

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 29
Average Utilization: 85.3%
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	49.6%	1,589	3,863	99.1%	68.9%	Improvement Needed
Distribution Center B	Dallas, TX	111.8%	2,784	1,755	97.8%	88.1%	Optimized
Distribution Center C	Atlanta, GA	78.7%	2,722	1,839	98.4%	92.3%	Optimized
Distribution Center D	Los Angeles, CA	72.3%	2,043	1,967	98.1%	90.6%	Optimized
Distribution Center E	Newark, NJ	85.9%	2,364	2,553	97.5%	86.7%	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