

## A-MATE<sup>®</sup>

AutoMate your load carrier movements



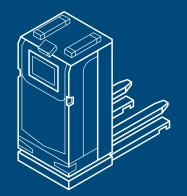
A-MATE<sup>®</sup> are intelligent mobile robots designed to transport logistic units such as pallets and containers in production and logistics environments like warehouses and sorting centers, without the need for an on board operator or driver.

The unique benefits of our Automated Guided Vehicles (AGVs) include a compact design and advanced driving system to enable agile movements in tight spaces. Equipped with a powerful electric free lift\*, our AGVs can pick up and drop off loads both from the floor as well as from shelves and conveyors. A 360 degree scanner coverage ensures maximum safety.

\* no scissors below the forks







## WELCOME TO THE FAMILY

- Compact design
- Electric free lift
- 360° safety
- Contour-based LiDAR navigation
- Long lasting Li-lon batteries
- Pallet detection
- Obstacle detection & avoidance

#### AVAILABLE MODELS A-MATE® FreeLift | A-MATE® Counter

#### WHAT YOU CAN ACHIEVE WITH A-MATE®



Reduce your handling costs

Improve the efficiency of your internal logistics



Improve ergonomics and Health & Safety



Decrease your dependency on skilled labor

Transition to partial or fully automated operations





The **implementation of AGVs** in your operation increases the digitalization of your workflows and transparency of your processes.

This increases the flexibility and competitiveness of your production environment.

- Increase scalability
- Facilitate rapid process modifications
- Utilize existing capacities and resources
- Track your loads and load carriers systematically
- Minimize disruptions

#### SHAPE THE FUTURE WITH AGVs AND GAIN A COMPETITIVE EDGE

## **FREE LIFT**

A-MATE<sup>®</sup> is a great solution for multiple use cases as it can both handle loads on the floor as well as deliver to or pick up from conveyor belts and shelves. (A)

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## **COMPACT DESIGN**

The advanced driving system combined with a compact design enables A-MATE<sup>®</sup> to move very efficiently in narrow and tight environments.

## VERSATILITY

A-MATE<sup>®</sup> transports various types of load carriers, for example pallets, foldable cages, roll cages and dollies, in different sizes, empty or full.

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This makes our AGVs a universal solution for a wide range of intralogistic process flows in manufacturing, warehousing and sorting operations for various industries.

They are designed to operate in demanding industrial environments with heavy traffic and rough conditions.







## RELIABILITY

A-MATE® works reliably in a constantly changing environment, stand-alone or connected to customer WMS / MES

#### Precise Positioning and Navigation

Contour-based LiDAR navigation Full dynamic mapping option Pallet detection Obstacle detection and obstacle avoidance

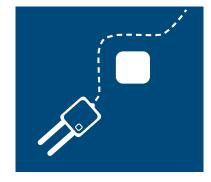
Fleet-Supervision Web based user interface WMS / MES connectivity Route planning / shortest routes / congestion management Arrival time forecast / priorities / statistics

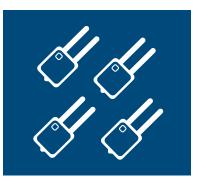


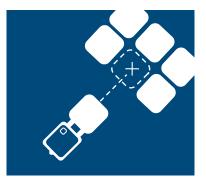
A-MATE<sup>®</sup> can be equipped with a VDA 5050 interface.



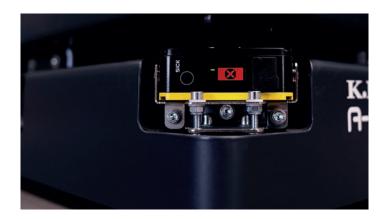








## **SAFE INTERACTION WITH HUMANS**



**MULTIPLE SCANNERS** to make the A-MATE® a 360° safe mobile robot



**EMERGENCY STOP BUTTONS** visible and accessible at any moment



**CLEAR LIGHT INDICATORS** to signal the operating status



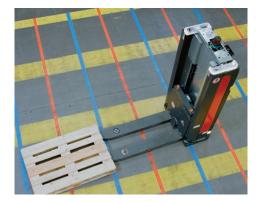
**INTERACTIVE DISPLAY** easy to access and easy to handle



## THE SMART CHOICE FOR YOUR APPLICATION

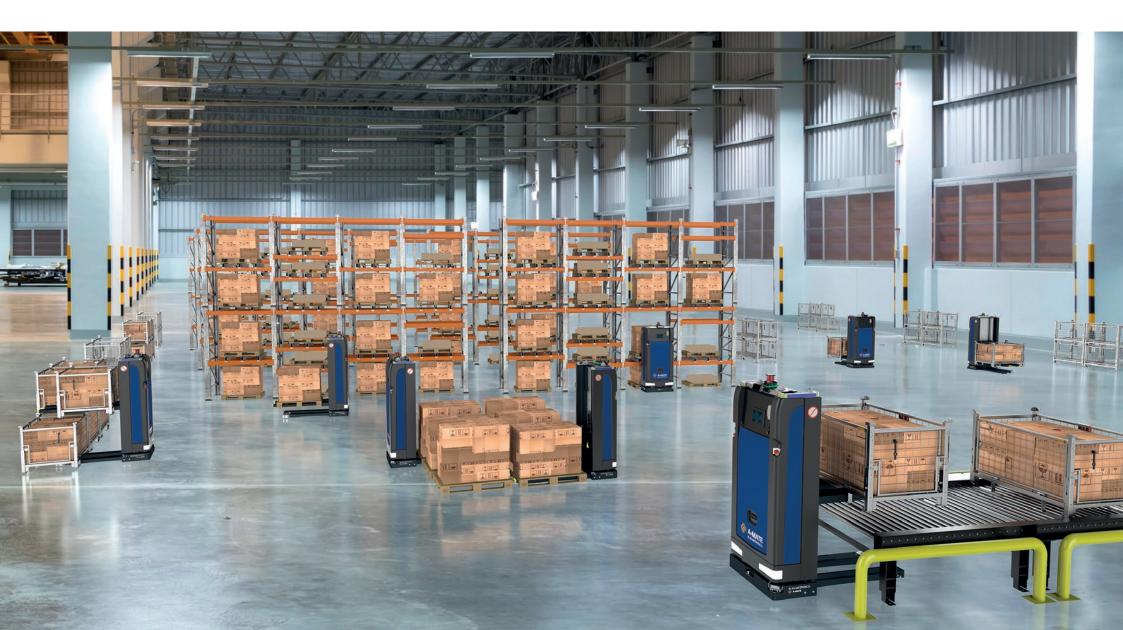
The compact design, electric free lift, advanced driving system and state-of-the-art software features pave the way for various application scenarios across all industries.

A-MATE<sup>®</sup> ensures efficient and safe load carrier handling on the floor, from racks, conveyors, machines, in buffer lanes and many more.









### SUCCESSFUL CUSTOMER PROJECTS



#### DANFOSS GRÅSTEN, DENMARK

- Four A-MATE® FreeLift
- Automated transport of full units from a buffer lane to various drop-off-locations
- Safe interaction with other AGVs, manually driven forklifts and human workers.





#### SCHAEFFLER BUEHL, GERMANY

- Six A-MATE® FreeLift
- Automated transport of full and empty units between machines and shipping area
- Navigation in narrow aisles
- Floor-to-floor and conveyor handling
- Interaction between internal Schaeffler software and external fleet management



Watch video



#### **VISIT K-HARTWALL.COM FOR MORE CUSTOMER STORIES**

# R-MATE

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K.HARTWALL A-MATE

### WE ARE ALSO USING A-MATE®





**EXPERIENCE. KNOWLEDGE. RELIABILITY.** 



We at K.Hartwall strive to create future-fit logistics solutions that answer the needs of our customers and bolsters their industry development. We know what it takes to make robust, industrial-grade AGVs for the most demanding environments.



We serve you globally in 65 countries



We serve more than 1500 satisfied customers



Over ninety years of design and innovation

#### K.Hartwall Oy Ab

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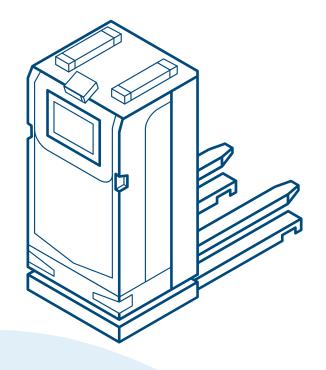


Watch A-MATE<sup>®</sup> in action at Schaeffler

Watch A-MATE<sup>®</sup> in action at Danfoss



Watch the A-MATE<sup>®</sup> animation





MAKE THE NEXT SMART MOVE IN LOGISTICS