation

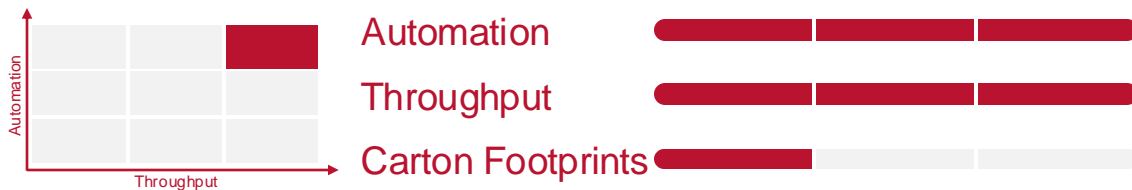
## Workstation with automated downstream transportation



### Description

The next level of automation provides a full automation of all processes around the picking process.

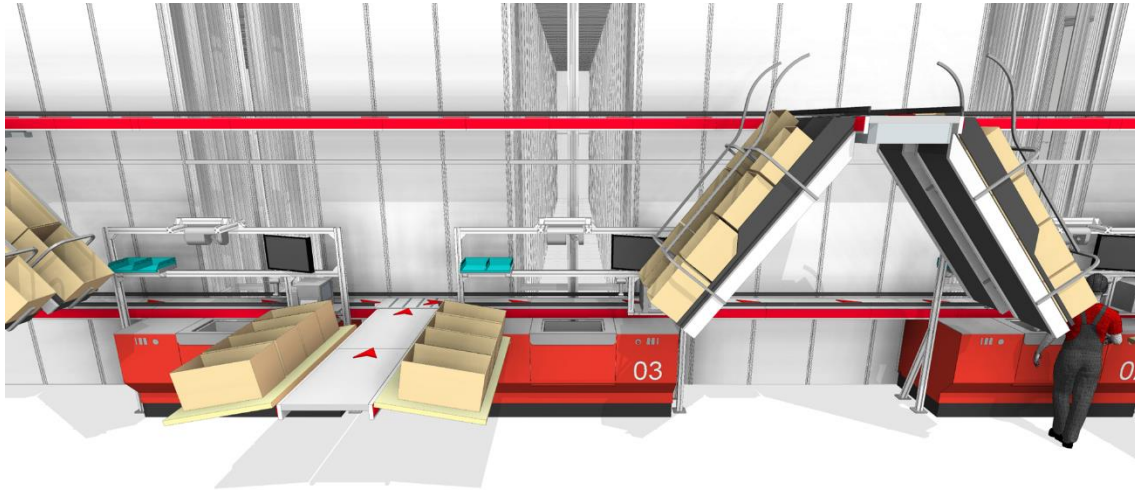
Preerected, empty cartons are supplied with conveyors to the workstation. The setup of the takeaway conveyor enables multi-order-picking operations and therefore optimizes the efficiency of the system. With an easy push of finished cartons, the orders are taken away and automatically transported to the next process. This ensures the ideal environment for efficient picking operations.



- Overhang with mezzanine*  *Pick-by-light bin pointer*
- Workstation equipment frame*  *Put-to-light labels*
- Multi-order-picking conveyor*  *Downstream transportation*

# 5 th. Level of automation

## Workstation with automated downstream transportation



### Description

The next level of automation provides a full automation of all processes around the picking process.

Preerected, empty cartons with different footprints are supplied with conveyors to the workstation. The setup of the takeaway conveyor enables multi-order-picking operations and therefore optimizes the efficiency of the system. With an easy push of finished cartons, the orders are taken away and automatically transported to the next process. This ensures the ideal environment for efficient picking operations.

*Shown setup of configuration*



- |                                     |                                     |                                    |                                     |
|-------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|
| <i>Overhang with mezzanine</i>      | <input type="checkbox"/>            | <i>Pick-by-light bin pointer</i>   | <input checked="" type="checkbox"/> |
| <i>Workstation equipment frame</i>  | <input checked="" type="checkbox"/> | <i>Put-to-light labels</i>         | <input checked="" type="checkbox"/> |
| <i>Multi-order-picking conveyor</i> | <input checked="" type="checkbox"/> | <i>Number of carton footprints</i> | 2                                   |



# eSuite Software

 Bins picked today

Current

2558

# The Software ecosystem

 Handling time

System handling time



**eLogiq**  
Integrated data platform



**eManager**  
Warehouse execution, management and control system for AutoStore



**eOperator**  
Robotic piece-picking



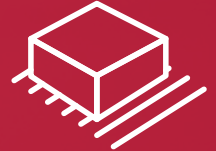
**eController**  
Material flow controller with visualization and simulation



AutoStore



Robotics solutions



Material flow handling



# Automation By Element

# Automation By Element Conveying technologies



Multiple levels of use, from simple takeaway conveyors to fully connected systems with complex material handling equipment.

Software:  
eController / eOperator



# Automation By Element

## OmniMod – The new item mover



**Sort:** Stand-alone system or with automated input/output

**Sequence:** Sequencing with single input/output or several inputs and outputs. Can be sequenced based on weight, ID, or any other parameters

**Buffer:** Parcels enter the system continuously and a subset of parcels leaves the system at a given time.

# Automation By Element eOperator – Robot piece picking



System that empowers robotic pieces picking from AutoStore or pick facades

Piece picking or order staging

Standardized for easy implementation

RaaS ready

Software:  
eOperator / eHub

# eOperator by Element Logic - Video



# AMR Product Family

## Connect Your Warehouse

Transport



Storage and Retrieval

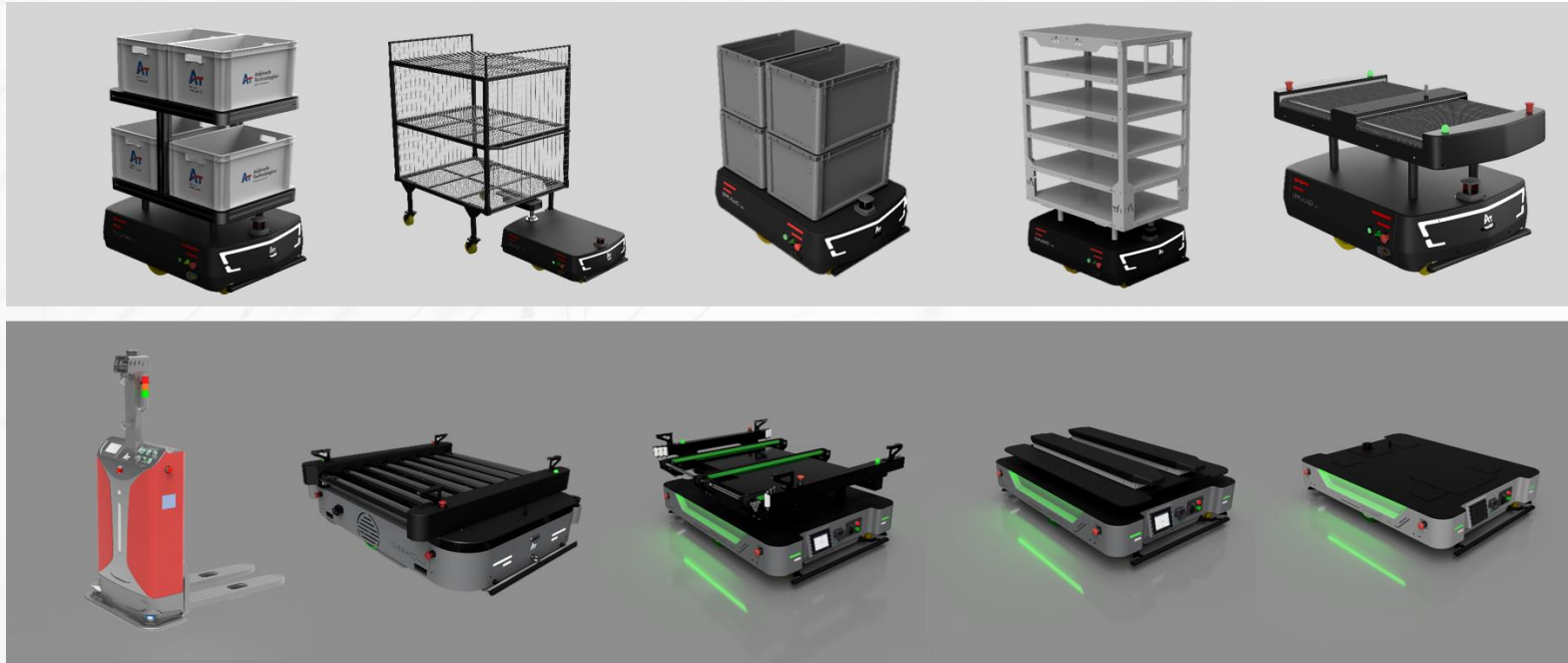


Sort



Element Logic has a range of AMRs to automate operations and connect with your AutoStore

# Automation By Element AMR's – Connect your warehouse



Connect your AutoStore and warehouse with autonomous vehicles

Wide range of configurations

Flexible and scalable

RaaS ready

Software:  
eOperator



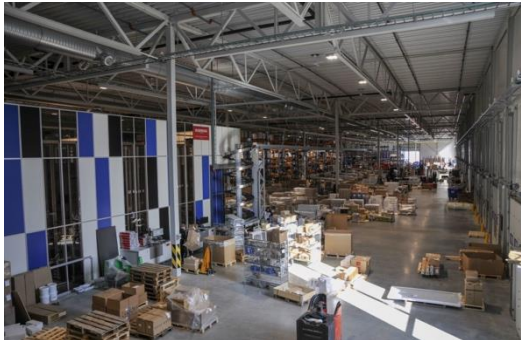
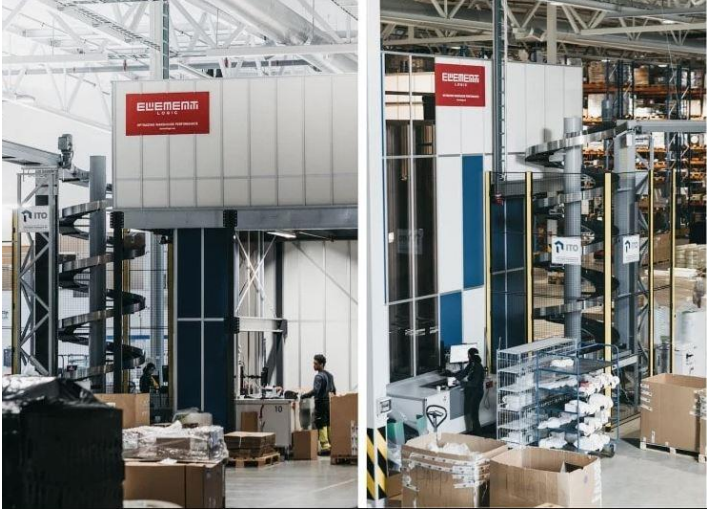
# Examples of automation

# Automation connected to AutoStore



# Customer reference

Berggård Amundsen – Ski, Norway



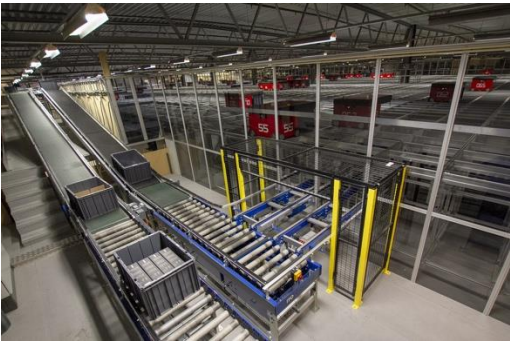
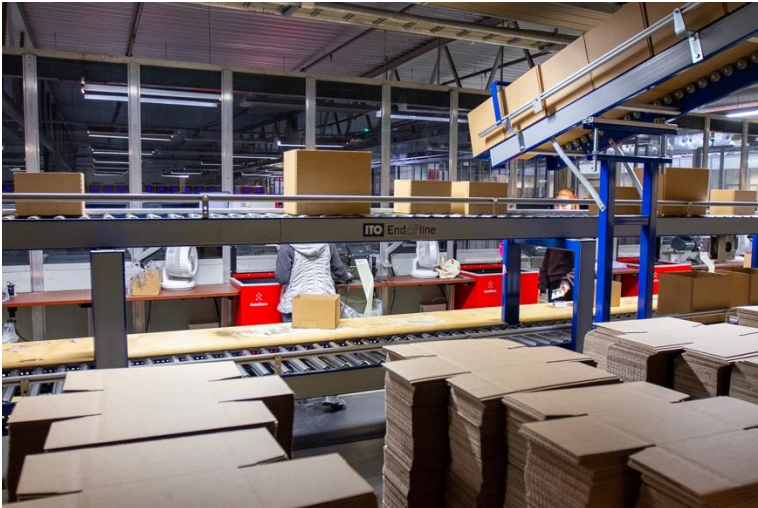
 20 000     19     8

- Electrical wholesaler
- B2B
- eManager
- Take-away bands with spiral lifts and sorter for packed goods
- 996 517 bin presentations in 2022



# Customer reference

Komplett – Sandefjord, Norway



 106 000       89       30

- Electronics
- B2B & B2C
- Take-away conveyer for picked orders, carton erector and lid applicator
- Aprox. 2 700 000 bin presentations in 2022
- Transfer cell for inbound outside of AutoStore

# Customer reference

Boozt – Ängelholm, Sverige

# Boozt



 1 245 000     1 243     301

- Clothing
- Biggest AutoStore in the world
- B2C
- Three separate grids
- eManager
- Take-away conveyor for picked orders

# Customer reference

Apotea – Uppsala, Sverige



 20 000       35       4

- Pharma
- B2C
- eManager
- eOperator – First operative
- Aprox. 770 000 bin presentations in 2022 (only 3 months)
- Take-away conveyer for picked orders, box erector, lid applicator and sorter.

# Customer reference

MEKO - Vestby, Norway



110 400



60



34 + 4 frames

- Consists of Mekonomen, Meca and Sørensen & Balchen
- Wholesale for automotive spare-parts
- eManager
- New warehouse in Vestby
- Largest player in Northern Europe in the vehicle market
- Already had one smaller AutoStore to begin with
- Waist conveyer band, bin lifts, pigeon walls, buffer solution, automatic palletizer robot, sorter and chutes

# Some of our happy customers - Global



Thank You!