

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 74
Average Utilization: 82.2%
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	51.4%	1,791	2,633	96.4%	77.2%	Improvement Needed
Distribution Center B	Dallas, TX	80.0%	2,170	2,186	97.1%	67.1%	Improvement Needed
Distribution Center C	Atlanta, GA	69.6%	2,430	1,774	95.2%	92.8%	Optimized
Distribution Center D	Los Angeles, CA	32.8%	2,376	1,758	95.6%	80.5%	Optimized
Distribution Center E	Newark, NJ	80.9%	2,929	2,930	97.8%	93.4%	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