

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 27
Average Utilization: 74.2%
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	101.8%	1,055	2,445	96.6%	63.0%	Improvement Needed
Distribution Center B	Dallas, TX	99.7%	1,951	2,281	96.7%	65.6%	Improvement Needed
Distribution Center C	Atlanta, GA	101.7%	1,382	3,972	97.3%	90.3%	Optimized
Distribution Center D	Los Angeles, CA	69.4%	2,762	3,698	95.5%	71.6%	Improvement Needed
Distribution Center E	Newark, NJ	82.1%	2,772	2,348	99.5%	80.5%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for all automated systems

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