Kardex Investor Day 2023

CH-Arbon, 7 November 2023
Agenda

1. **Kardex AutoStore Update**
   Daniel Hauser – Managing Director Kardex AS Solutions AG

2. **Kardex Today and Tomorrow**
   Jens Hardenacke – CEO Kardex Holding AG
Kardex Investor Day 2023 – AutoStore Update

CH-Arbon, 7 November 2023
Agenda

- Positioning
- Why Kardex
- Status & Outlook
Positioning
Kardex Positioning in Light Goods Logistics with sold Projects
Why Kardex
# Why Kardex – Differentiation from competition

<table>
<thead>
<tr>
<th>Differentiation</th>
<th>Global organization</th>
<th>Focus &amp; Speed</th>
<th>Service</th>
<th>Innovation</th>
</tr>
</thead>
</table>

## Key differentiation factors

- **Global organization**
  - Subsidiaries in 30 countries
  - Contract with the local Kardex subsidiary
  - Leverage existing customer base

- **Focus & Speed**
  - Vast + proven experience
  - Dedicated, specialized team
  - Speed in customer response
  - Efficient with small projects

- **Service**
  - Professional global standardized setup
  - Local support, dense service network
  - AutoStore service done by existing organization

- **Innovation**
  - Cleaning station for robot sensors
  - IPA – Intuitive Picking Assistant
  - Kardex Pick&Pack solution
  - More to come!

---

**Why Kardex**

- Differentiation from competition

- Vast + proven experience
- Dedicated, specialized team
- Speed in customer response
- Efficient with small projects

**Professional global standardized setup**

- Local support, dense service network
- AutoStore service done by existing organization

**Cleaning station for robot sensors**

- IPA – Intuitive Picking Assistant
- Kardex Pick&Pack solution

- More to come!
Innovation – Sensor Cleaning Station

- Fully integrated cleaning system from Kardex.
- Removes dust and contamination.
- Each robot drives to the cleaning station once a day. The blow-off nozzles are activated automatically.
- After a few seconds, the cleaning process is finished.
- The robots can work without interruption for longer, which increases the overall availability of the system.
Innovation – Intuitive Picking Assistant (IPA)
Innovation – Kardex Pick&Pack integrated AutoStore workstation

- Pick robot on gantry serves 2 AS ports
- Up to 3 sizes of order-cartons
- Up to 400 order-cartons/h
- Cartons are erected, filled, closed and labelled
- Port to port operations possible
- Very compact footprint
Status & Outlook
## Choice of projects in operation

### Arbeitsschutz-Express
- **Location:** Germany, Leipheim
- **Sector:** E-Com / Safety Clothing
- **Key Features:**
  - 54’000 bin locations
  - 26 R5+ robots
  - 6 carousel ports
- **Launch Date:** Live since July 2022

### Bike24
- **Location:** Spain, Barcelona
- **Sector:** E-Com / Bike parts
- **Key Features:**
  - Largest (bins) installation
  - 90’000 bin locations
  - 50 R5 robots
  - 10 carousel ports
  - Conveyor system
- **Launch Date:** Live since March 2023

### Cutter & Buck
- **Location:** United States, Seattle
- **Sector:** Apparel
- **Key Features:**
  - Important reference in US
  - 39’728 bin locations
  - 54 R5 robots
  - 9 carousel + 2 conveyor ports
  - Conveyor system
- **Launch Date:** Live since August 2023

### Arvato
- **Location:** United Kingdom, Hams Hall
- **Sector:** 3 PL
- **Key Features:**
  - Fastest system: 3’200 bins/h
  - 65’000 bin locations
  - 130 R5 robots
  - 11 carousel + 8 conveyor ports
- **Launch Date:** Live since August 2023
Geographical expansion and market split

40 projects in 13 countries

Priorities for expansion
Thank you very much for your attention!
Factory Tour @ MS Direct

- AutoStore with
  - 30’000 bin locations
  - 48 R5 robots
  - 8 Carousel Ports
  - 1 Conveyor Port
  - Fire extinguishing system

- Live since May 2023

- Factory Tour in 3 groups, guided by
  - Marcel Guerdi, Sales Manager
  - Dominik Kathriner, Project Manager
  - Daniel Hauser

- Highlights
  - Picking of customer orders
  - View into the inside of the AutoStore system
  - Functional explanation at Demo-system

- Pictures
  - are allowed
  - Please avoid people and products
Kardex Today and Tomorrow

Investor Day, November 07, 2023
Why Kardex?
Trends in Intralogistics

Robotics

E-Commerce

Urbanization

Labor Shortage
Effects of these Trends

<table>
<thead>
<tr>
<th>Industry 4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
</tr>
<tr>
<td>Effectivity</td>
</tr>
<tr>
<td>Collaboration</td>
</tr>
<tr>
<td>“New” technologies</td>
</tr>
<tr>
<td>Trend &amp; Innovation</td>
</tr>
</tbody>
</table>
Market Overview

Biggest intralogistics markets

Top 20 worldwide materials handling system suppliers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Daiko Co. Ltd</td>
<td>4560</td>
<td>4569</td>
<td>2.00%</td>
<td>0%</td>
<td>Osaka, Japan</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Dematic (KION Group)</td>
<td>4569</td>
<td>4569</td>
<td>-0.00%</td>
<td>0%</td>
<td>Atlanta</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Honeywell</td>
<td>2840</td>
<td>2879</td>
<td>-1.30%</td>
<td>-16%</td>
<td>Charlotte, N.C.</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>VDL Groep (TFW)</td>
<td>2535</td>
<td>2730</td>
<td>-7.63%</td>
<td>7%</td>
<td>Vught, The Netherlands</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>Knauss-Ko</td>
<td>1560</td>
<td>1719</td>
<td>10.14%</td>
<td>-48%</td>
<td>Mannheim, Germany</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>Kramatst</td>
<td>N/A</td>
<td>2,115</td>
<td>N/A</td>
<td>N/A</td>
<td>Altena</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>Kurita Machinery, Ltd</td>
<td>1,726</td>
<td>1,679</td>
<td>-2.67%</td>
<td>22%</td>
<td>Kyoto, Japan</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>Illig Logistik Systeme</td>
<td>2,877</td>
<td>2,920</td>
<td>1.65%</td>
<td>N/A</td>
<td>Neunkirchen, Germany</td>
</tr>
<tr>
<td>9</td>
<td>10</td>
<td>Material Handling Technologies, Inc.</td>
<td>1,777</td>
<td>1,679</td>
<td>-5.61%</td>
<td>10%</td>
<td>Bemels, Spain</td>
</tr>
<tr>
<td>10</td>
<td>9</td>
<td>HS Plant Engineering</td>
<td>1,532</td>
<td>1,430</td>
<td>-6.68%</td>
<td>17%</td>
<td>Paris, France</td>
</tr>
<tr>
<td>11</td>
<td>11</td>
<td>Bauer Group GmbH</td>
<td>1,156</td>
<td>1,179</td>
<td>-1.00%</td>
<td>-24%</td>
<td>Buxheim, Germany</td>
</tr>
<tr>
<td>12</td>
<td>N/A</td>
<td>Hako Group</td>
<td>N/A</td>
<td>1,299</td>
<td>N/A</td>
<td>N/A</td>
<td>Sankt-Niklass, Belgium</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
<td>Yantian Loganics</td>
<td>963.3</td>
<td>991</td>
<td>-2.68%</td>
<td>-1%</td>
<td>Shanghai, China</td>
</tr>
<tr>
<td>14</td>
<td>13</td>
<td>SSI Schaefer AG</td>
<td>707</td>
<td>827</td>
<td>17.59%</td>
<td>13%</td>
<td>Bottrop, Germany</td>
</tr>
<tr>
<td>15</td>
<td>14</td>
<td>Comau S.p.A.</td>
<td>629</td>
<td>713</td>
<td>-13.16%</td>
<td>91%</td>
<td>Genoa, Italy</td>
</tr>
<tr>
<td>16</td>
<td>15</td>
<td>Translucida (Trans Group)</td>
<td>684</td>
<td>812</td>
<td>-20.40%</td>
<td>31%</td>
<td>Paris, France</td>
</tr>
<tr>
<td>17</td>
<td>16</td>
<td>Siemens AG</td>
<td>3,541</td>
<td>3,507</td>
<td>-0.97%</td>
<td>15%</td>
<td>Zurich, Switzerland</td>
</tr>
<tr>
<td>18</td>
<td>N/A</td>
<td>Terberg</td>
<td>N/A</td>
<td>565.3</td>
<td>N/A</td>
<td>N/A</td>
<td>Wilminghton, Mass</td>
</tr>
<tr>
<td>19</td>
<td>17</td>
<td>AutoStore AS</td>
<td>327.6</td>
<td>590.5</td>
<td>-45.75%</td>
<td>78%</td>
<td>Nedre Vosse, Norway</td>
</tr>
<tr>
<td>20</td>
<td>N/A</td>
<td>Elektra Logistics</td>
<td>N/A</td>
<td>427.1</td>
<td>N/A</td>
<td>N/A</td>
<td>Kallta, Norway</td>
</tr>
</tbody>
</table>

Source: Modern Materials Handling
*Source: Modern Materials Handling
**Compiled from official/public number

The Kardex family

Source: Warehouse Automation Market to reach $41 Billion by 2027
(thelogisticsiq.com)

Source: Top 20 materials handling systems suppliers 2023 – Modern Materials Handling (mmh.com)
Kardex in the Intralogistics Market – 3 Years ago

- Racking and Shelving
- Automated Products
- Stand Alone Subsystems
- Integrated Subsystems
- Fully Integrated Systems

Profitability

Relative growth
Market volume
Growth directions

Complexity
Kardex in the Intralogistics Market – Now

Person-to-

Racking and Shelving

Goods-to-person

Automated Products

Stand Alone Subsystems

Integrated Standard Systems

Integrated tailor-made Systems

Profitability

Relative growth

Market volume

Complexity

Kardex Investor Day | Nov 7, 2023
AutoStore Business – Blueprint for Kardex?

- Service
- Local Company
- Connection
- Leads
- Focus
- Innovation
Kardex global setup: A look into the future
Thank you!

Dr. Jens Hardenacke
CEO
Outlook (as communicated 27 July 2023)

- Near shoring and skilled labor force shortages continue to strengthen the global megatrend towards automation of intralogistics solutions supporting Kardex’ business model

- Customers expected to continue investments in intralogistics solutions to maintain or strengthen competitiveness, despite worldwide cooling of growth expectations

- Strong Backlog of both Remstar and Mlog is a solid foundation for the second half of the year

- Availability of components improves but remains fragile

- Kardex AutoStore to continue contributing to volume increase and profitability

- Kardex is well positioned to develop in line with the communicated financial targets
Disclaimer

This communication contains statements that constitute “forward-looking statements”. In this communication, such forward-looking statements may include statements on the financial situation, earnings situation and business results of Kardex as well as certain strategic plans and objectives. Because these forward-looking statements are subject to risks and uncertainties, actual future results may differ materially from those expressed in or implied by the statements. Many of these risks and uncertainties relate to factors which are beyond Kardex’ ability to control or estimate precisely, such as future market conditions, currency fluctuations, the behavior of other market participants, the actions of governmental regulators and other risk factors detailed in Kardex’ past and future filings and reports and in past and future filings, press releases, reports and other information posted on Kardex’ websites. Readers are cautioned not to put undue reliance on forward-looking statements, which speak only of the date of this communication. Kardex disclaims any intention or obligation to update and revise any forward-looking statements, whether as a result of new information, future events or otherwise.