

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 86.1%
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	71.5%	2,292	3,714	95.9%	79.4%	Improvement Needed
Distribution Center B	Dallas, TX	45.7%	1,394	2,467	97.5%	70.4%	Improvement Needed
Distribution Center C	Atlanta, GA	47.7%	1,590	3,282	98.0%	94.2%	Optimized
Distribution Center D	Los Angeles, CA	70.5%	2,859	3,213	96.8%	93.2%	Optimized
Distribution Center E	Newark, NJ	57.3%	2,852	3,507	98.3%	93.5%	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