

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 63
Average Utilization: 81.9%
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	120.0%	2,878	3,451	96.1%	72.2%	Improvement Needed
Distribution Center B	Dallas, TX	64.7%	1,404	1,580	99.2%	81.2%	Optimized
Distribution Center C	Atlanta, GA	48.7%	1,099	3,427	97.8%	90.0%	Optimized
Distribution Center D	Los Angeles, CA	68.7%	2,524	3,213	95.6%	90.5%	Optimized
Distribution Center E	Newark, NJ	73.7%	2,466	1,980	99.4%	75.5%	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