

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 77.5%
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	41.8%	1,156	3,564	98.8%	63.3%	Improvement Needed
Distribution Center B	Dallas, TX	89.5%	1,660	2,049	96.0%	84.6%	Optimized
Distribution Center C	Atlanta, GA	52.7%	1,205	2,840	97.9%	94.7%	Optimized
Distribution Center D	Los Angeles, CA	54.5%	2,594	1,694	98.9%	62.1%	Improvement Needed
Distribution Center E	Newark, NJ	94.4%	1,335	2,616	97.4%	82.8%	Optimized

Optimization Opportunities

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

picking
system to
improve
accuracy to
99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs