

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 66
Average Utilization: 81.4%
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	68.9%	1,538	3,811	98.9%	70.8%	Improvement Needed
Distribution Center B	Dallas, TX	66.0%	1,003	2,943	97.6%	80.5%	Optimized
Distribution Center C	Atlanta, GA	65.5%	1,816	3,880	95.2%	84.4%	Optimized
Distribution Center D	Los Angeles, CA	54.7%	1,078	1,907	96.3%	86.6%	Optimized
Distribution Center E	Newark, NJ	59.2%	1,175	2,966	98.9%	84.4%	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