

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 81.8%
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	41.7%	1,801	2,414	98.4%	74.5%	Improvement Needed
Distribution Center B	Dallas, TX	43.8%	1,538	2,337	97.6%	64.3%	Improvement Needed
Distribution Center C	Atlanta, GA	75.0%	2,303	2,126	97.9%	92.2%	Optimized
Distribution Center D	Los Angeles, CA	99.8%	2,524	1,776	97.6%	90.2%	Optimized
Distribution Center E	Newark, NJ	72.9%	1,267	1,705	97.5%	88.0%	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