

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 79.6%
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	60.3%	2,555	1,958	98.8%	62.7%	Improvement Needed
Distribution Center B	Dallas, TX	86.6%	2,630	2,309	95.7%	81.8%	Optimized
Distribution Center C	Atlanta, GA	79.2%	2,455	1,948	96.4%	90.9%	Optimized
Distribution Center D	Los Angeles, CA	90.0%	1,491	2,266	95.4%	76.6%	Improvement Needed
Distribution Center E	Newark, NJ	31.2%	2,296	2,090	96.8%	86.1%	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