

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 84.1%
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	37.4%	1,705	1,960	96.7%	74.3%	Improvement Needed
Distribution Center B	Dallas, TX	51.5%	1,029	3,062	97.0%	94.3%	Optimized
Distribution Center C	Atlanta, GA	61.3%	2,623	2,333	95.4%	91.5%	Optimized
Distribution Center D	Los Angeles, CA	62.1%	1,174	3,584	99.4%	86.1%	Optimized
Distribution Center E	Newark, NJ	80.2%	1,656	1,727	98.9%	74.5%	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