

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 82.1%
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	45.9%	2,182	2,472	96.2%	78.6%	Improvement Needed
Distribution Center B	Dallas, TX	44.2%	1,550	3,717	97.4%	93.5%	Optimized
Distribution Center C	Atlanta, GA	52.9%	2,751	2,319	98.4%	93.2%	Optimized
Distribution Center D	Los Angeles, CA	41.3%	2,123	2,744	98.0%	81.4%	Optimized
Distribution Center E	Newark, NJ	73.7%	2,242	3,037	95.7%	63.6%	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