



# EXOTEC



October 2021



1

COMPANY  
OVERVIEW



# Elegant warehouse robotics for a volatile world

Exotec was founded in 2015 by two engineers.

Exotec robotics power resilient supply chains for the world's largest brands, helping them profitably navigate rapid shifts in business models and customer expectations.

As we see the inherent limitations of the brute-force approach to scaling logistics, Exotec offers a clear alternative: elegant collaboration between human and robot workers that delivers sustainable warehouse productivity



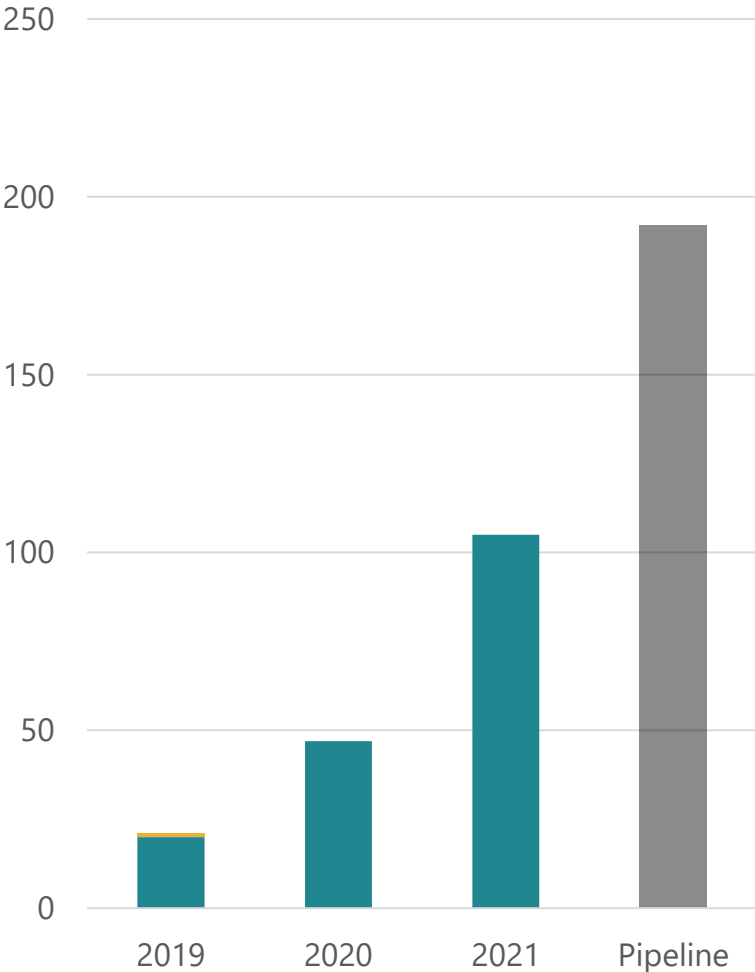
Romain Moulin  
*Drive*



Renaud Heitz  
*Design*

# Goal: to be a top 10 warehouse automation player by 2025

M€ revenues



**360 employees**  
by end 2021

**Product**  
DESIGN  
BUILD

**3 Business Units**  
SELL  
DEPLOY  
MAINTAIN




**9 Integrators**

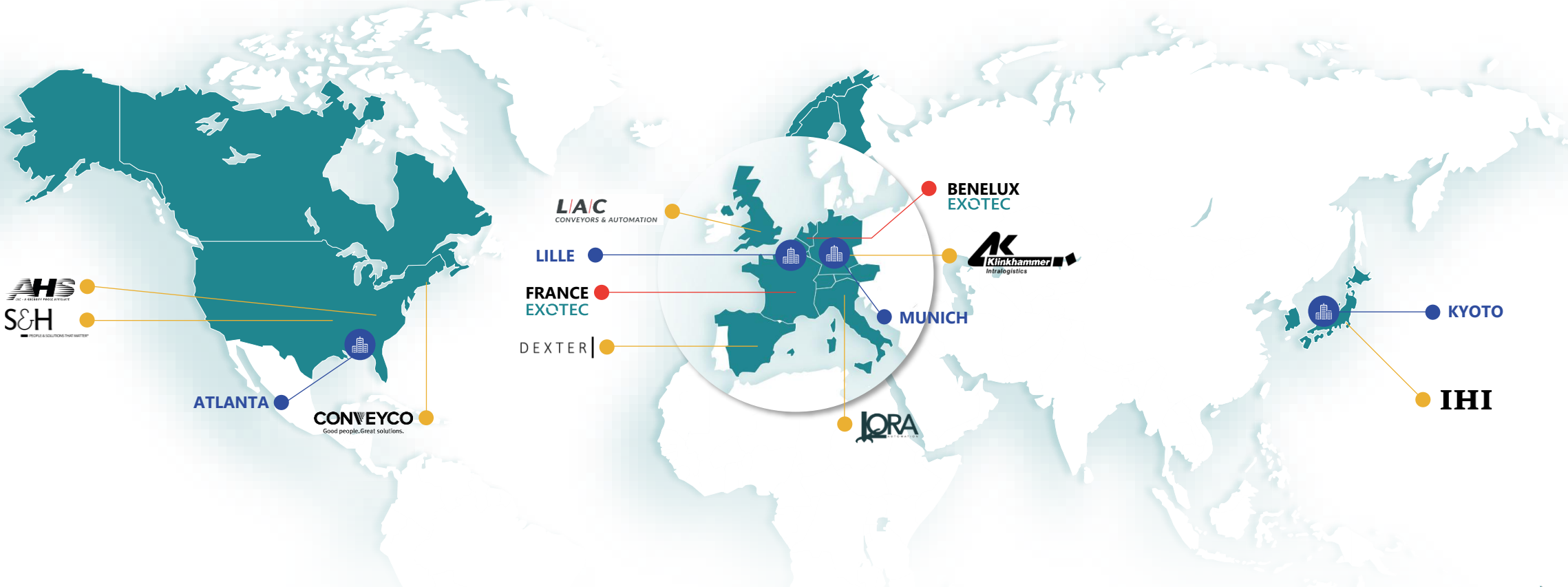
**3,000 robots** produced in our own facilities by the end of 2021



# Rapid international development

2/3 of revenue generated outside of home country in 2021

-  Exotec Offices
-  Exotec
-  Integration Partner



# Delivering satisfaction to the world's largest brands

Repeat business accounting for 60% of revenue since creation

100s of millions of order lines prepared

24 systems running

14 systems in deployment

Apparel

DECATHLON

GAP

UNI  
QLO

PATATAM

ARIAT

Food & Beverage

TANNICO

LE FOIE GRAS  
UPIGNAC



Carrefour

E.Leclerc

General Merchandise

Cdiscount

Healthcare

GRUP  
GEPORK

Industrial Goods

REVZILLA

SIDER

DURIEU  
GROUPE

TURN14  
DISTRIBUTION

ELTRA  
N.V.  
S.A.

Manufacturing

LACROIX

3PL

GEODIS

ESBO  
LOGISTICS SYSTEMS

# Exotec success factors

Strong **company culture**

No compromise on hiring the **right people** with the right skills

Very **structured** way of working, building for the **long term**

**Lean decision making** process

The **right product at the right time**

**UNDERSTAND YOUR CLIENT**

Clients determine our success. Listen to them. Speak their language. Meet them where they are.

**BUILD TOGETHER**

We are on the same boat. Get everybody rowing in the same direction. No politics. Listen, share, act.

**BE PROUD**

Make Exotec the best place to work. Deliver what you promised. Celebrate your accomplishments.

**EXOTEC**

We build robots to allow our customers to achieve more and allow people to engage in exciting jobs.





EXOTEC

PART  
2

WAREHOUSE  
ROBOTICS IS THE  
FUTURE

---

VYGU

EXOTEC



## Legacy warehouse automation is falling short to meet today's challenges



Traditional warehouse automation solutions offer improved storage density and cost efficiencies compared to manual order preparation.

However, they **lack the flexibility that today's volatile world requires**. Especially in e-commerce with hard-to-predict growth and rapidly evolving consumer demands.

The future automation will be **flexible, quickly scalable** according to business needs and able **to pivot** to unknown future models, all **without disrupting ongoing operations**.

Such systems should do so **without compromising on efficiencies**, which is essential to meet cost pressures.

# Warehouse Robotics is the future of automation

Shifting the paradigm

EXOTEC

## Legacy automation

## Warehouse robotics

### Solution features

Project specific  
Built on site  
Heavy static mechanics  
PLC-based (automation)

Full size product validation  
Built in factory  
Mobile machine  
Algorithm-based (robotics)

### Impact

Complex to install & maintain  
Inflexible  
Overshoot for future production  
Low innovation  
High energy consumption

**Simple and fast** to install & maintain  
**Adaptable** without disrupting operations  
Deploy for today, **scale** later  
Constant **innovation**  
**Low energy** consumption

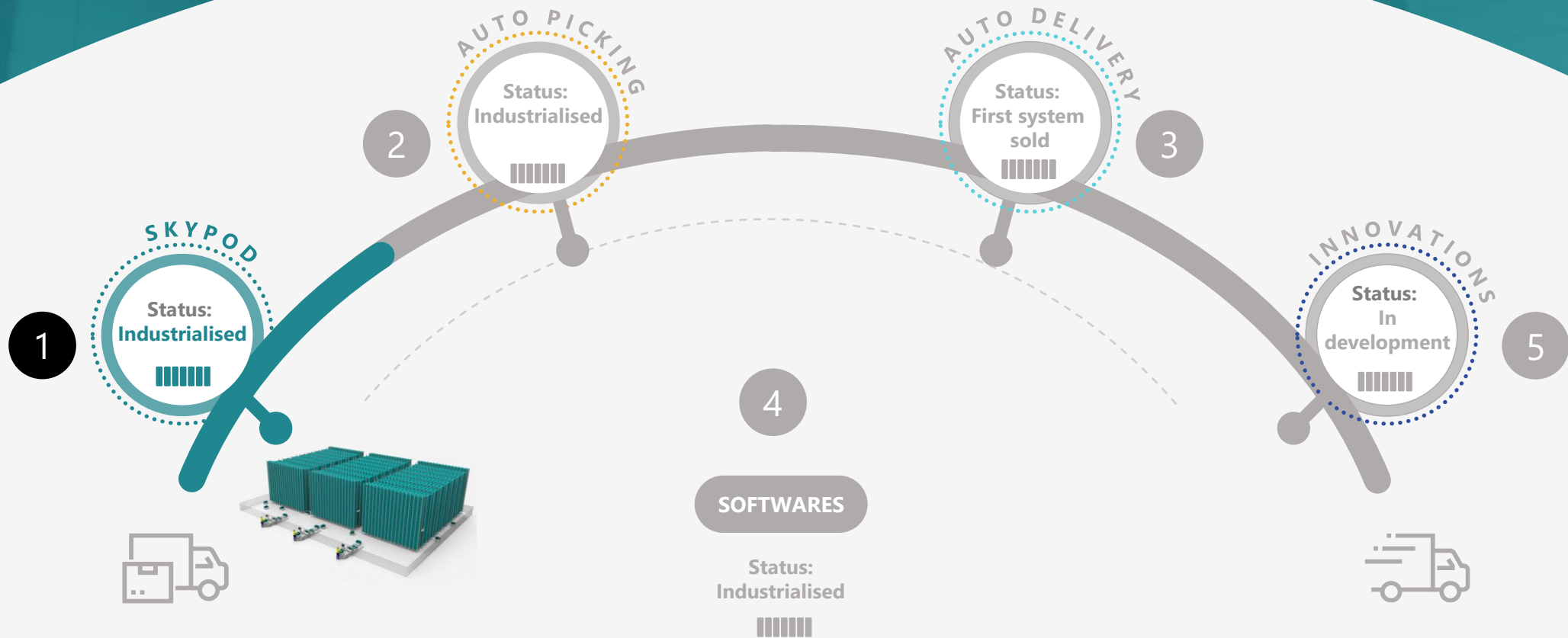


3

EXOTEC  
PRODUCT  
OFFERING

---

# EXOTEC Elegant warehouse robotics for a volatile world

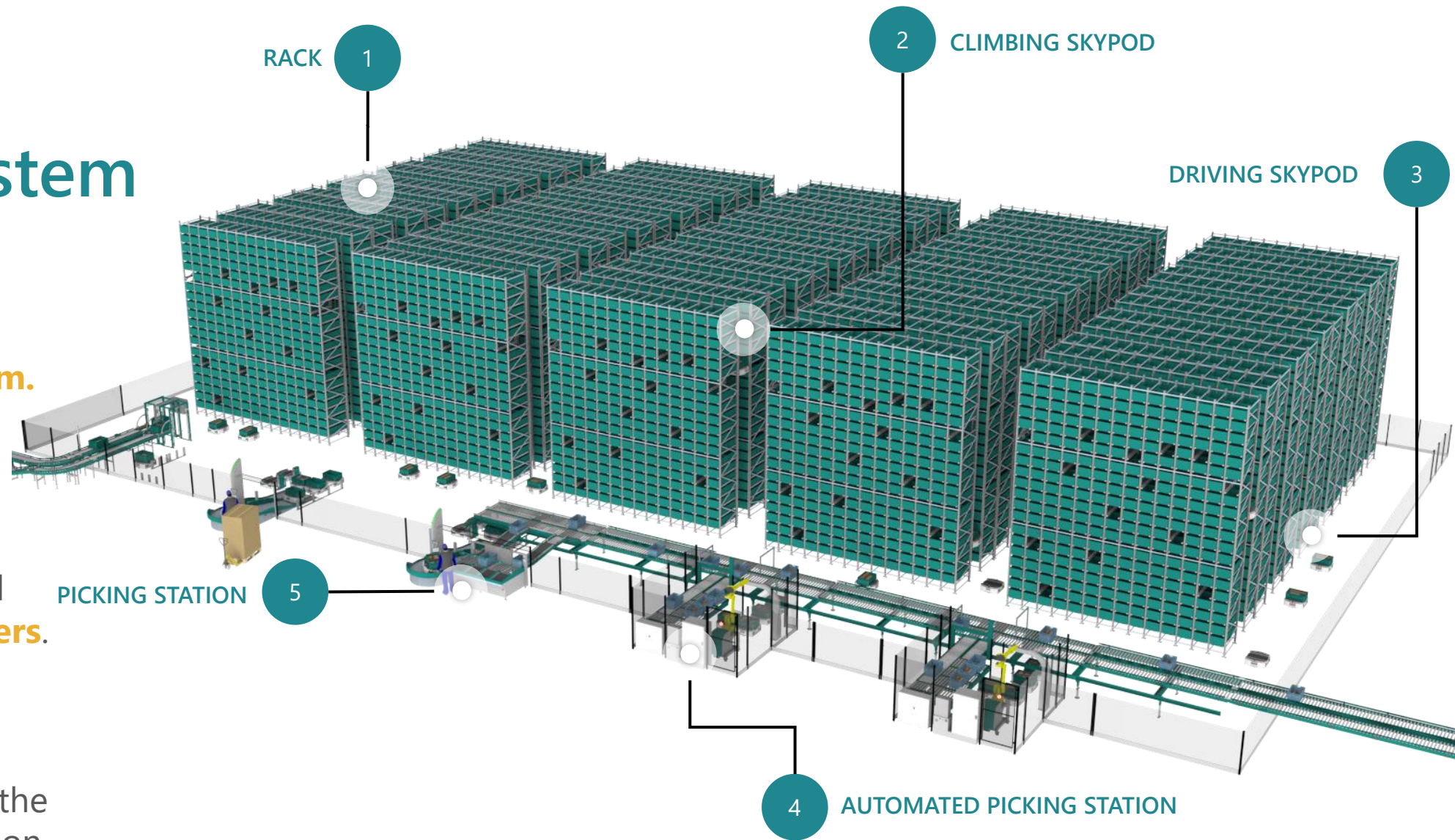




## Skypod System

An agile and high-performing automated order preparation system.

The **Skypod** is a light robot, with a carrying capacity of 30kg. It can move in all directions and reach a height of **12 meters**. Autonomous robots are programmed to conduct their inventory sweeps collecting the bins, while the operator stays at the station for final order assembly.



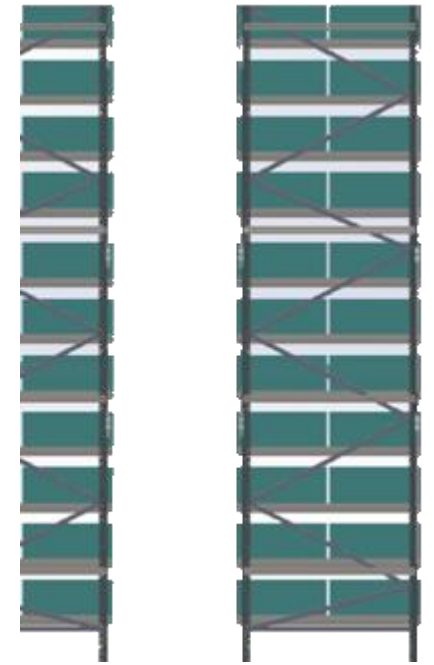
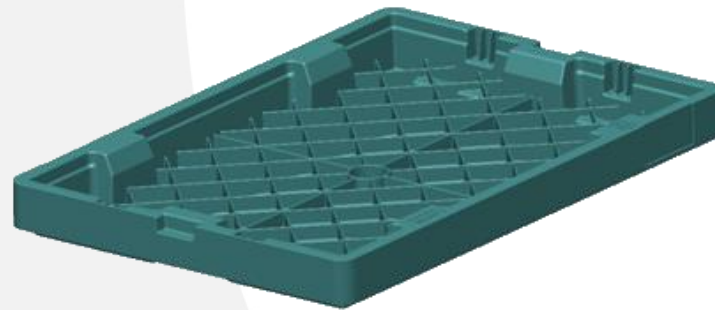
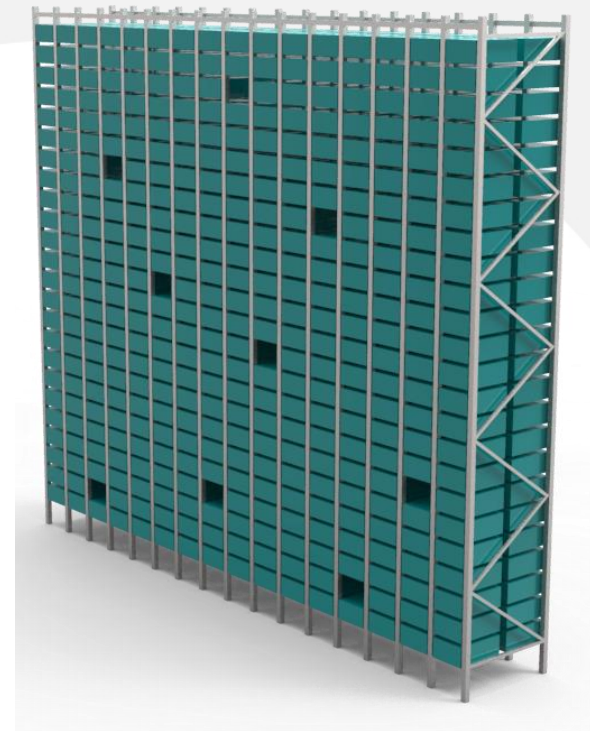
# EXOTEC

## Storage *Simple or double deep*

Completely passive, made of simple racking and bins, the storage provides high density, with all bins accessible at all times.

Bins are 220 mm, 320 or 420 mm high, and can be subdivided in 2,3,4,6 or 8 Sub locations.

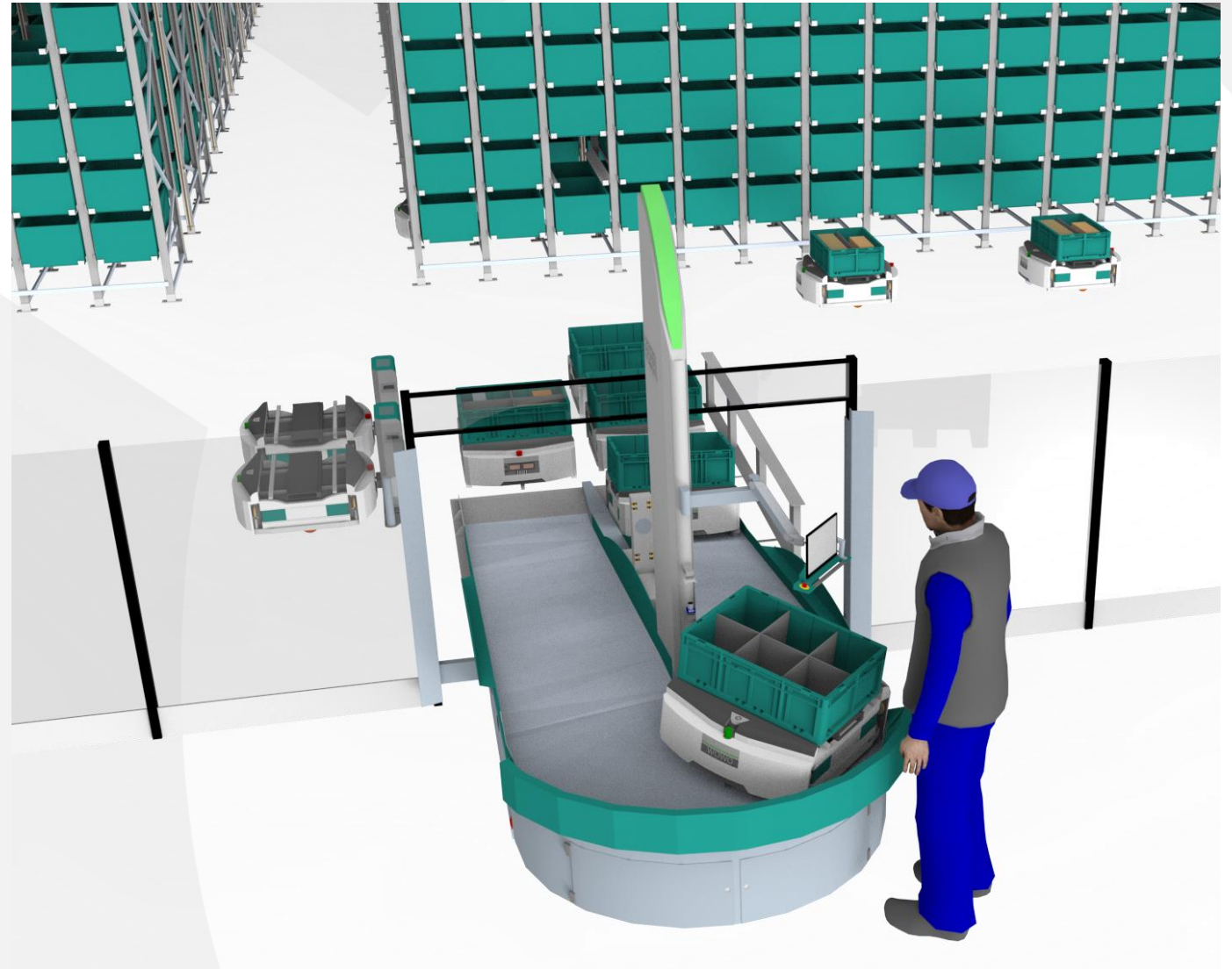
Bins can be replaced by tray to allow direct carton or custom bin storage





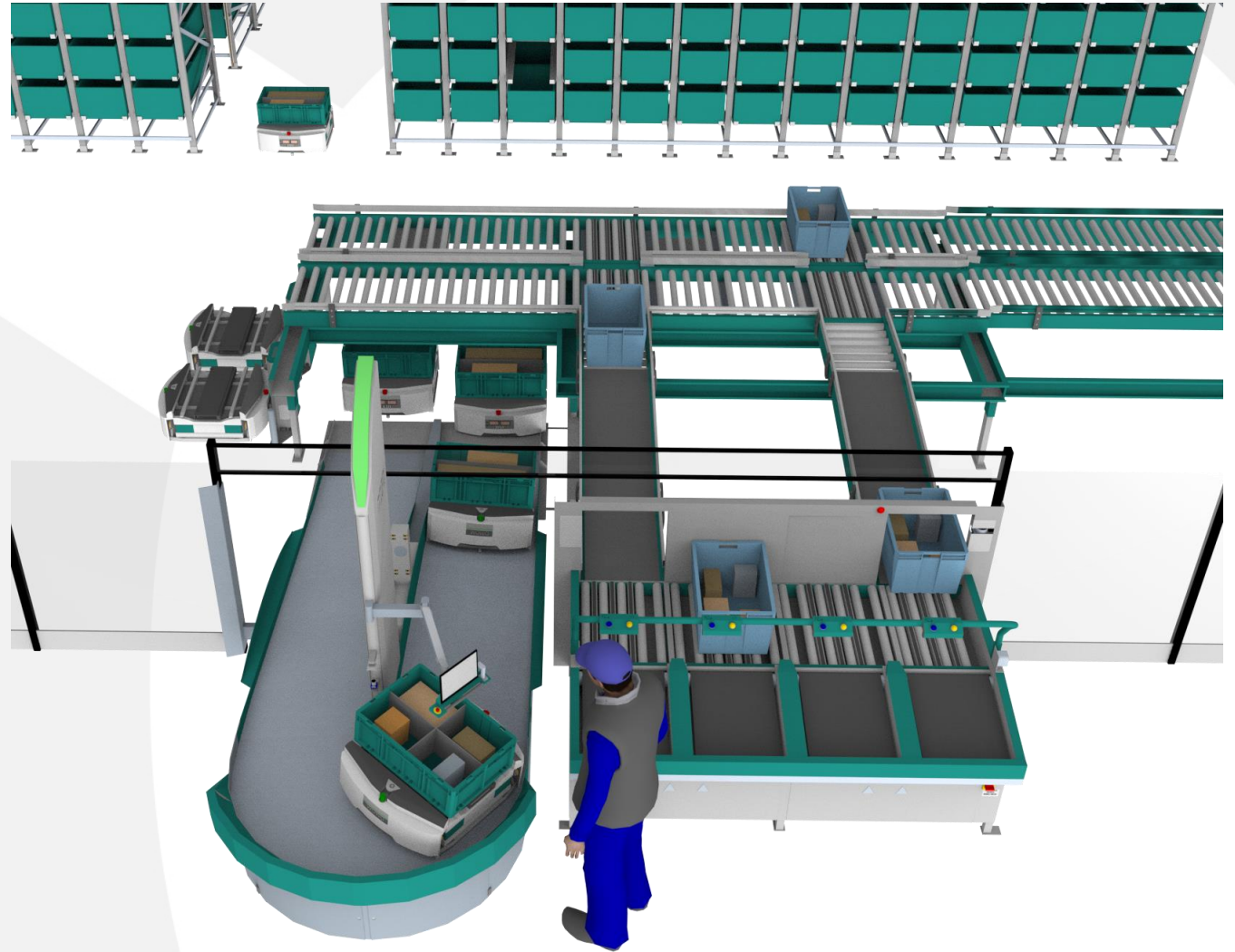
## Manual Station

The station can prepare up to four orders simultaneously or replenish. Order boxes are placed and removed by the operator.



## Station with order mover

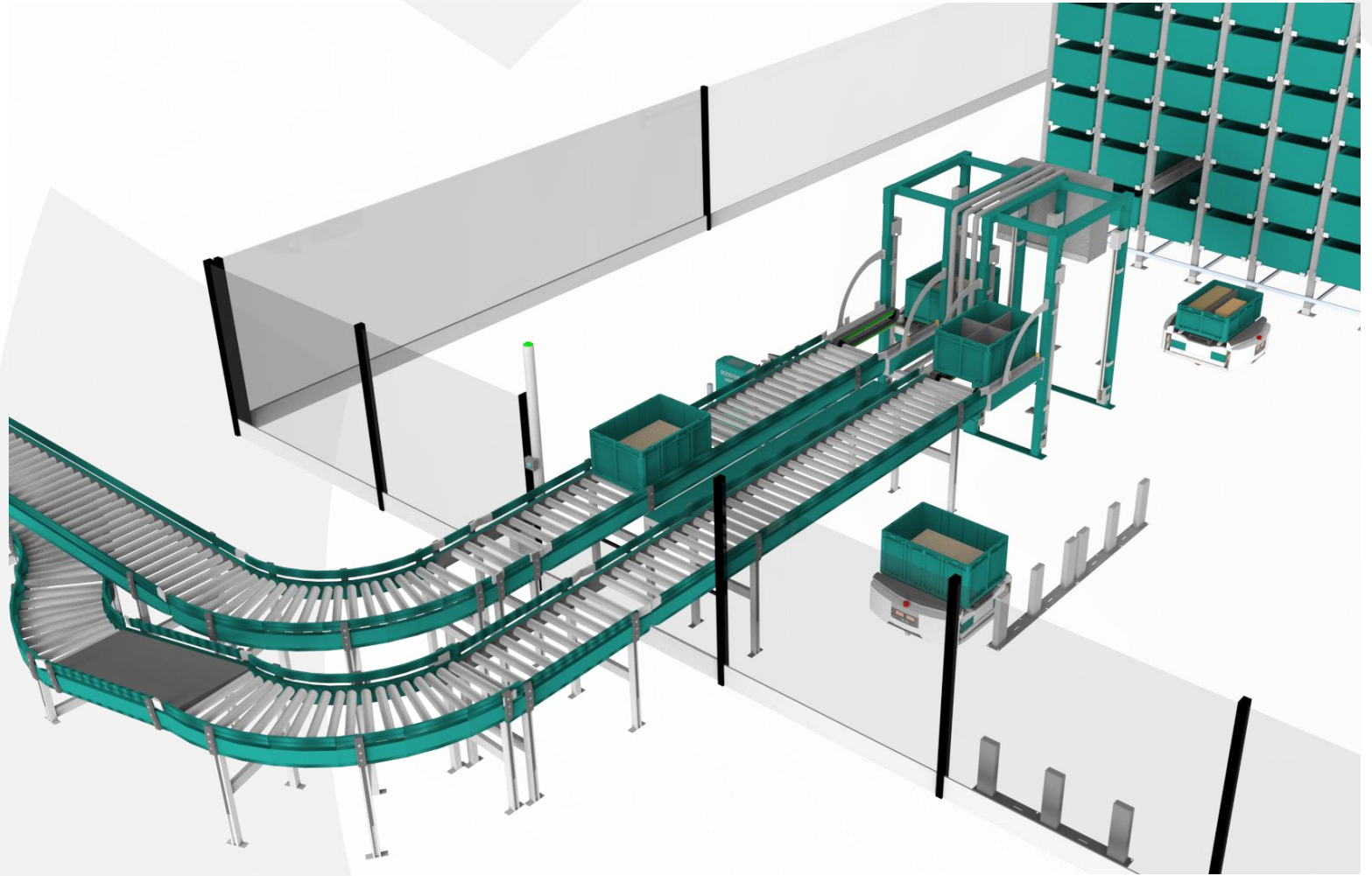
The order mover takes care of bringing empty totes or boxes, and removing finished orders. Orders are then sent to packing lines, closing machines, or shipping dispatch.





## Bin interface

The bin interface allows to enter and exit bins from the Skypod to the rest of the warehouse. Skypods engage in the chimney to take or drop bins.



# Benefits

The Skypod system is **uniquely combining**

- the **highest performance of traditional automation**
- to the **flexibility of cutting-edge robotics.**



## Picking speed

Up to 500 totes/hour.



## Density

x 5 compared to standard picking on shelving.



## Delivery Speed

Any item, anytime in 2 minutes



## Ergonomics

Picking at 800mm height.



## Fast set up

Set up of the System in months, not years

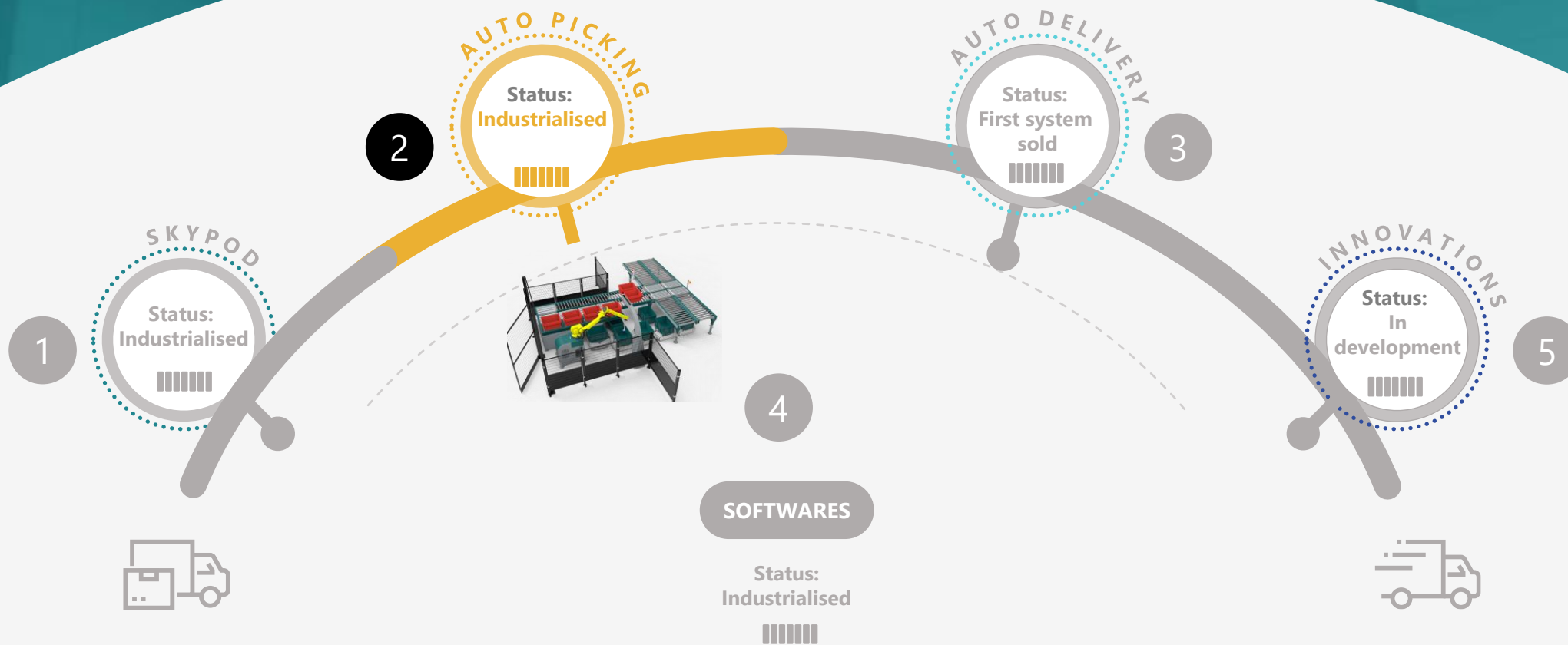


## Scalability

Ability to add robots & totes to follow customer growth

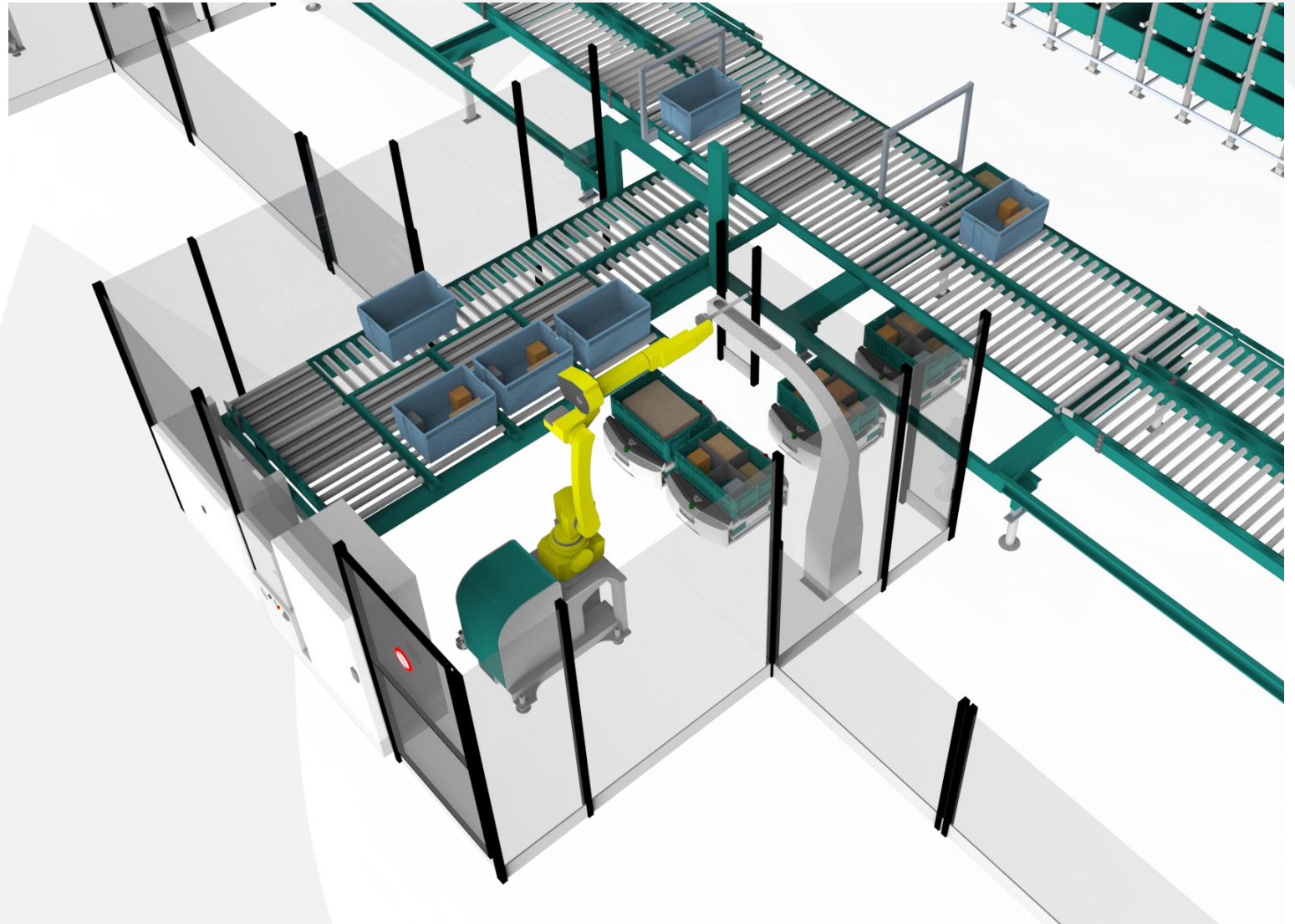


# EXOTEC Elegant warehouse robotics for a volatile world



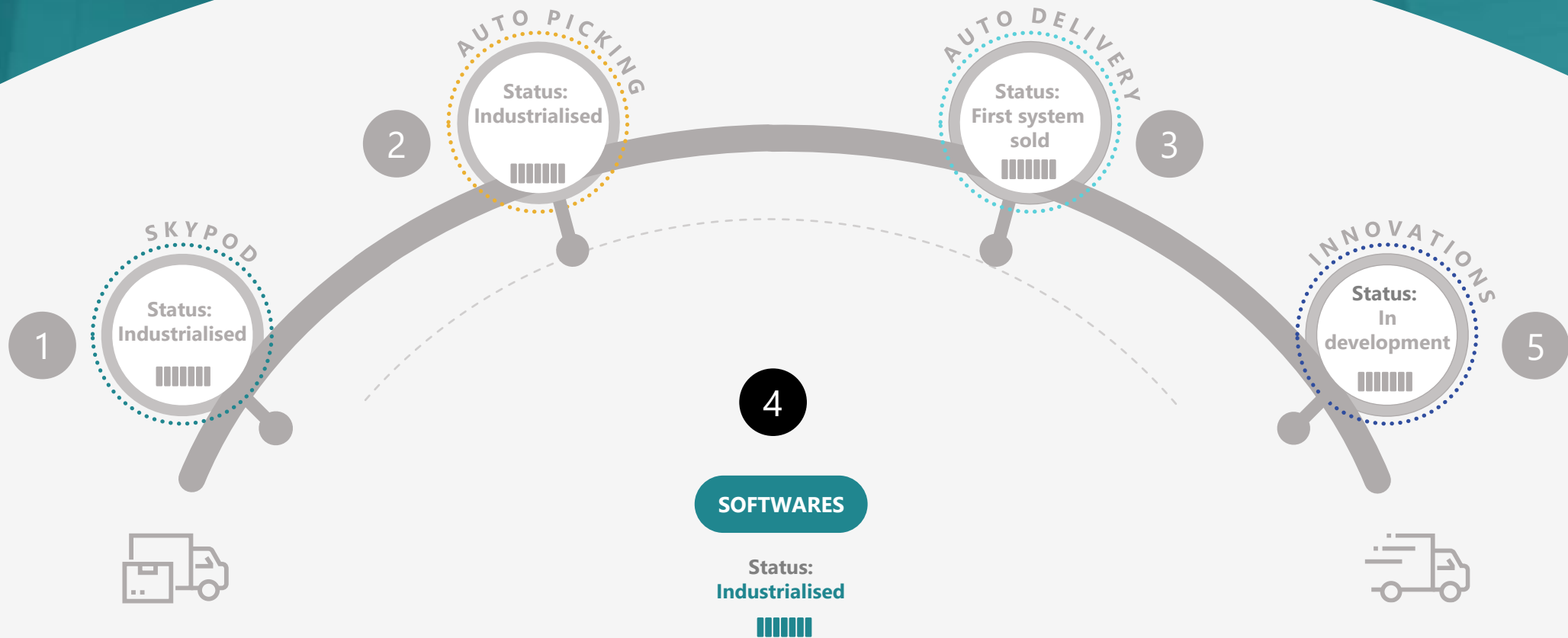
## Automated Picking Station with order mover

The SkyPicker is a fully automated picking solution with a revolutionary picking learning algorithm. The system finds and detects picking points so no human configuration is needed.





# EXOTEC    Elegant warehouse robotics for a volatile world



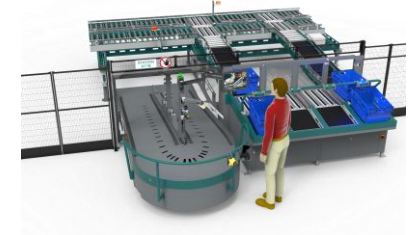
## Astar

Astar is the conductor of the orchestra. Using advanced algorithms, it synchronizes robots, humans, and bins to get the orders prepared as soon as possible.

The software system is based on redundant databases and relies on state of the art architecture.

### WMS

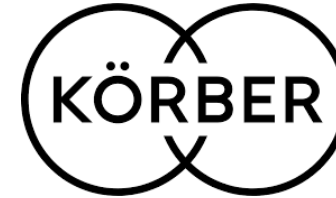
Customer warehouse management



EXOTEC

Experience  
interfacing Astar  
with a broad  
range of WMS

Manhattan  
Associates®

KÖRBER

REFLEX  
LOGISTICS  
SOLUTIONS  
BY HARDIS GROUP

SAP®

C&W  
Software for logistic excellence

LOGISTAR  
Empower your Supply Chain

**AS/400**

ORACLE®  
JD Edwards

acteos

COSMO

QAD

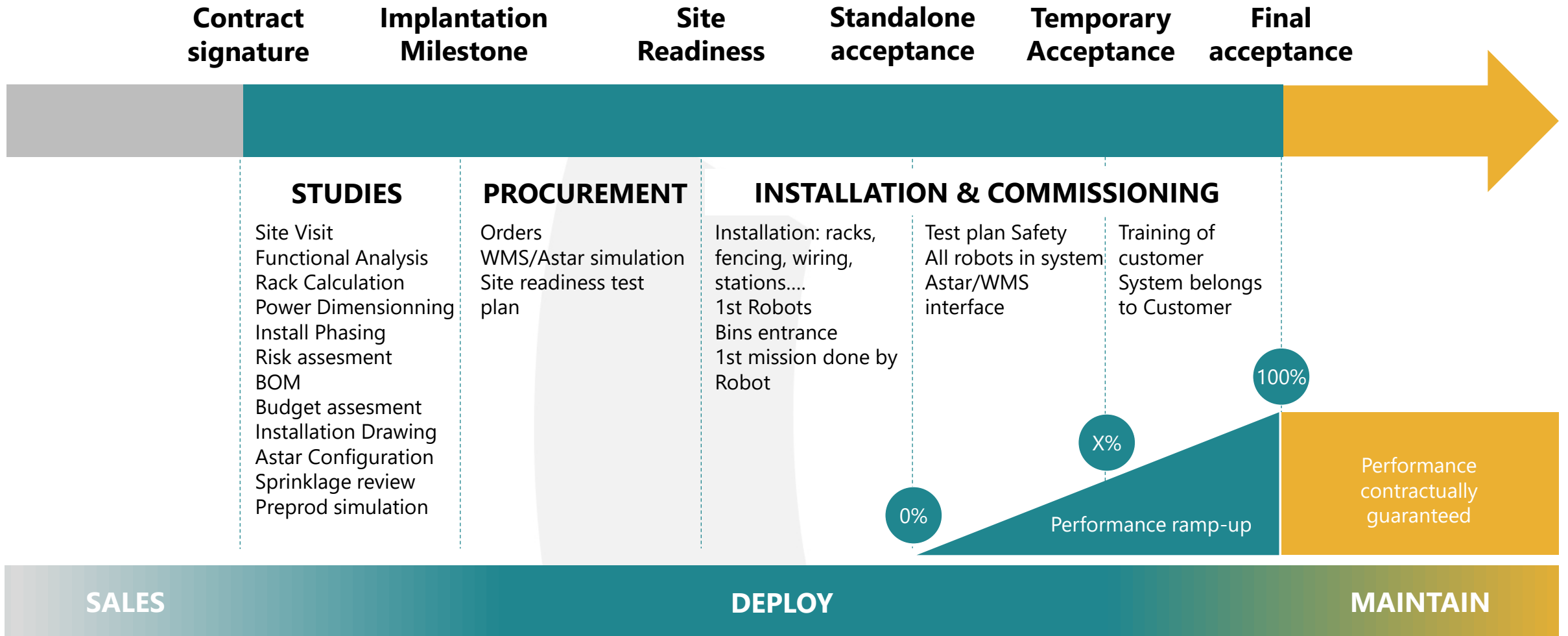


4

DEPLOYMENT & MAINTENANCE



# Deployment process for a Skypod System



## System performance contractually guaranteed

$$A = Op * F$$

Op: Operational Availability

- > Operational availability represents how long the system was "up" during production

F : Flow Performance

- > Flow Performance represents the mechanical performance of the system, independently of any external issues

Example:

Op = 99% and F = 100%, then A = 0.99 \* 1.00 = 99%



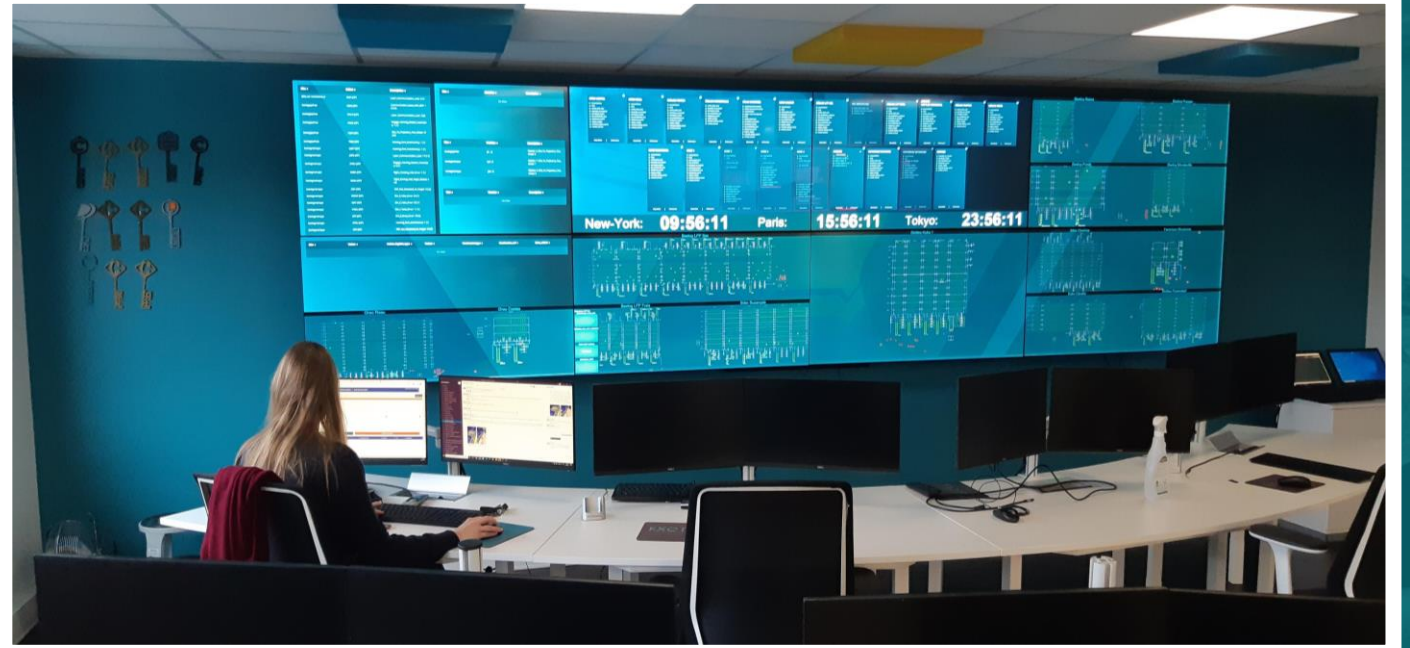


## 24/7 remote supervision

Exotec control center is able to monitor & access **any robots, anytime, everywhere** in the world to secure **operations continuity**

System errors are instantly flagged to **trained operators** who troubleshoot and restore the state of the system

This powerful tool is **central to our ironclad performance guarantee** and is running 24/7



- Hotline 24/24, 7/7
- Real-time performance monitoring
- Remote interventions on robots to fix issues before they are even visible
- Coordination with sites physical intervention is needed
- Continuous improvement of products thanks to big data analysis

5

EXPERIENCE





## WHAT CUSTOMERS SAY ABOUT EXOTEC

*« We will draw on the outstanding ability and experience of [Exotec] to strengthen our supply chain by stepping up our warehouse automation and global transformation»*

**Takuya Jimbo, Group Executive Vice President, Fast Retailing**

*« Exotec's solution perfectly blends into our Industry 4.0 approach. It's simple to implement and can evolve to meet our future needs »*

**Benjamin Gauchenot, Quality & Operations VP – Lacroix Electronic**

*« We chose to partner with Exotec in large part due to the high-performance system, speed of implementation, and strong history of successful execution»*

**Jérôme Saillour, Logistics Transformation Manager – Decathlon**

*« Exotec technology is reliable, flexible, and powerful »*

**Sébastien Laizet, Supply Chain Director, Monoprix**

*« We expect this deployment to have a real transformational effect on our operations»*

**Richard Tremblay, Logistics Leader, Decathlon Canada**