

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 23
Average Utilization: 81.1%
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	77.3%	1,877	2,223	97.0%	69.7%	Improvement Needed
Distribution Center B	Dallas, TX	37.3%	2,231	2,569	98.2%	80.9%	Optimized
Distribution Center C	Atlanta, GA	61.9%	2,741	2,824	95.2%	81.3%	Optimized
Distribution Center D	Los Angeles, CA	35.5%	1,300	3,905	95.3%	89.2%	Optimized
Distribution Center E	Newark, NJ	90.4%	2,760	2,788	96.0%	84.6%	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