

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 45
Average Utilization: 82.2%
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	77.5%	1,398	3,502	97.2%	67.5%	Improvement Needed
Distribution Center B	Dallas, TX	81.4%	2,570	1,631	96.9%	81.4%	Optimized
Distribution Center C	Atlanta, GA	53.6%	1,476	3,838	95.9%	93.6%	Optimized
Distribution Center D	Los Angeles, CA	39.0%	1,656	1,799	95.1%	90.4%	Optimized
Distribution Center E	Newark, NJ	74.4%	2,279	2,983	98.4%	77.9%	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