

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 36
Average Utilization: 83.7%
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	39.2%	2,149	1,759	95.5%	66.5%	Improvement Needed
Distribution Center B	Dallas, TX	80.1%	1,107	1,984	95.6%	80.0%	Optimized
Distribution Center C	Atlanta, GA	56.8%	1,592	1,568	95.9%	91.7%	Optimized
Distribution Center D	Los Angeles, CA	33.2%	2,147	3,967	96.2%	90.1%	Optimized
Distribution Center E	Newark, NJ	110.3%	1,912	3,124	95.6%	90.2%	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