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AUTOMATIC LINE
WAREHOUSE AND PICKING
KJ

High bay warehouse • Transport • Selection • Order picking

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SYSTEM DESCRIPTION

The KJ Line is a **fully integrated, automated intralogistics system** designed for container handling in production plants and distribution centers. The solution combines a high-bay automated warehouse, a conveyor system, a picking area, and order completion and registration into a single, cohesive system. The system ensures high efficiency, high storage density, and full container and product traceability.

MAIN SYSTEM MODULES

• high-bay automatic warehouse with rack stackers (X/Y/Z axis)

• roller and belt conveyor system

• warehouse and order picking stations

• buffer lines and picking/dispatch area

• ID points with container identification and weighing

PERFORMANCE (REFERENCE VALUES)

• up to 90 tons of product per day
about 65 t of finished product
about 25 tons of raw material

• multi-shift operation • over 360 picking locations • up to 8 picking operator stations • parallel processing of multiple orders • implementation of the FIFO strategy

AUTOMATION AND CONTROL

• **Rockwell** -based control system **Automation** (Allen-Bradley)

• control modernization carried out approximately 6 years ago

• PLC control + HMI operator terminals • real-time diagnostics and monitoring • integration with ERP / WMS systems

KEY BENEFITS

ÿ **high storage density** ÿ **reduced manual work** ÿ **quick access to products** ÿ **possibility of relocation and expansion** ÿ **industrially proven solution**

Status: complete, working technological line – available for sale.

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DATA SHEET TECHNICAL (DATASHEET)

HIGH-BAY WAREHOUSE

- type: automatic rack warehouse • operation: rack stackers
- movement axes: X / Y / Z
- storage strategy: FIFO
- container transport system

CONTROL

- PLC: Rockwell Automation / Allen-Bradley • Control modernization: approx. 6 years ago
- HMI operator terminals
- online diagnostics and monitoring

INTERNAL TRANSPORT

- roller and belt conveyors
- automatic separation and buffering • rejection and manual handling points • barcode readers at the nodes

IDENTIFICATION

- container identification: Code 128 • full traceability (batch, weight, order)
- registration at ID points

SELECTING AND COMPLETING

- manual selection assisted systemically
- number of matchmaking locations: 360+
- number of operator stations: up to 8
- integrated weighing and ID confirmation

REQUIRED UTILITIES

- ✅ Power supply: 3×400 V AC, 50 Hz, N, PE
- ✅ Control power supply: 24 V DC (internal)
- ✅ IT network: Ethernet (TCP/IP)
- ✅ Compressed air
- ❌ Water/steam/process gases: not required

EFFICIENCY

- maximum capacity: up to 90 t/day
- finished products: ~65 t/day
- raw materials: ~25 t/day
- multi-shift work

DELIVERY STATUS

- Complete line, relocation possible and restart.

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LAYOUT

1. Completion and registration
2. Picking Section 1 3. Picking Section 2 4. High-bay automated warehouse 5. Conveyor system