

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 30
Average Utilization: 83.5%
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	48.3%	1,157	2,120	96.1%	76.3%	Improvement Needed
Distribution Center B	Dallas, TX	72.1%	1,488	1,904	97.6%	93.8%	Optimized
Distribution Center C	Atlanta, GA	43.4%	1,074	3,133	96.8%	84.2%	Optimized
Distribution Center D	Los Angeles, CA	52.8%	1,182	3,282	97.1%	81.1%	Optimized
Distribution Center E	Newark, NJ	69.6%	1,909	1,666	96.1%	81.8%	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