

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 59
Average Utilization: 81.2%
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	67.8%	1,160	1,871	97.4%	70.8%	Improvement Needed
Distribution Center B	Dallas, TX	43.8%	2,138	3,492	97.3%	88.2%	Optimized
Distribution Center C	Atlanta, GA	49.6%	1,872	3,590	99.4%	82.7%	Optimized
Distribution Center D	Los Angeles, CA	42.3%	2,219	2,081	98.9%	81.2%	Optimized
Distribution Center E	Newark, NJ	75.3%	1,636	2,157	97.3%	83.1%	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