

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 34
Average Utilization: 80.0%
Throughput Increase: 34.2%
Labor Cost Reduction: 28.5%
ROI Period: 2.3 years

Warehouse Performance

Warehouse Location		Capacity Used	Inbound/Day	Outbound/Day	Picking Accuracy	Automation Level	Status
Distribution Center A	Chicago, IL	85.4%	2,530	1,780	97.8%	72.3%	Improvement Needed
Distribution Center B	Dallas, TX	55.1%	2,697	2,090	97.7%	73.3%	Improvement Needed
Distribution Center C	Atlanta, GA	80.3%	2,863	1,970	96.1%	86.6%	Optimized
Distribution Center D	Los Angeles, CA	83.6%	1,029	1,546	96.3%	93.7%	Optimized
Distribution Center E	Newark, NJ	78.0%	2,712	2,595	96.2%	74.1%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

ment voice-
picking
system to
improve
accuracy to
99.8%

- Upgra
de WMS
integration
for real-time
inventory
visibility

- Add au
tomated
sortation
system for
small
package
handling

- Imple
ment
predictive
analytics for
demand-
based
staffing

- Consid
er AS/RS
system for
high-
velocity
SKUs