

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 47
Average Utilization: 78.8%
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	64.4%	1,632	3,658	98.1%	61.2%	Improvement Needed
Distribution Center B	Dallas, TX	46.2%	1,242	3,023	98.7%	65.9%	Improvement Needed
Distribution Center C	Atlanta, GA	79.6%	1,657	3,605	96.6%	91.5%	Optimized
Distribution Center D	Los Angeles, CA	51.3%	2,580	3,424	99.2%	85.5%	Optimized
Distribution Center E	Newark, NJ	94.7%	2,137	3,465	95.6%	90.1%	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