

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 71.5%
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	54.7%	2,749	1,844	95.7%	66.7%	Improvement Needed
Distribution Center B	Dallas, TX	50.8%	1,554	3,160	96.5%	63.8%	Improvement Needed
Distribution Center C	Atlanta, GA	97.6%	2,740	3,309	98.3%	87.1%	Optimized
Distribution Center D	Los Angeles, CA	117.7%	1,301	3,115	95.9%	61.5%	Improvement Needed
Distribution Center E	Newark, NJ	70.3%	2,387	2,374	97.9%	78.3%	Improvement Needed

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