

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 72.8%
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	92.5%	1,505	3,489	95.2%	62.7%	Improvement Needed
Distribution Center B	Dallas, TX	51.8%	1,551	1,969	99.1%	72.0%	Improvement Needed
Distribution Center C	Atlanta, GA	55.1%	2,628	2,379	96.5%	61.0%	Improvement Needed
Distribution Center D	Los Angeles, CA	66.3%	2,129	3,366	98.9%	75.5%	Improvement Needed
Distribution Center E	Newark, NJ	47.2%	1,653	3,061	96.6%	92.9%	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