

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 83.9%
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	76.0%	2,346	3,071	95.2%	74.2%	Improvement Needed
Distribution Center B	Dallas, TX	92.0%	1,282	3,569	98.1%	90.3%	Optimized
Distribution Center C	Atlanta, GA	55.4%	1,734	1,648	97.1%	75.1%	Improvement Needed
Distribution Center D	Los Angeles, CA	44.0%	2,624	2,905	98.6%	87.8%	Optimized
Distribution Center E	Newark, NJ	61.8%	1,844	2,788	98.5%	92.1%	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