

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: 83.5%
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	75.3%	2,787	2,110	97.5%	75.9%	Improvement Needed
Distribution Center B	Dallas, TX	60.7%	2,904	3,035	96.9%	88.0%	Optimized
Distribution Center C	Atlanta, GA	62.4%	2,345	1,776	96.2%	86.2%	Optimized
Distribution Center D	Los Angeles, CA	33.3%	2,512	2,777	98.5%	86.3%	Optimized
Distribution Center E	Newark, NJ	47.3%	1,239	2,776	99.3%	81.3%	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