

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 81.1%
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	87.4%	1,897	3,021	97.6%	77.5%	Improvement Needed
Distribution Center B	Dallas, TX	71.0%	1,427	3,537	99.0%	62.6%	Improvement Needed
Distribution Center C	Atlanta, GA	76.7%	2,361	2,220	96.6%	88.9%	Optimized
Distribution Center D	Los Angeles, CA	35.7%	1,873	1,934	96.4%	86.5%	Optimized
Distribution Center E	Newark, NJ	68.8%	2,493	3,081	97.7%	90.0%	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