

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 61
Average Utilization: 79.7%
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	69.9%	1,855	3,832	98.5%	74.2%	Improvement Needed
Distribution Center B	Dallas, TX	54.2%	2,087	2,701	98.9%	91.4%	Optimized
Distribution Center C	Atlanta, GA	82.2%	2,269	2,562	98.0%	92.0%	Optimized
Distribution Center D	Los Angeles, CA	72.9%	1,655	2,091	97.1%	80.2%	Optimized
Distribution Center E	Newark, NJ	51.3%	1,176	2,801	99.0%	60.6%	Improvement Needed

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