

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: 81.3%
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	69.8%	1,978	3,248	97.5%	74.3%	Improvement Needed
Distribution Center B	Dallas, TX	66.9%	1,481	1,781	97.3%	84.5%	Optimized
Distribution Center C	Atlanta, GA	103.5%	1,327	3,167	96.6%	67.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	84.2%	2,814	3,881	98.1%	87.6%	Optimized
Distribution Center E	Newark, NJ	86.1%	2,290	3,757	98.7%	92.3%	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