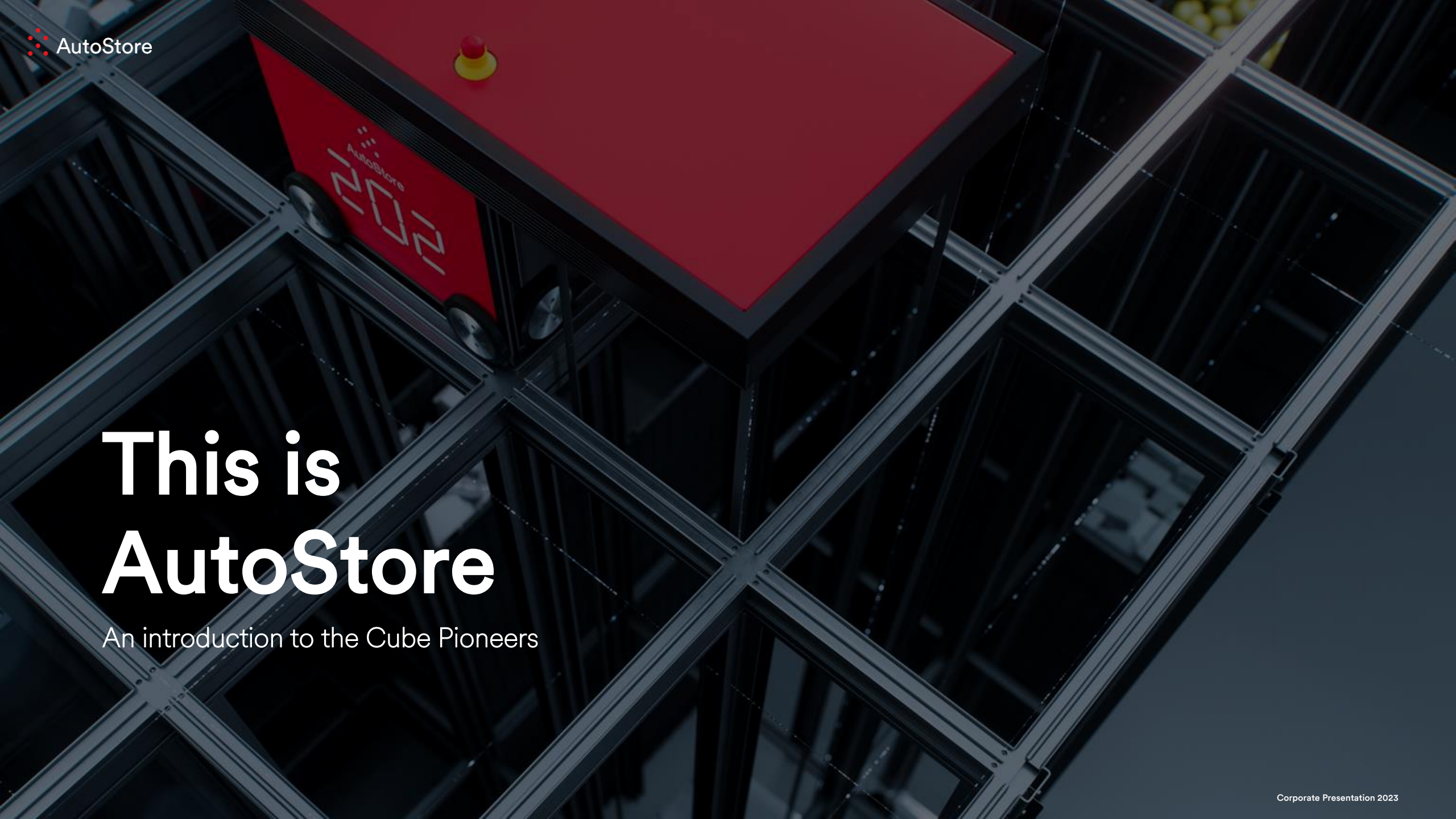
AutoStore



This is AutoStore

An introduction to the Cube Pioneers

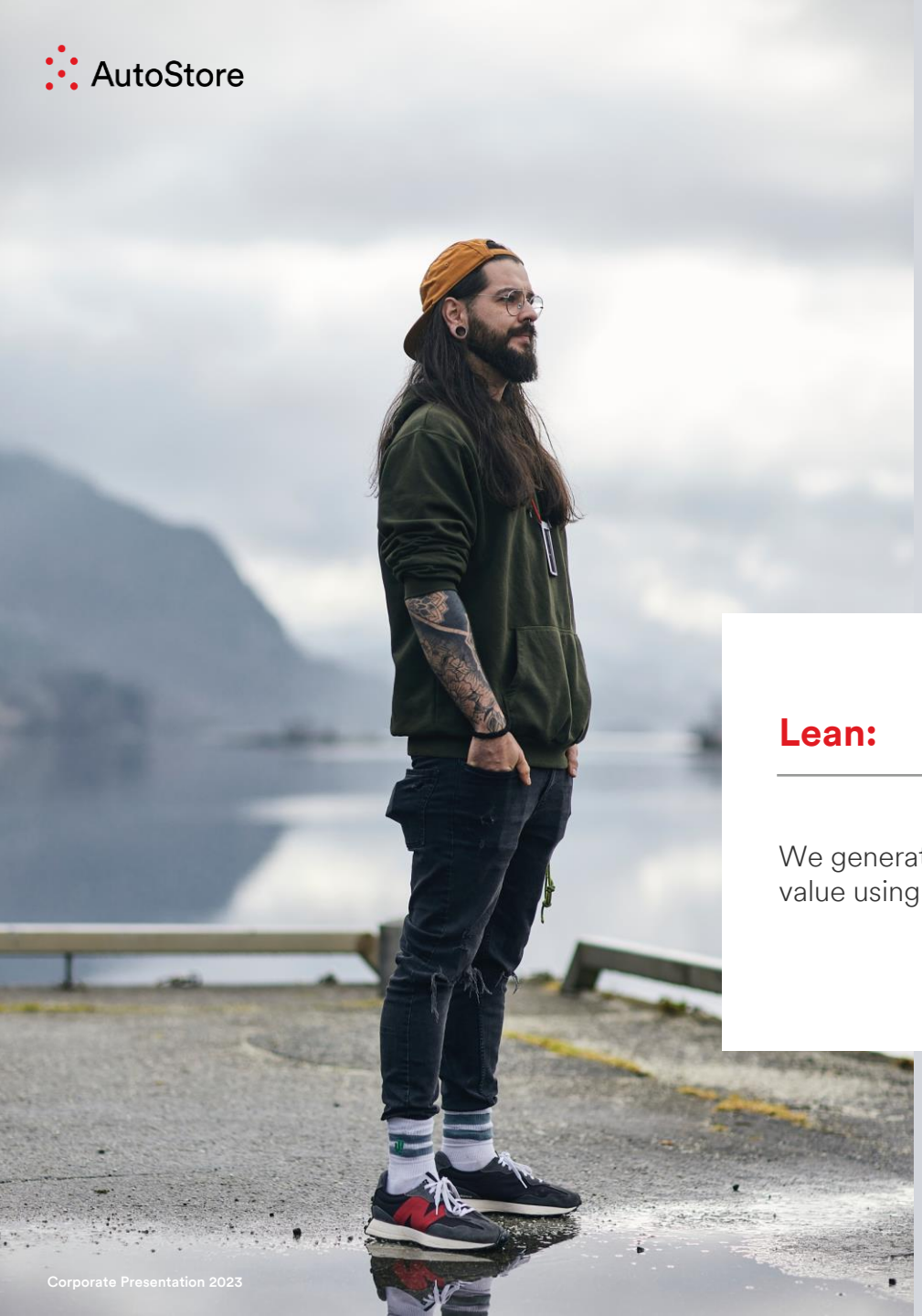
AutoStore

About AutoStore

AutoStore™, founded in 1996, is a technology company that develops order-fulfillment solutions to help businesses achieve efficiency gains within the storage and retrieval of goods. We deliver both hardware and software capabilities. Our vision is to make automation technology accessible to everyone with a storage need.

AutoStore is a pioneer and global leader in cubic storage automation. The AutoStore System consists of an aluminum Grid, Robots, Bins, Ports and a Controller. Robots ride on rails along the top of the Grid, retrieving Bins as needed. Using the Router software platform, the Controller constantly adjusts the location and path of Robots in real time.

AutoStore



Our values:

Lean:

We generate more customer value using fewer resources.

Transparent:

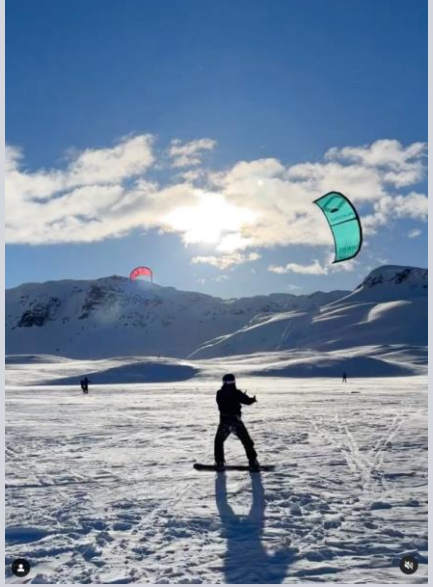
We are fair and easy to do business with.

Bold:

We have the creativity, courage and willingness to take risks.

AutoStore

The AutoStore team is our greatest asset



AutoStore

AutoStore

The AutoStore Journey:

1996–2003

Product Development

1996: Ingvar Hognaland developed the AutoStore idea. Started to work on a world patent.

2002: First ever AutoStore prototype in operation for Hatteland Logistics.

2004–2012

Commercialization

	Robots sold:
2004: Decision to introduce AutoStore as a commercial product. Established first AutoStore distributor for the Nordics.	5
2005: First commercial delivery and installation.	19
2006: Focus on product development and improvements	24
2009: Expanded distribution network to European markets.	161
2012: Global distribution network established. Robot production in Poland.	409

2013–2017

AutoStore Branding – GTM

	Robots sold:
2013: 1000 robots sold 1 million bins sold.	1,163
2014: Installations on four continents.	1,910
2015: Installations in 20 countries.	3,112
2016: 140 installations on five continents.	4,507
2016: >200 installations. New owners: EQT	6,356

2018–2022

Commercialization

	Robots sold:
2018: 300 installations across 28 countries.	11,000
2019: Over 400 installations across 30 countries. Sold to THL Partners	14,500
2020: Over 500 installations across 45 countries (Q4 2021)	20,000
2021: Over 850 installations across 45 countries (Q4 2021) Softbank acquired 40%. Listed on Oslo Stock Exchange.	>37,000
2022: Over 1000 installations across 49 countries (Q3 2022) Announced the appointment of Mats Hovland Vikse as CEO, effective from January 1, 2023	50,000

AutoStore

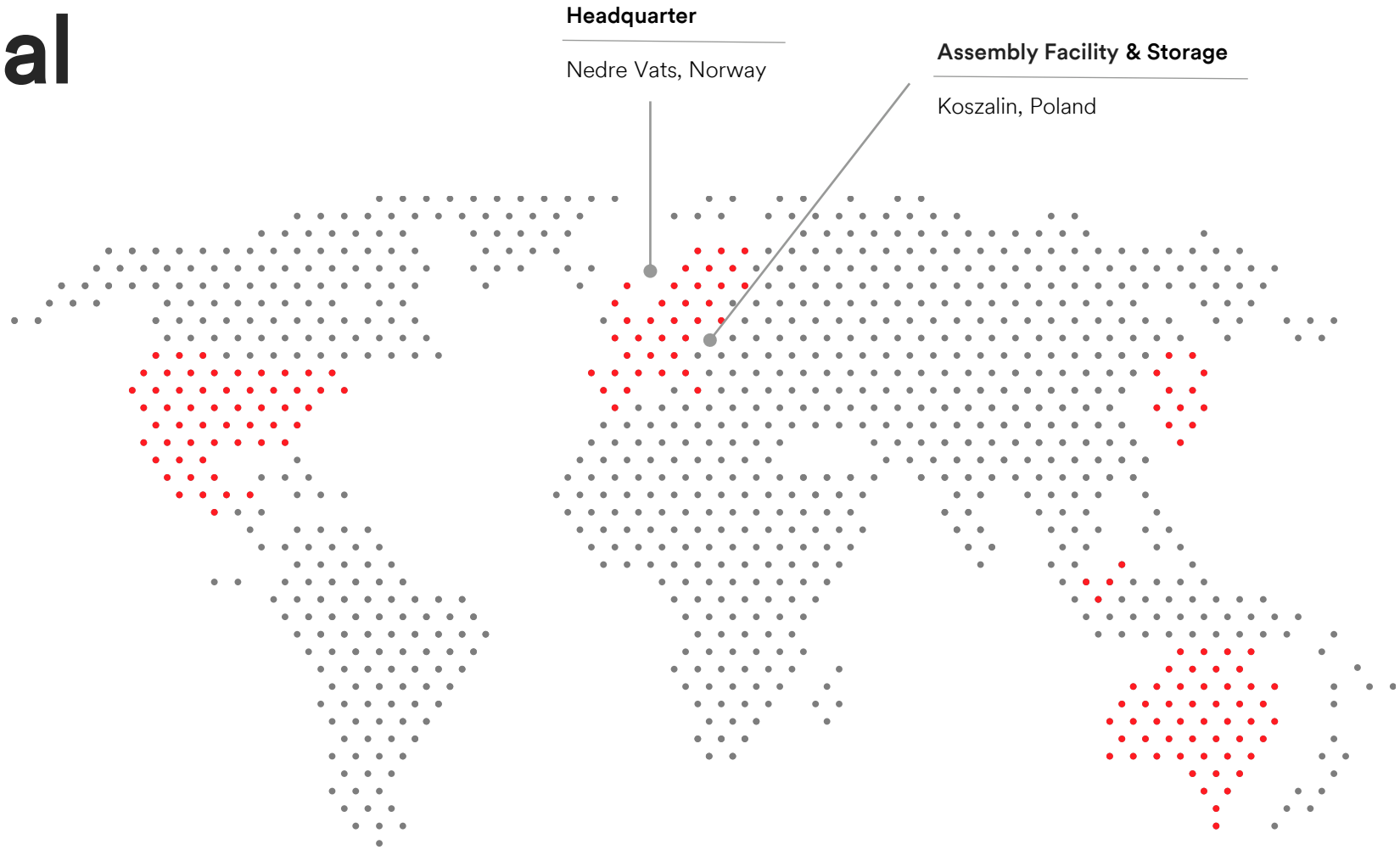
Our technology has many advantages for businesses:

– High throughput of orders
– Space and energy efficient
– Unbeatable uptime
– Modular design to fit anywhere
– Easy integration with other solutions

Organizational overview:

Offices

Norway
US
UK
Germany
Austria
France
Italy
Spain
Japan
Singapore
South Korea
Australia



AutoStore

Meet us across the world:

Australia
Austria
Belgium
Brazil
China
Colombia
Denmark
Finland
France
Germany
India
Italy
Japan
Malaysia
Mexico
Netherlands
Norway
Panama
Poland
Saudi Arabia
Singapore
South Africa
South Korea
Spain
Sweden
Switzerland
United Arab Emirates
United Kingdom
USA

Industry trends

The four most prominent trends in our industry – AutoStore™ fits them all perfectly!

Boost in eCommerce Sales

E-commerce sales are expected to grow 10.4% in 2023.

20.8% of retail purchases are expected to take place online in 2023.

By 2026, 24% of retail purchases are expected to take place online.

Automation and robotization

Global Industry 4.0 Market:

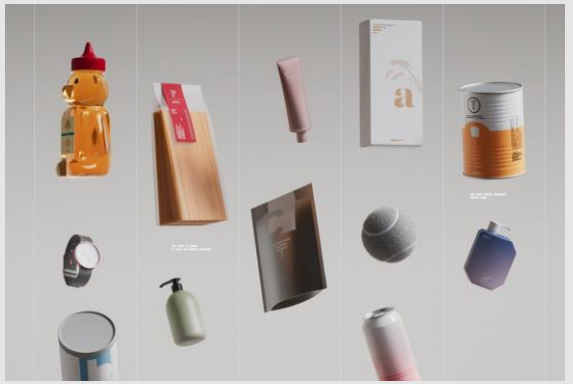
$78,19 billion in 2018 and is projected to reach $260,71 billion by 2026.

Increase in labor costs and labor shortage is driving automation.

Growth in global urbanization

91% of global consumption growth generated in cities from 2015-2030.

Growth in commercial real estate costs force businesses to look for space efficient solutions.



Demand for delivery, speed, and accuracy

Omnichannel consumers look for a seamless shopping experience, creating a demand for smart logistics and inventory management.

AutoStore

Recognition & awards:

Q1
2021
Named as a Robotics Business Review RBR50 Innovation Award winner

Q1
2021
H Mart Teams With AutoStore on Micro Fulfillment

Q1
2021
AutoStore Unveils Innovation Hub to Test and Replicate Supply Chain Environments

Q3
2021
Food Logistics' 2021 Top Green Providers Award Top Software & Technology Providers

Q3
2021
First IKEA store in the world to set up Goods-to-person

Q4
2021
Won the Retail Supply Chain & Logistics Award

Q2
2022
AutoStore™ Named SupplyTech Breakthrough Award Winner for 2022

Q2
2022
AutoStore™ Named Le Fonti AWARDS® Winner for 2022

Q3
2022
"Best Solutions Provider" award in the 21st Korea SCM Industry Awards 2022

Q4
2022
AutoStore™ Named Top Software & Technology Provider for 2022

Our global partner network:

AutoStore

Business areas:

AutoStore has a large and diversified blue-chip customer base across all end markets, and 800+ unique customers have integrated AutoStore into their supply chains already. In 2022, revenues included approximately 60% e-commerce and omnichannel exposure.

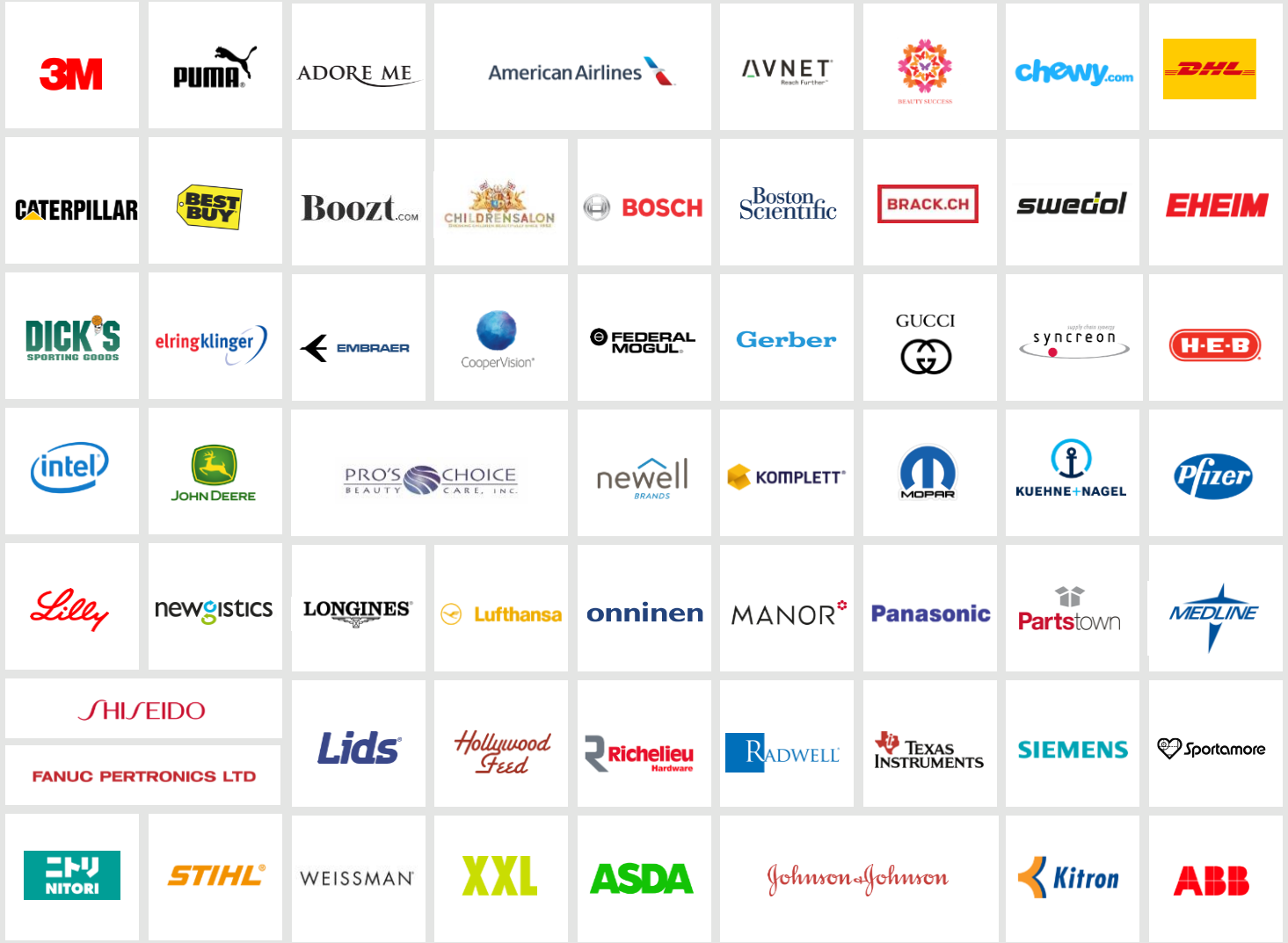
End-market	# of systems[1]	Selected blue chip customers
Apparel / Sports accessories	~ 210	Puma, Decathlon, XXL, Lids, Boozt, CFG, Crocs
Industrials[2]	~ 400	Fanuc, ABB, Siemens, Bosch, 3M, John Deere, Cat
3PL	~ 160	UPS, DB Schenker, DHL, Swiss post, Kuehne+Nagel, CJ Logistics
Other Retail[3]	~ 130	Kid, RoyalDesign, Kitchentime, Chewy
Grocery	~ 100	SSG , HEB, H Mart, Weiling, Peapod, ASDA, Weee!
Automotive	~ 80	Federal Mogul Motorparts, Continental, GS Bildeler, AGCO
Healthcare	~ 90	Medline, Johnson & Johnson, Pfizer, CVS Pharmacy, Osaki, Apotea
Consumer electronics	~ 40	Best Buy, Dustin, Komplett.no, Olympus
Luxury & Personal Care	~ 40	Gucci, Longines, Eton, Manor, Shiseido

1 As per end of Q2 2023, includes installed base and backlog.

2 End markets include aviation, aerospace and defense, building and construction, machinery and other industrials.

3 End markets include toys and games, office supplies, home supplies, generalist retailer, books & media.

Some of our clients:



AutoStore

The cubic storage pioneers:

Scaling our business in the global e-commerce and robotics megatrends

Scaled and Global Platform

Countries	~50
Robots	~58,500
Systems[1]	~1,250
R&D FTE[2] (~70% Software)	~250

Customers and Partners

23 Partners	~2,000 Certified sales representatives[3]
Unique customers	~900
Customer payback period	1-3 years
Broad exposure to all end markets	~50% Sale to existing customers[4]

Superior Financial Profile

2023 revenue guidance	$700-750m
Revenue CAGR 2017-2022	~50%
Adj. EBITDA Margin Q2 2023	50%
FCF conversion[5] Q2 2023	85%

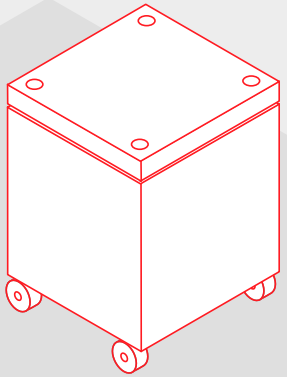
1. As per end of Q2 2023, includes installed base and backlog
2. As per end of Q2 2023
3. Includes people trained/active licenses to partner portal
4. Historical average (2020 - Q2'23)
5. Defined as (Adjusted EBITDA less Adjusted Capex) divided by Adjusted EBITDA

AutoStore

Operational overview

In 2023, AutoStore reached a new milestone of

1,250+ systems sold in total[1]

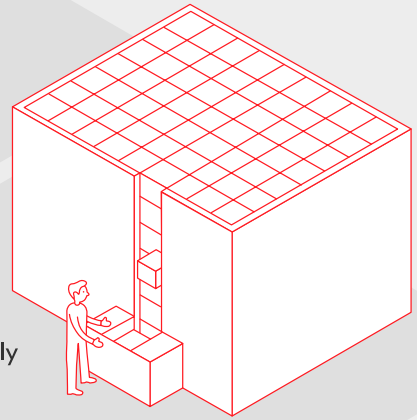


to

900+ unique customers

across

50 countries

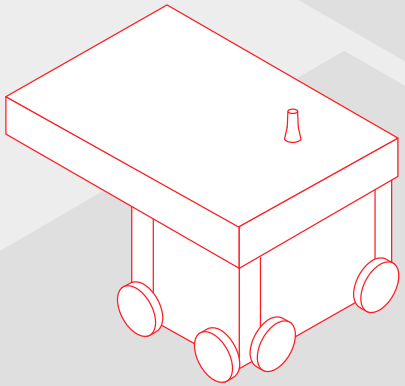


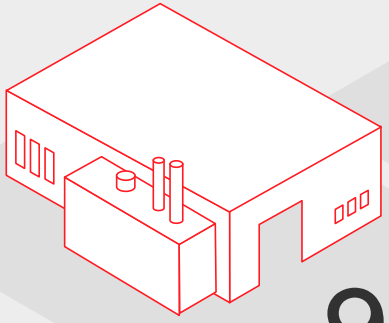
presenting approximately

5.3 billion Bins

with

~58,500 Robots



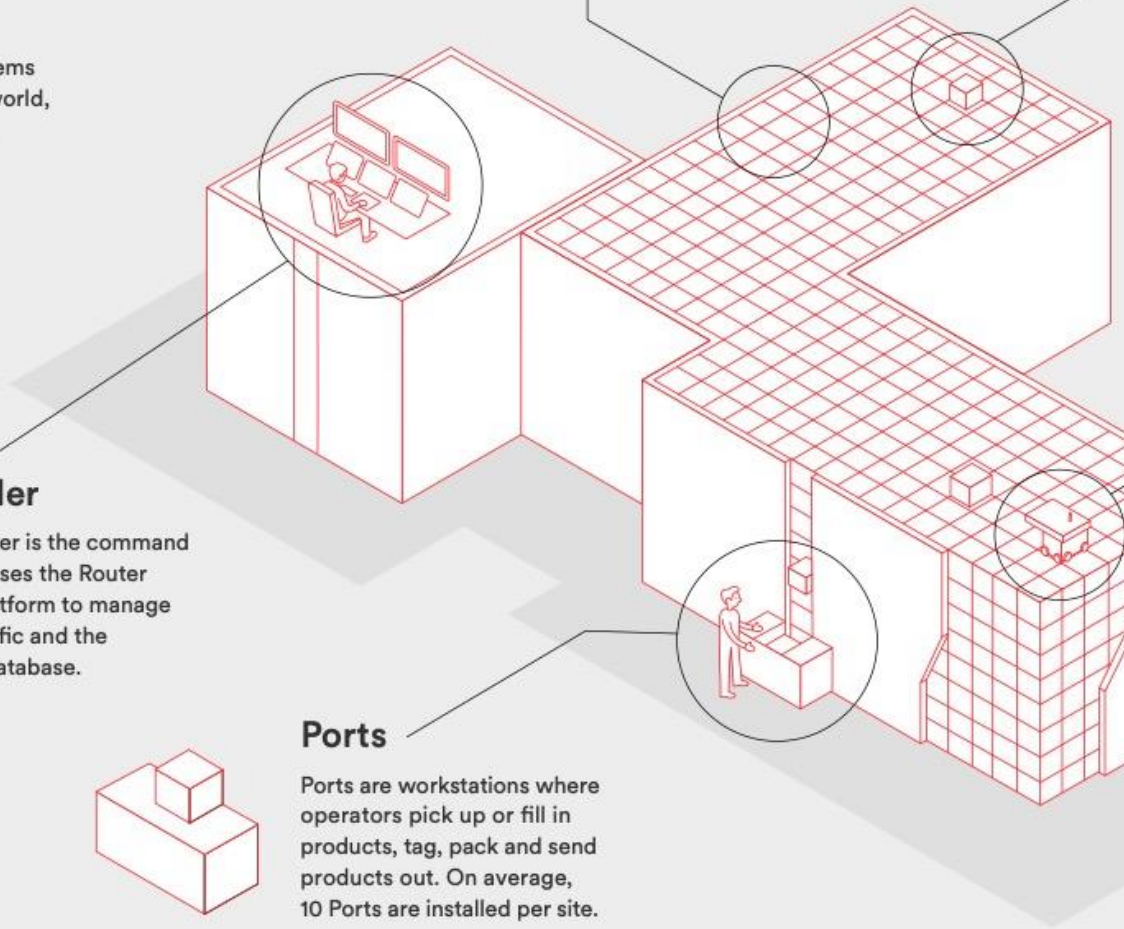


1 As per end of Q2 2023

System introduction

Product overview

With over 1,250+ systems installed around the world, no two are the same.



Grid

The Grid is the aluminum framework that holds the columns of vertically stacked Bins. On average, the Grid is 5.4 meters high and holds 16 levels of 330 mm Bins.

Bins

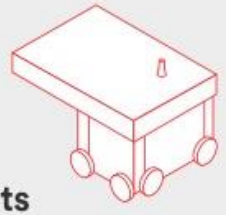
Products are stored in Bins, a durable container that holds up to 30 kg of stock. On average, 40,000 Bins are stacked per site. Did you know that one Bin can hold around 100 t-shirts?

Controller

The Controller is the command center and uses the Router software platform to manage both Bin traffic and the AutoStore database.

Robots

Robots ride on rails along the top of the Grid, retrieving Bins as needed. On average, 45 Robots are in operation per site.



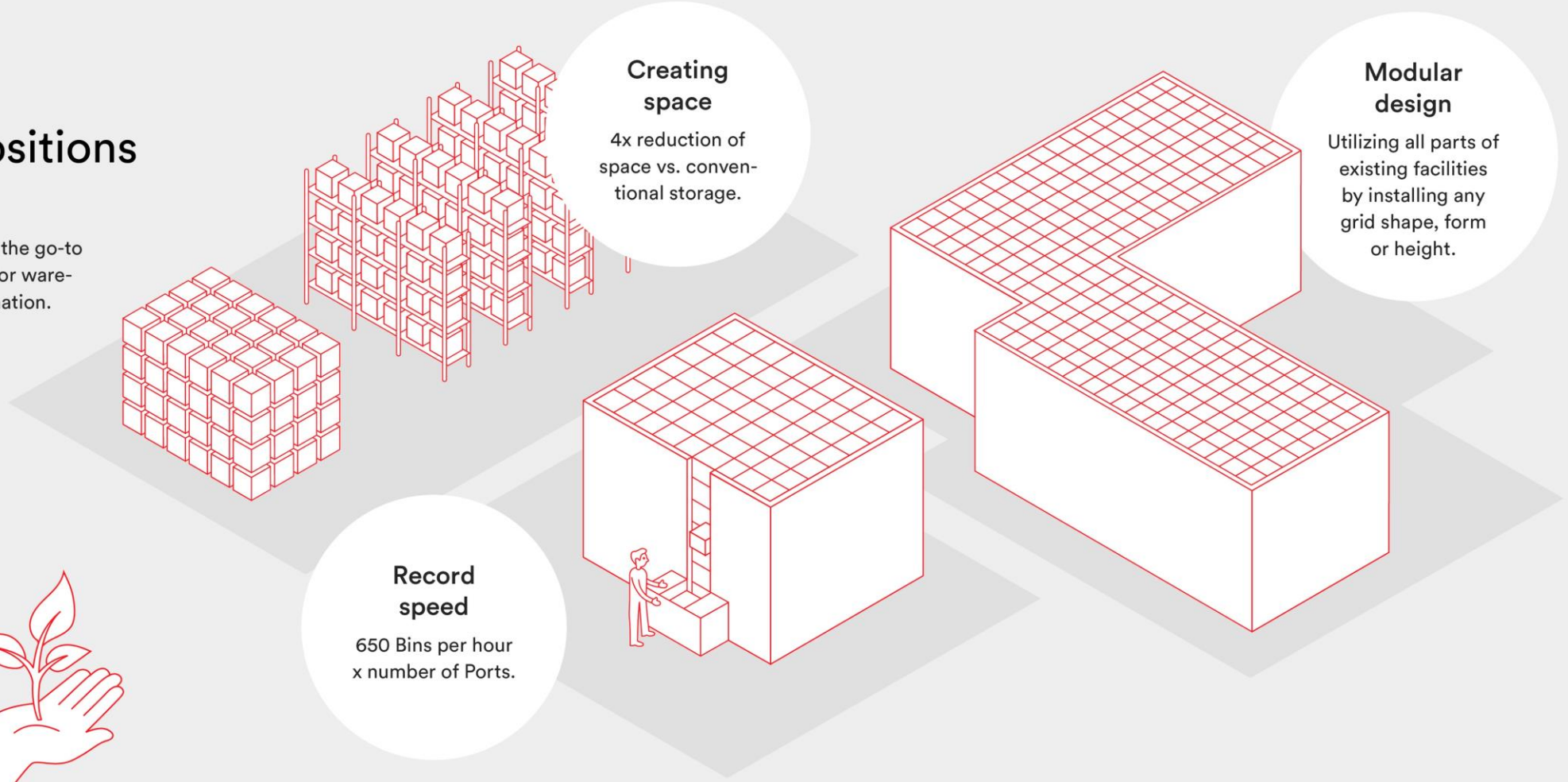
Ports

Ports are workstations where operators pick up or fill in products, tag, pack and send products out. On average, 10 Ports are installed per site.

AutoStore

Value propositions

AutoStore is the go-to technology for warehouse automation.



Creating space

4x reduction of space vs. conventional storage.

Modular design

Utilizing all parts of existing facilities by installing any grid shape, form or height.

Record speed

650 Bins per hour x number of Ports.

Sustainable impact

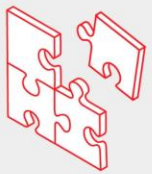
An AutoStore system consumes little energy. With the elimination of “airhousing”, wasteful air purification, heating and cooling operations is reduced.

24/7 operation

Worldwide uptime of 99.7%.

Reliable delivery

99.9% picking accuracy.



Easy connections

Integration with any third-party technology.

AutoStore

The evolution of the robot:

From the mid 90s, Hatteland started the development of the first prototypes of the Cube Storage solution and the first Robots saw daylight.

1990s

Prototypes

2000

1st generation

2nd generation

2005

3rd generation

4th generation

2010

R5

2019

B1

2022

R5+

Innovating & expanding:

Continuously innovating and expanding use-cases

Next

Frozen for online grocery segment

Unlocking new potential

2017

X-Handler AI software released

Self-correct robot error situations without stopping the installation

2019

New robot for black line

HTP workstation for Black Line launched

Ticket-to-play in high-throughput and large systems segment
Enabled access to $230bn AS/RS TAM

2020

AutoStore Router released

AutoStore Router

New software architecture

2021

Cloud simulator released

State-of-the-art cloud-based design tool

2021

Launched AutoStore WMS[1]/WMS[2]

AutoStore WMS

Next-generation warehouse management system

2021

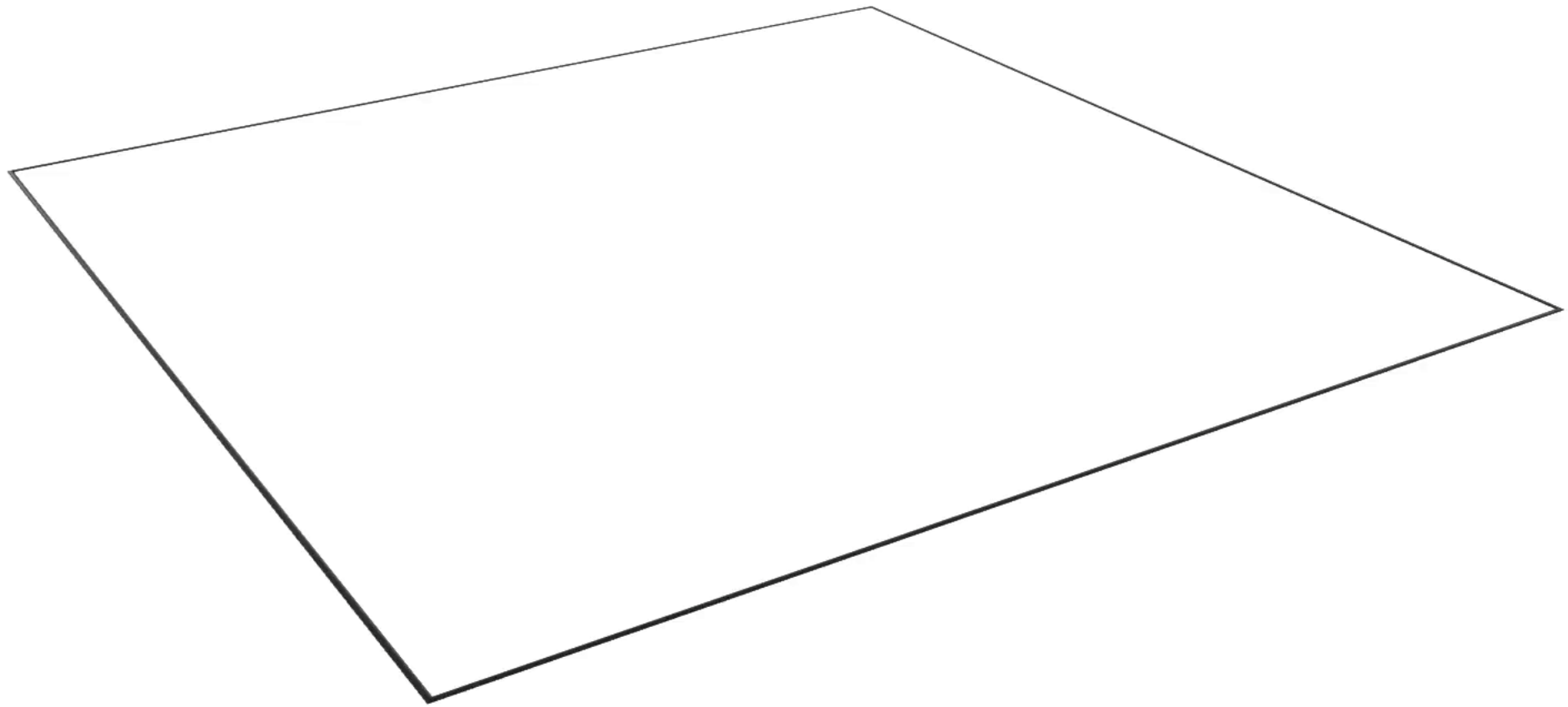
Bin Lift 2.0 & Carousel Port 4.0 released

Upgrade high-volume selling products

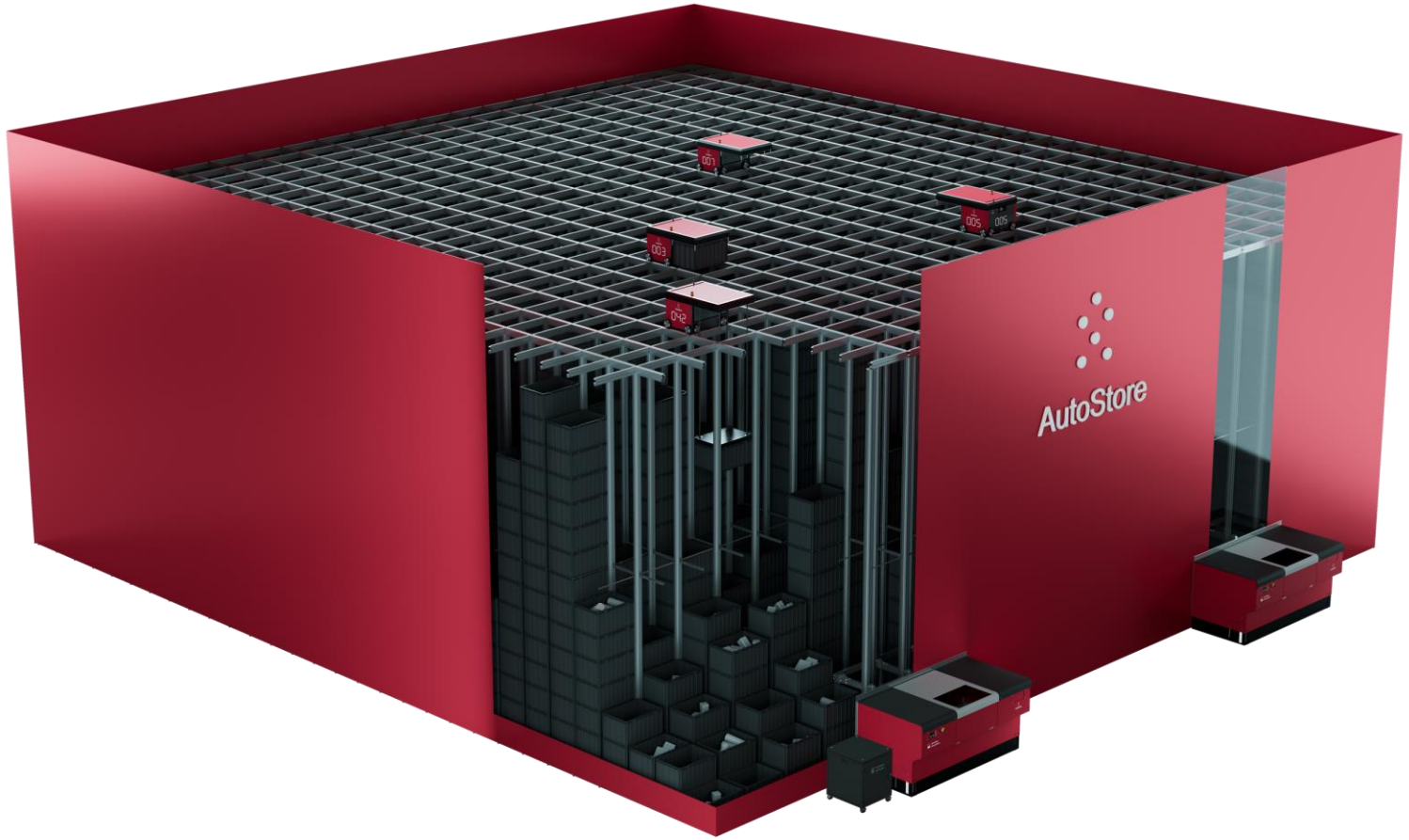
2022

R5+ released

Cost-efficient solution



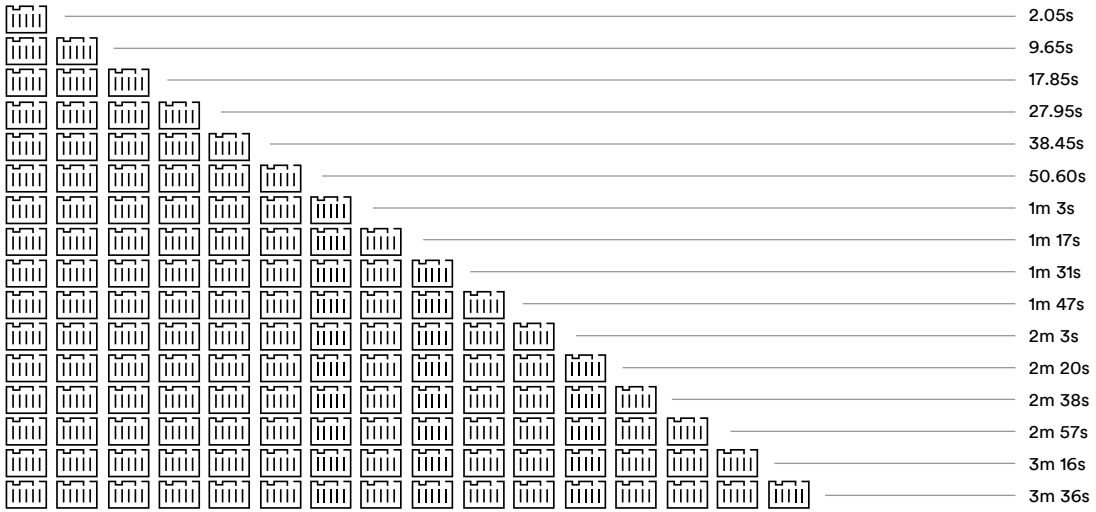
Modular and standarized:

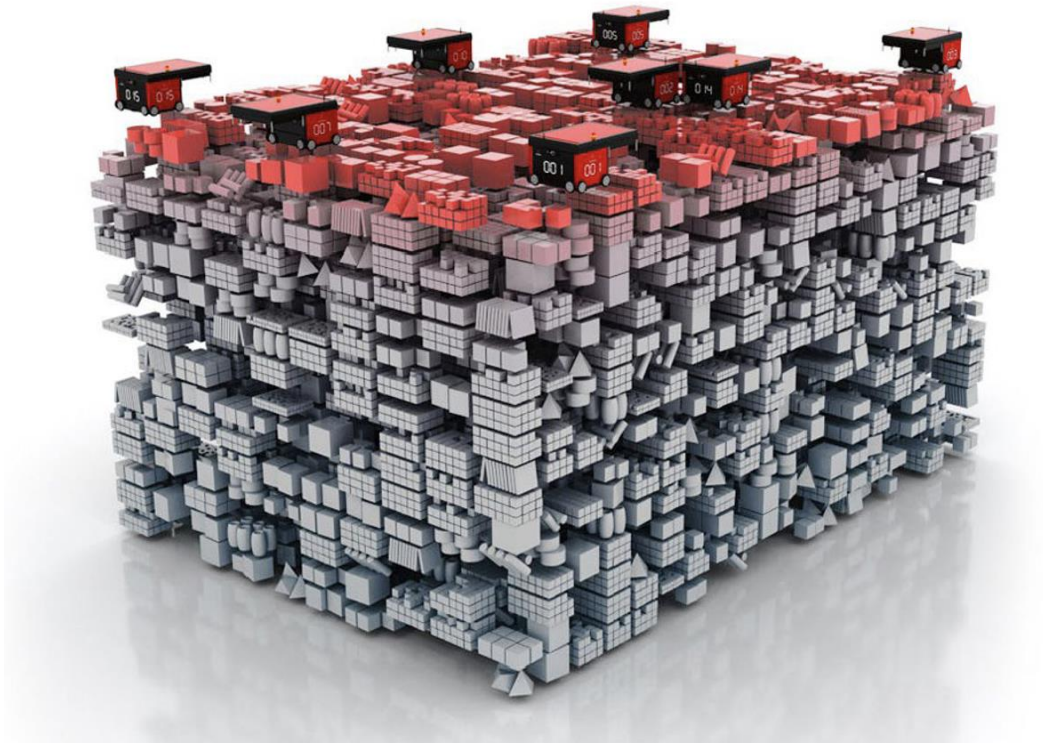


Adapted to the needs of each customer

Bin digging:

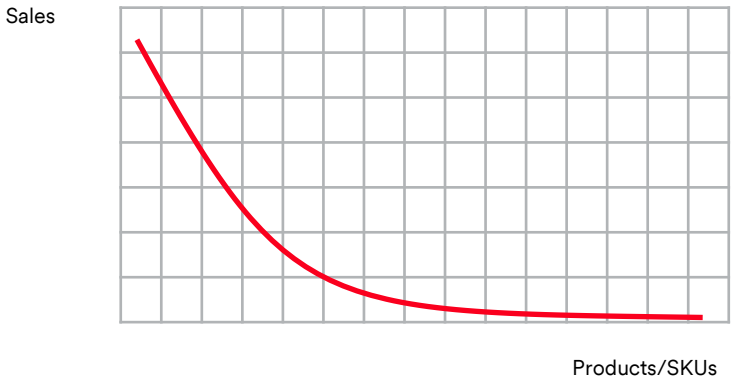
- System continuously optimizes the Bin delivery time, making sure the time to complete an order is kept to a minimum
- First time a Bin is needed the robot will “burrow” into the stack and remove the top 15 Bins
- This process takes maximum of 3.5 minutes
- Multiple robots work together in a pack
- Robot lowers Bin to workstation to be fulfilled

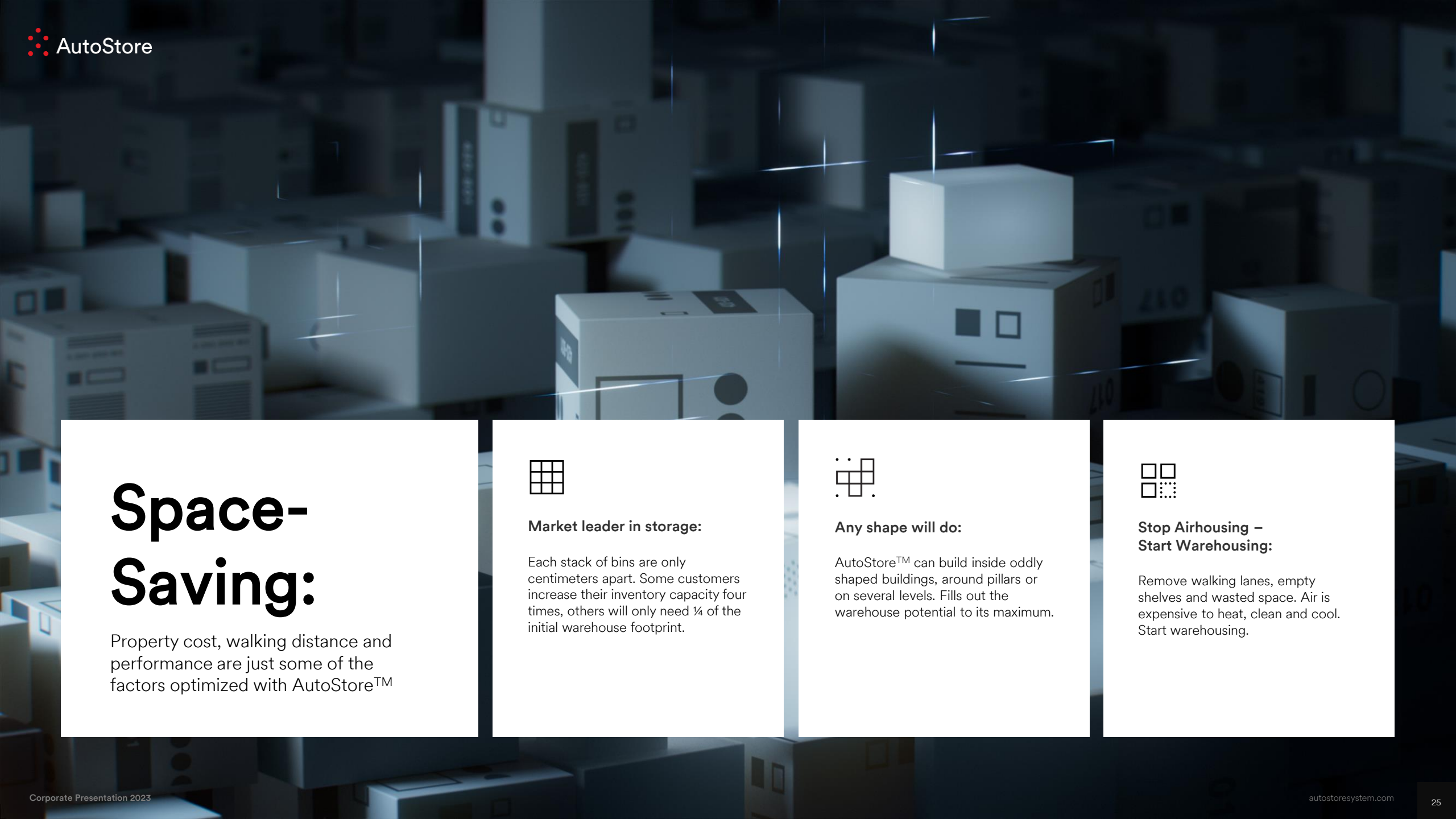




Natural slotting:

- Active Bins will stay on top as they are always placed there after movement.
- Design philosophy ensures that only on rare occasions will robots have to dig to the bottom of a stack.
- Over time, slower moving Bins will naturally descend to the bottom of stack.
- Pareto Principle: 80% of order lines are associated with 20% of SKU's.





Space-Saving:

Property cost, walking distance and performance are just some of the factors optimized with AutoStore™

Market leader in storage:

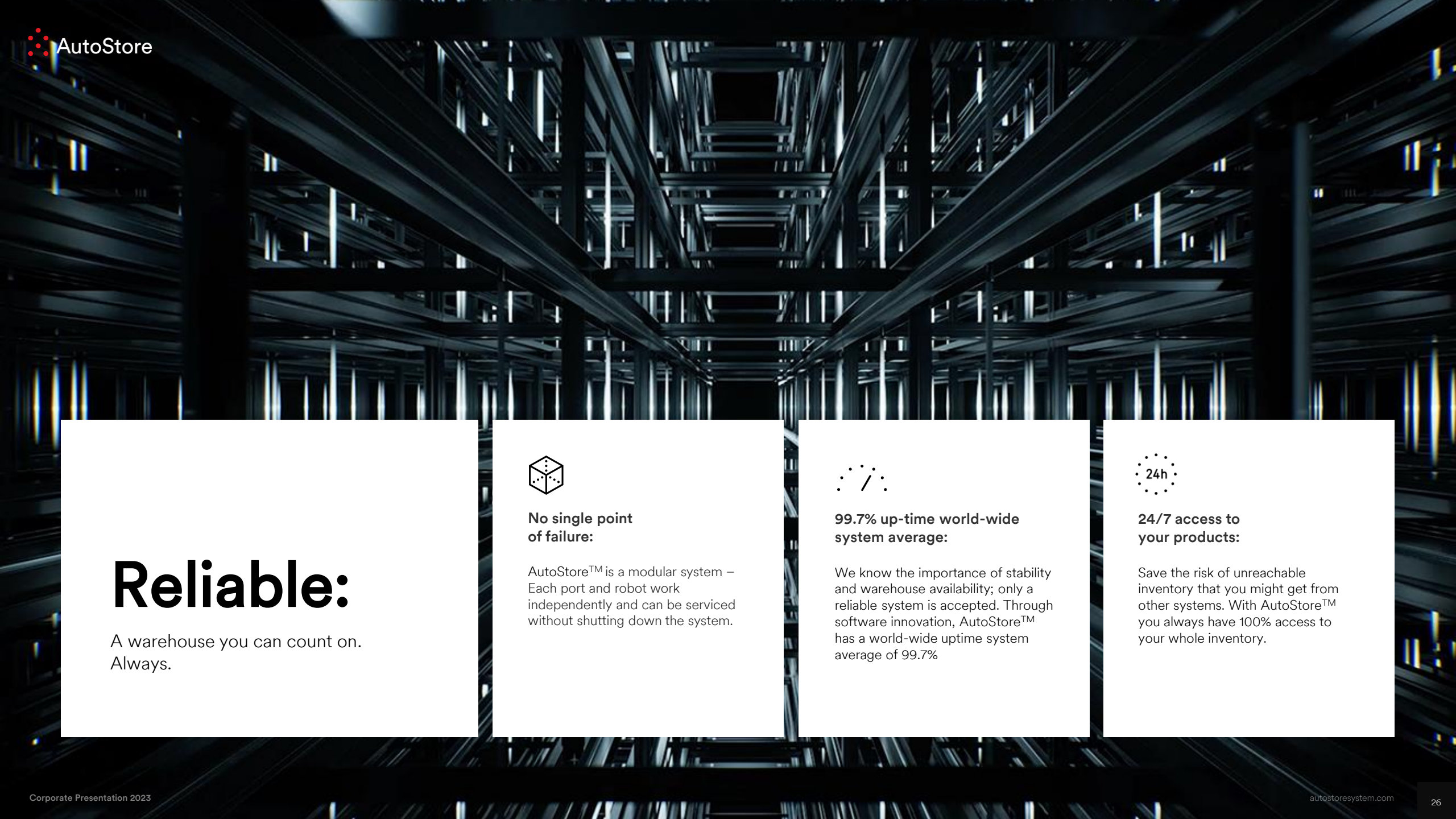
Each stack of bins are only centimeters apart. Some customers increase their inventory capacity four times, others will only need ¼ of the initial warehouse footprint.

Any shape will do:

AutoStore™ can build inside oddly shaped buildings, around pillars or on several levels. Fills out the warehouse potential to its maximum.

Stop Airhousing – Start Warehousing:

Remove walking lanes, empty shelves and wasted space. Air is expensive to heat, clean and cool. Start warehousing.



Reliable:

A warehouse you can count on.
Always.

No single point of failure:

AutoStore™ is a modular system – Each port and robot work independently and can be serviced without shutting down the system.

99.7% up-time world-wide system average:

We know the importance of stability and warehouse availability; only a reliable system is accepted. Through software innovation, AutoStore™ has a world-wide uptime system average of 99.7%

24/7 access to your products:

Save the risk of unreachable inventory that you might get from other systems. With AutoStore™ you always have 100% access to your whole inventory.

Scalable:

Your business changes. AutoStore™ will change with you.

Grow while running:

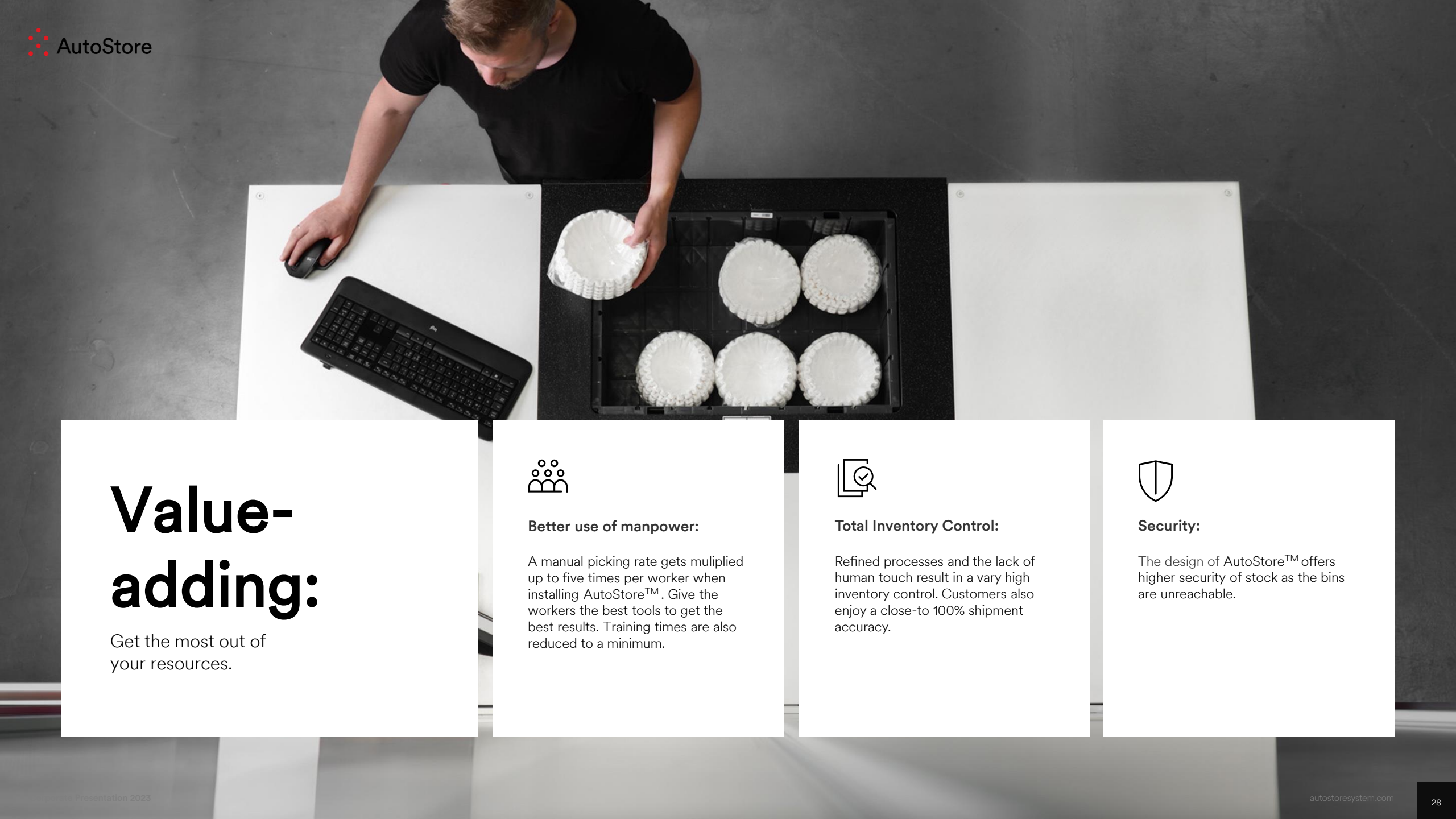
One of the most desired benefits og AutoStore™ is the possibility to expand the storage capacity while the system is running.

Add robots and ports for higher performance:

A customer's throughoput requirement can change during seasons or with general growth. For higher throughput extra robots and ports can be added.

Green:

AutoStore™ uses minimal energy. In fact, 10 robots use the same amount of power as a vacuum – and they will work in the dark.



Value-adding:

Get the most out of your resources.

Better use of manpower:

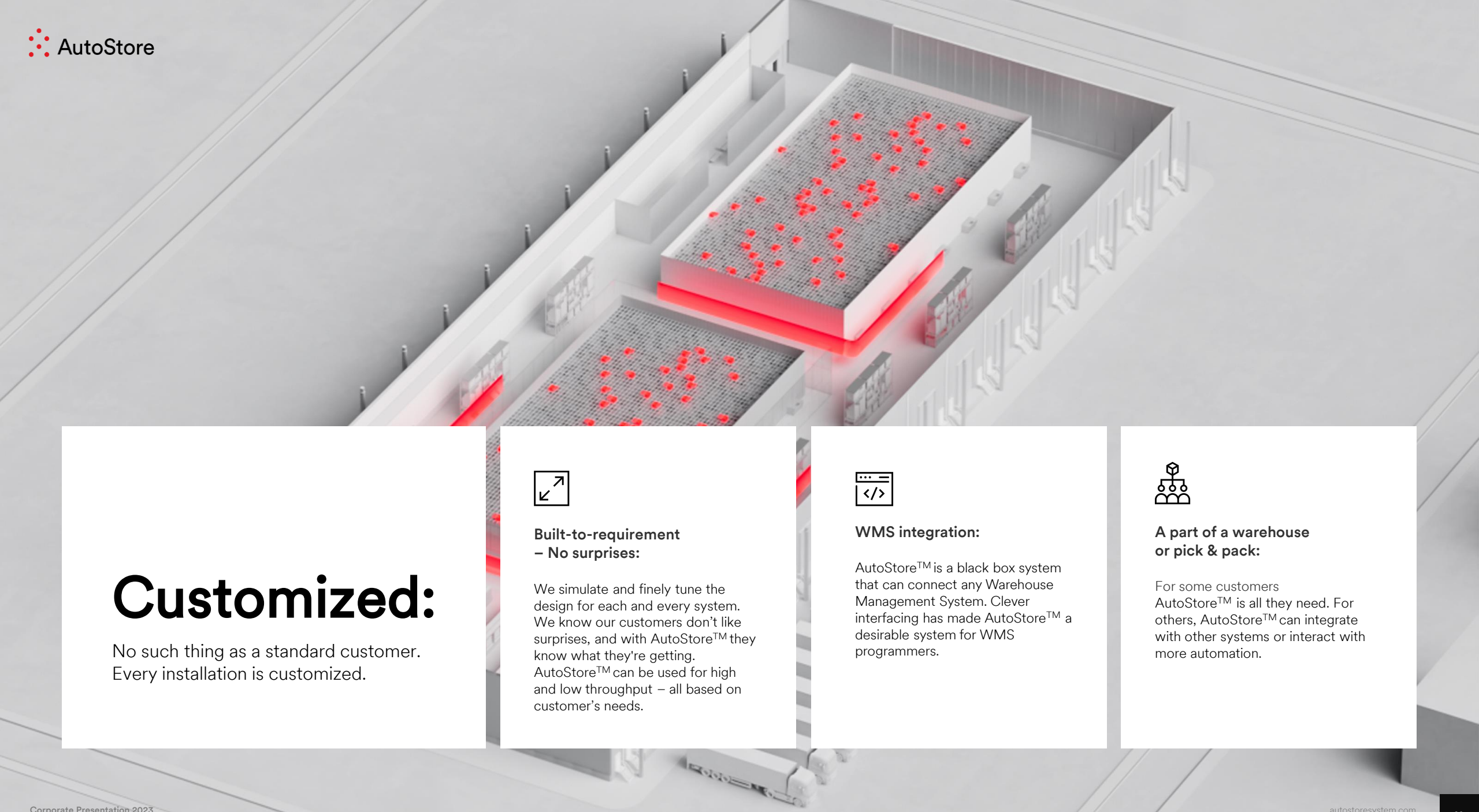
A manual picking rate gets muliplied up to five times per worker when installing AutoStore™. Give the workers the best tools to get the best results. Training times are also reduced to a minimum.

Total Inventory Control:

Refined processes and the lack of human touch result in a vary high inventory control. Customers also enjoy a close-to 100% shipment accuracy.

Security:

The design of AutoStore™ offers higher security of stock as the bins are unreachable.



Customized:

No such thing as a standard customer.
Every installation is customized.

Built-to-requirement – No surprises:

We simulate and finely tune the design for each and every system. We know our customers don't like surprises, and with AutoStore™ they know what they're getting. AutoStore™ can be used for high and low throughput – all based on customer's needs.

WMS integration:

AutoStore™ is a black box system that can connect any Warehouse Management System. Clever interfacing has made AutoStore™ a desirable system for WMS programmers.

A part of a warehouse or pick & pack:

For some customers AutoStore™ is all they need. For others, AutoStore™ can integrate with other systems or interact with more automation.

Unify™ Connect:

Unify™ Connect is a Windows Service that is installed on the Customer's application server.

It has a one-way communication to AutoStore™ servers located at AutoStore headquarters in Norway.

The main purpose is to alert the customer if the system stops, but it also offers several other important features – and new functionality is constantly being worked on.

Here are the features it provides today:

Instant email alert if system stops:
Unify Connect can send automated email alerts or SMS to the end-user in the event of a system stop. This way the super user can act immediately to reduce the system downtime.

Easy access to AutoStore™ log files:
Every night Unify Connect will automatically upload the latest AutoStore™ log files to a cloud storage provider. The logs are easily accessible by the AutoStore Service & Support team as well as the Distributor. The files are used to run analysis of the system, helping to plan proactive maintenance and service tasks.

Weekly uptime analysis:
AutoStore Service & Support performs weekly uptime-analysis of every system running Unify Connect. In case a system has an uptime below 98%, a deeper analysis is performed to find the cause. Any findings are reported to the distributor.

System uptime:
Unify Connect calculates the system uptime automatically for the last 7 days for each individual site. The results are presented on the AutoStore™ Service Portal and is visible to the end-user and the Distributor.

Software and Firmware version info:
To ensure the AutoStore system is running with the newest available SW/FW-releases, Unify Connect will automatically analyze the logfiles of each site; checking the version installed and presenting the result on the AutoStore™ Service Portal.

Delayed stop:
In order to keep the downtime at a minimum, the AutoStore system can be configured to isolate an area where a robot has failed while the rest of the system operates. The Customer will get an email-alert and can recover the failed robot.

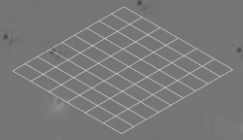
AutoStore

The five Modules

The five Modules

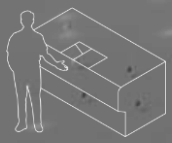
01 **Bin**
The inventory container of AutoStore™. Comes in 3 depth options.

02 **Grid**
Self-supported aluminium grid with robot rails.



03 **Controller**
The sophisticated brain behind all movement.

04 **Ports**
Where put away, picking and all human interaction is done.



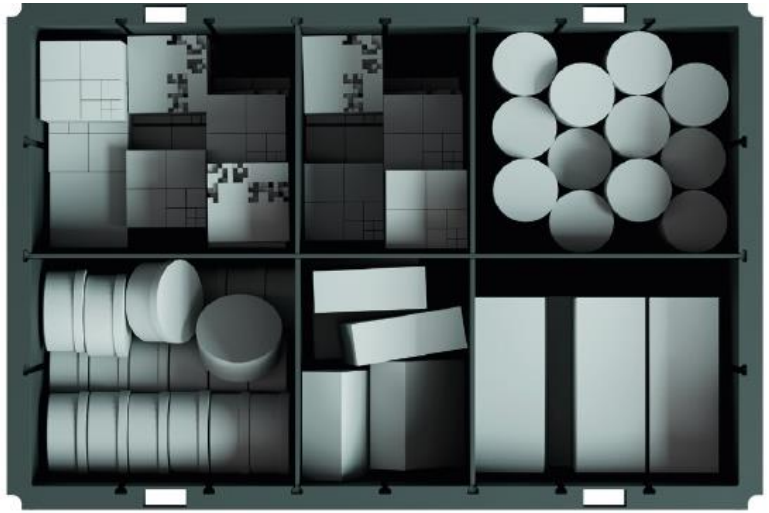
05 **Robot**
The hard worker that dig, organize and transport the bins.


AutoStore
1.GTIN
01
The Bins

The Bins

Bucket, tote, container or box. This is the AutoStore™ Bin. A robust, stackable, functional plastic form that keeps inventory safe and stowed properly inside the grid. Meticulously engineered and tested for function, durability and affordability.

The Bins



External Dimensions:
25.55” x 17.68” / 649x449 mm

Internal Dimensions:
23.74” x 15.86” / 603x403 mm

Max. Load Capacity:
55 Lbs. / 30 kg

16.73”
425 mm

Max. Internal Storage Volume:
98.17 L

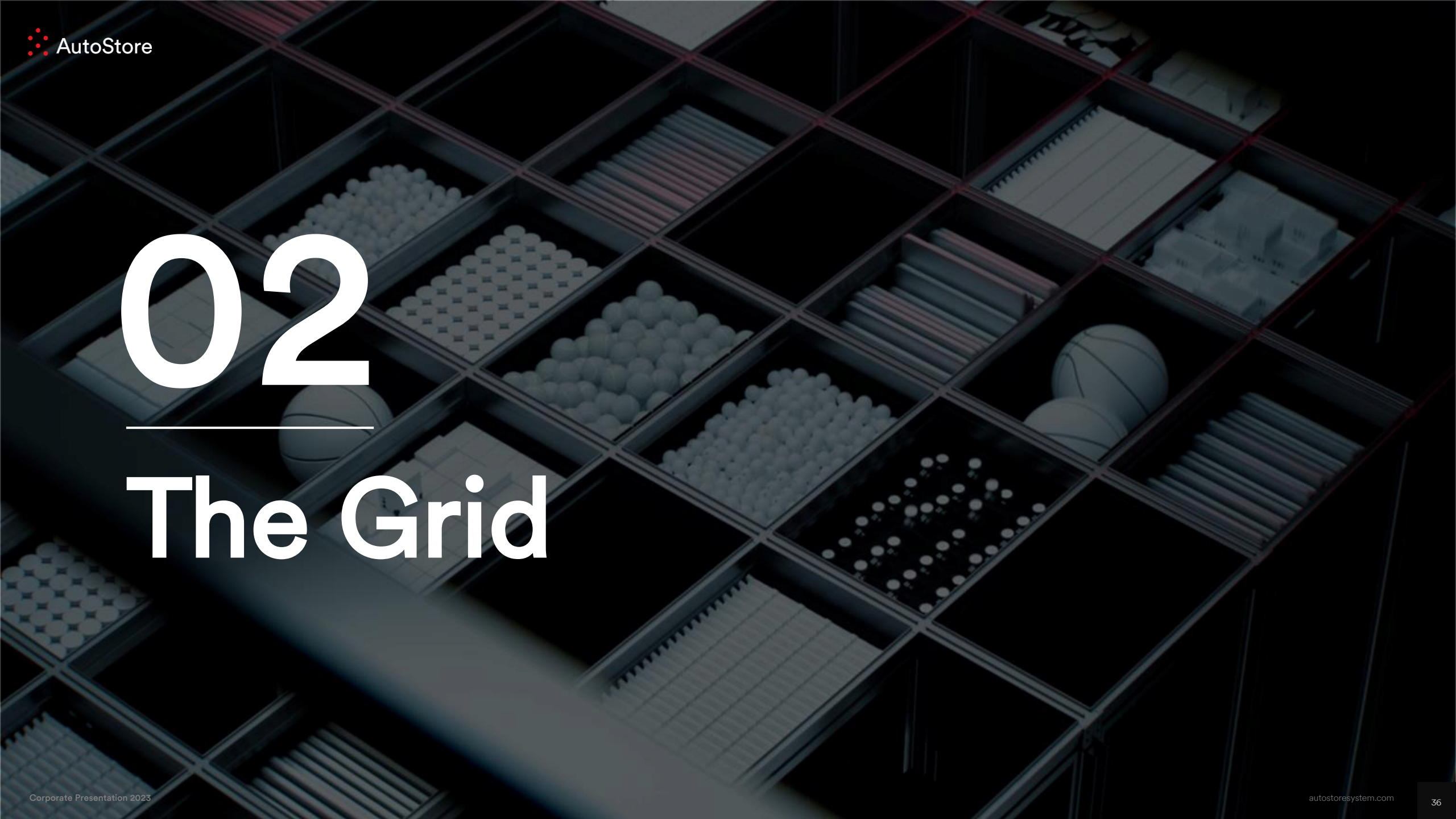
13.00”
330 mm

Max. Internal Storage Volume:
75.81 L

.

8.66”
220 mm

Max. Internal Storage Volume:
49.08 L



02

The Grid

AutoStore

The Grid

The aluminum framework provides the storage space for all your goods.

Optimal space usage: The size / form of the Grid is restricted only by the warehouse surroundings.

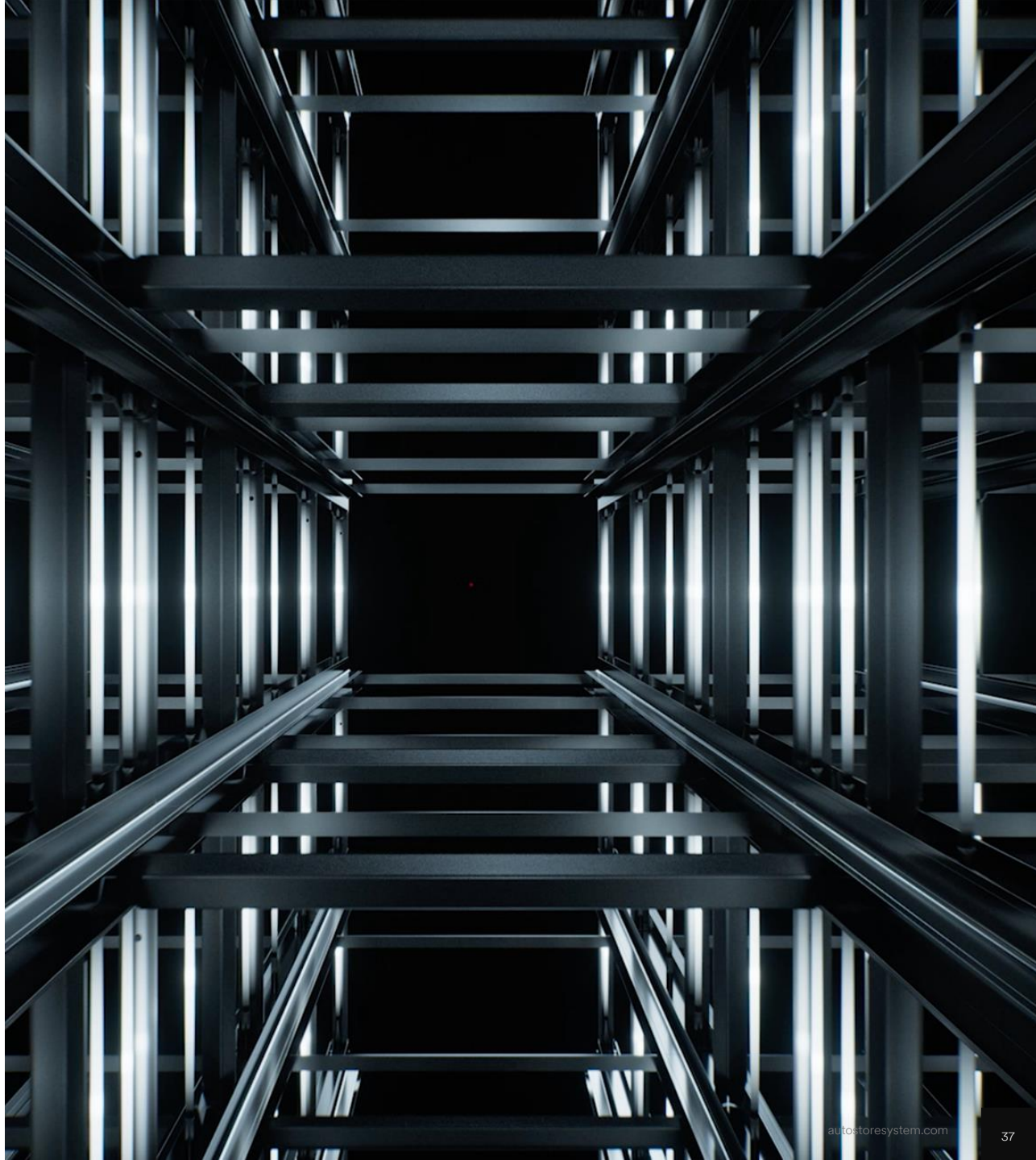
Quick installation time: Components are standardized and simple to assemble and easy to connect.

Only 17 unique parts make up the entire Grid system.

Grid top tracks in X & Y directions allow the Robots to access any cell inside the Grid.

Self-Supported Aluminum Grid:
— Aligns Bins on top of each other in stacks
— Rigid Robot rails on top

Standardized, Modularized, Flexible Concept:
— Fixed To The Floor - Correct Distances / Easier Installation
— Foot construction to compensate for smaller floor deviations

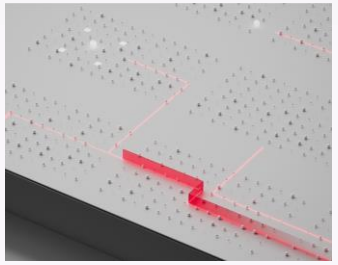


03

The Controller

Controller

With over 20 years of control development, our state-of-the-art traffic system is in a league of its own. Not only is it sophisticated, it is also incredibly stable.



04

The Ports

The Ports

ConveyorPort™

CarouselPort™

RelayPort™

SwingPort™

PickupPort™

FusionPort™ /
FusionPort Staging™

ConveyorPort™

Keep it simple

ConveyorPort is a workstation in its simplest form. Bins are dropped on a conveyor and transferred to an opening outside of the Grid. Smart covering and sensors keep the operation safe.

Available in narrow or wide, the ConveyorPort works for a location on any side of the Grid

240 Bins/hr

Max throughput
at Mezzanine level

5 seconds

Min Exchange Time
for Bins

CarouselPort™

Ergonomically Efficient

The CarouselPort remains our most popular and widely used workstation. Each generation is based on end-user data about people's minute-to-minute work behaviors. The latest design, CarouselPort 4.0, has a redesigned safety cover that slides freely in all directions, and a new safety box with additional emergency stop options. All of these enhancements help maximize CarouselPort's efficiency, usability, and safety while lowering operating costs.

3

Rotating Arms
To maintain product flow

2.5 seconds

Min Exchange Speed
Ensuring optimal productivity

RelayPort™

Record Setting

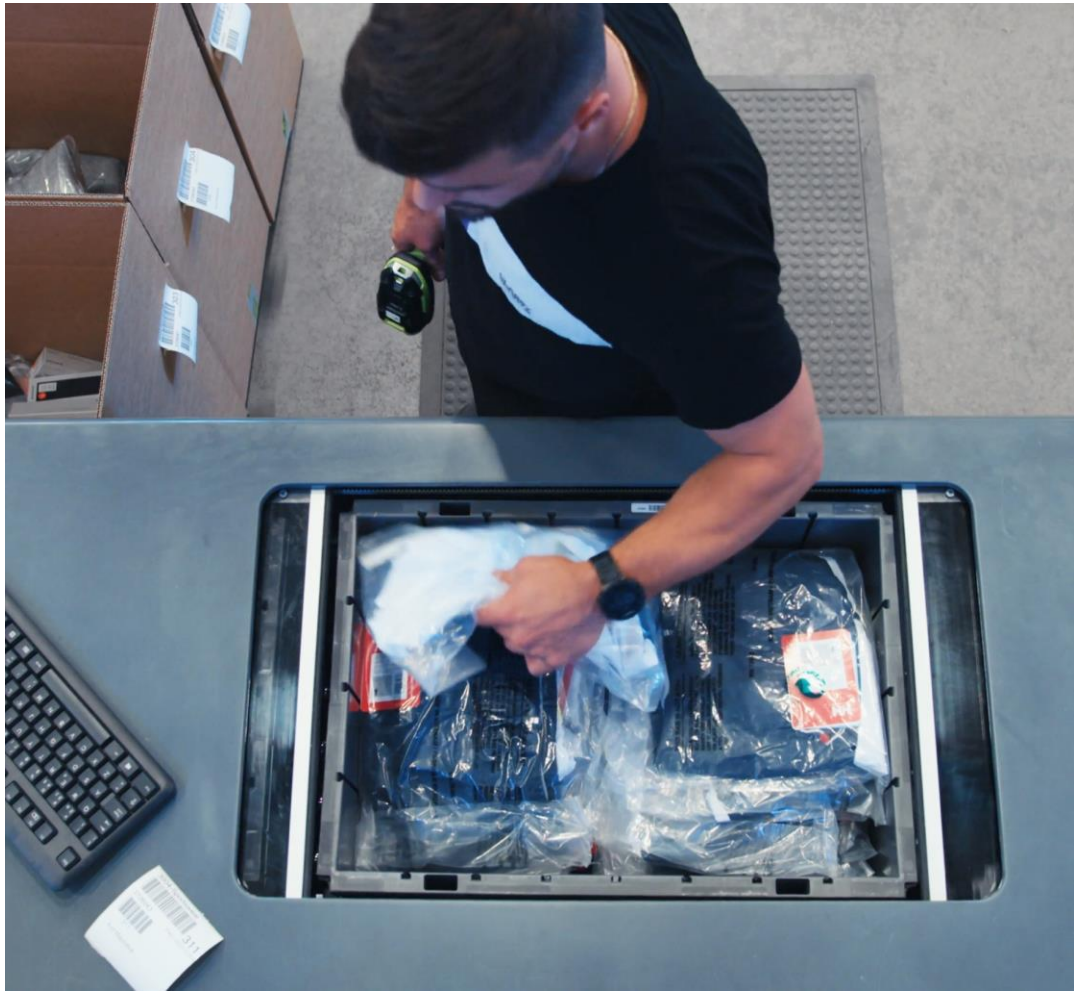
Designed to use human and robot power to the maximum, RelayPort is our fastest workstation, ever. Multiple Robots deliver to central cells, creating a rapid flow of Bins to the operator. Minimum exchange time for this Port is less than 3 seconds. With all 6 Tab modules in place, the Port can handle up to 650 Bins per hour.

2.5 seconds

Min Exchange Time

650 Bins/hour

Max Handling Capacity



SwingPort™

A Million Tests

A swing movement with two Bin buckets is technically balanced and with reduced complexity for smooth operations. The movement and technical solution have been refined and tested several million times, both at AutoStore labs and at live installations.

1 million

Live Tests
To ensure smooth movements

100 %

Bin Accessibility
Outside the AutoStore Grid

PickUpPort™

Ultimate Omnichannel Solution

For retailers to remain on top, they must capture what the consumers want and ensure shopping experiences are convenient.

The PickUpPort delivers a seamless BOPIS (Buy Online Pickup In-Store) experience for customers at the brick-and-mortar stores, giving retailers a boost in in-store foot traffic and sales. This allows retailers the opportunity to diversify their revenue stream and keep their omnichannel business healthy.

Improve Customer Experience

Stay Ahead in an Ever-changing Retail Industry

FusionPort™

Designed with the worker in mind

FusionPort reduces fatigue and maintains comfort for those front-line workers that are essential to your success. Tilted Bin openings and ergonomic user interface positioning minimize reaching and twisting motions, allowing operators to comfortably perform repetitive tasks without fear of injury during long work shifts. To maximize safety, safety hatches stay closed until Bins are ready for picking, guaranteeing a safe and secure transfer of products from Robots to humans.

2

Source Bin Openings
Angled at 15 degrees to minimize reaching

2

Safety Hatches
Stay closed until Bins are ready to pick

FusionPort Staging™

Save space & money

Staging orders within the AutoStore system provides you with up to four times more storage capacity as compared to traditional on-the-floor staging. The pre-integrated pick-to-light (PTL) interface eliminates the time and money needed to implement a third-party picking guidance system

4x

Storage Capacity
Quadruple your available space

PTL

Comes Pre-installed
No need for external guidance system

05

The Robots

The Robots

Meet: The Worker. For over 20 years, it has continued to meet the challenge.

Found around the globe in large and small teams, they tirelessly dig, retrieve, and deliver to support your customer-winning order fulfillment. AutoStore™ Robots are ready for a new adventure, giving you, more floor space for your money, enabling you to stay closer to your customer.

The Robots

Reliability

Team Player:

Each Robot is independently controlled, supporting a system with no single point of failure and an uptime of 99.7%. Any robot can collect any bin and deliver it to any workstation. This efficiency means you have access to 100% of your stock when you need it.

99.7%
Operational uptime

100%
Access to stock

Performance

Tireless worker:

Customer satisfaction happens in all departments. R5 and R5+ stand ready, working to increase order accuracy and decrease time for order fulfillment and shipping. It is your go-to for a faster, more accurate service for longer customer relationships.

3.1 m/s
Top Speed
(10.2 feet/s)

1.6 m/s
Lift Speed
(5.25 feet/s)

Sustainability

Energy Efficient:

Robots are assigned tasks based on their location, always completing the closest task taking the shortest route. Utilizing regenerative technology, energy is returned to the battery making AutoStore one of the only systems able to run on solar power alone.

100 Watts
Of energy used during operation

10 Robots
Use the energy of 1 vacuum cleaner

Customer Loyalty

More reasons to shop with you:

The R5+ is built and based on the same iconic R5 technology supporting brands around the world achieving incredible business outcomes for over 20 years. Designed with extra capacity, R5+ handles all three AutoStore Bin sizes, including the tallest 425 mm Bin.

14 Levels
Maximum Grid Height

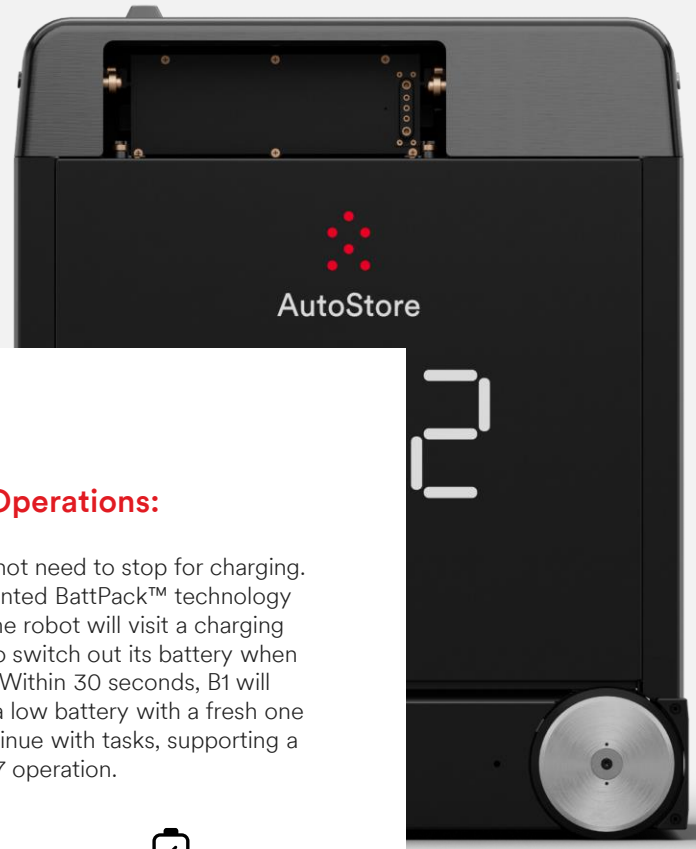
425 mm
Tallest compatible Bin

B1™ Robot

The Next Evolution

A slimmed-down, lighter warehouse robot with a cavity design, the AutoStore™ B1 brings more speed to operations where it matters most, like larger warehouses where driving distances are longer.

B1™ Robot



Storage

Cavity Design:

The slimmer B1 includes a cavity design to carry bins within the robot body, accommodating a taller bin (up to 425 mm) and unlocking additional storage potential. The slimmer body profile provides space for tighter and busier robot clusters.

425 mm
The B1 can carry the tallest AutoStore Bin

1/2
B1 required half the space of an R5

Speed

Increased Performance:

B1 accelerates faster than other AutoStore robots. By having individual direct drive motors in each wheel base and removing the need for drive belts, the robot acceleration is 75% higher than that of R5. Driving is more balanced and on average B1's delivery performance is 20% higher than R5.

4 m/s
Top Speed
(13.1 feet/s)

1.4 m/s²
Acceleration Rate
(4.6 feet/s)

Stamina

24/7 Operations:

B1 does not need to stop for charging. Our patented BattPack™ technology means the robot will visit a charging station to switch out its battery when needed. Within 30 seconds, B1 will replace a low battery with a fresh one and continue with tasks, supporting a true 24/7 operation.

30 seconds
Time it takes to switch batteries

26.4V / 15 Ah
Lithium-ion batteries

AutoStore

Technical Spesifications

Red Line robot

R5™ Robot:

Measurement (DDG)
W: 700 mm (2.3 ft / L: 988 mm (3.2 ft)
H: 545 mm (1.8 ft)

Weight (DDG)
156 kg (343.9 lbs) with batteries

Power Consumption
100 W (operation)

Operation Temperature
+2°C (35.6°F) to +35°C (95°F)

Speed
3.1 m/s (10.2 ft/s)

Acceleration
0.8 m/s² (2.6 ft/s²)

Red Line robot

R5+™ Robot:

Measurement (DDG)
W: 700 mm (2.3 ft / L: 988 mm (3.2 ft)
H: 645 mm (2.1 ft)

Weight (DDG)
160 kg (352.7 lbs) with batteries

Power Consumption
100 W (operation)

Operation Temperature
+2°C (35.6°F) to +35°C (95°F)

Speed
3.1 m/s (10.2 ft/s)

Acceleration
0.8 m/s² (2.6 ft/s²)

Black Line robot

B1™ Robot:

Measurement
W: 701 mm (2.3 ft / L: 642 mm (2.1 ft)
H: 815 mm (2.7 ft)

Weight
98 kg (216 lbs) with batteries

Power Consumption
100 W (operation)

Operation Temperature
+12°C (53.6°F) to +35°C (95°F)

Speed
4 m/s (13.1 ft/s)

Acceleration
1.4 m/s² (4.6 ft/s²)

AutoStore™ Track Record

Range of System Sizes

Robots:

Smallest	Average	Largest
2	44	1,150+

Bins:

Smallest	Average	Largest
500	40K	370K+

Case Studies

AutoStore

CASE

Decathlon

Location: Canada
Industry: Retail
Partner: Bastian Solutions

> “Really the biggest impact is the fact that we are able to spend more time directly with our customers and we have more products on display. It saves us a lot of time to be able to use the [AutoStore] solution and it has created a really unique shopping experience.”

Craig Binch
Decathlon Canada Store Leader

The sports retailer Decathlon was founded in France in 1976. Today, the company sells an array of sports gear and equipment for more than 80 different sports in over 60 countries worldwide.

Decathlon is known as a tech-forward company and when it decided to open a new concept store in Calgary, western Canada, it also opted for an automated on-site warehouse. The solution delivered by AutoStore gives customers a new retail experience, including a three minute in-store order fulfillment time. In addition, the store acts as a storage and distribution center for e-commerce orders from four western Canadian provinces, reducing shipping times to these areas.

Decathlon was able to increase its typical location storage capacity, enabling it to place more items on display. Thanks to the AutoStore system, Decathlon can stock 145,000 items, compared to 70,000–90,000 items at other locations. Shoppers scan a QR code, select the size and fill a virtual basket. Goods are then delivered to a pickup desk right beside the dressing rooms. The store layout was also designed to free employees from non-value-adding tasks, allowing them to focus more on customers.

R5 robots	Bins	Stock-keeping units	Order fulfillment time
27	6,000	7,000	3 min

AutoStore

CASE

Fanuc Pertronics LTD

Location: Japan
Industry: Industrials
Partner: Okamura Corporation

FANUC Pertronics Ltd manufactures automation equipment for various industries, including the machine-tending, electronic, and food and beverage sectors. The company is headquartered in Japan but has customers worldwide.

FANUC Pertronics Ltd has installed an AutoStore system at its headquarters in Nagano. Previously, picking was done manually, and workers wasted a lot of time walking back and forth to move carts in the warehouse. The company wanted to improve its warehouse picking rates and had to find a way to ensure multiple workers could pick simultaneously. FANUC Pertronics Ltd was also looking to optimize its storage space and found AutoStore's solution to be perfect thanks to its layered grid that takes up relatively little floor space, allowing expansion on the existing site.

> **Production volume has doubled since the implementation of the AutoStore system.**
>
> **Jun Shiohara**
> Representative Director and
> President, FANUC Pertronics Ltd

Further benefits of implementing an AutoStore system have included significantly reduced picking errors and more accurate parts management and traceability, as well as reduction of manufacturing and shipping lead times.

AutoStore's solution has enabled FANUC Pertronics Ltd to double its production volume. Although the company had anticipated having to hire many more people, the efficiency of the picking system meant that this was not necessary.

Production volume	Bins	Conveyor ports	Carousel ports
2x	35,000 (10.000 additional Bins scheduled for 2023)	8	8

AutoStore

CASE

The Hut Group

Location: UK
Industry: E-commerce
Partner: Element Logic

> **The implementation of AutoStore at our Manchester fulfillment center has had a significant effect on customer satisfaction.**
>
> **John Gallemore**
> Executive Director and
> Chief Operating Officer

The Hut Group (THG) is a leading vertically integrated, global e-commerce technology group and brand owner, powered by its proprietary technology platform, Ingenuity, through which it also provides end-to-end e-commerce solutions for brands to reach a global e-commerce consumer base.

In total, the company ships to over 190 destinations from a global fulfilment network of 16 warehouses in strategic locations across the world, and powers over 300 localized websites.

AutoStore installation. THG has two AutoStore sites, one in the UK and one in the U.S. In the UK, THG chose AutoStore for its new fulfillment center in Manchester. The selection criteria were flexibility, simplicity, rapid ROI and capacity to handle up to one million units per day. It took just three months to complete the AutoStore installation, and then six weeks to input 10 million units into the grid.

The impact on customer satisfaction has been dramatic. Results include significantly reduced processing times, enabling customers to get their orders earlier. As a result, repeat orders and customer retention have improved. Picking rates have increased, at the same time as picking accuracy has improved, with picking errors having become negligible, allowing for an overall reduction in labor requirements. The return on investment (ROI) time for the site has been impressive, with the investment cost being recouped in less than a year.

Robots	Bins	Conveyor ports	Carousel ports
380	300,000+	13	56


AutoStore
autostoresystem.com