

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: 72.1%
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	80.0%	1,799	2,893	98.9%	63.7%	Improvement Needed
Distribution Center B	Dallas, TX	78.8%	2,538	1,966	96.6%	72.5%	Improvement Needed
Distribution Center C	Atlanta, GA	105.3%	1,366	3,401	97.3%	66.8%	Improvement Needed
Distribution Center D	Los Angeles, CA	70.8%	1,547	1,759	99.0%	74.3%	Improvement Needed
Distribution Center E	Newark, NJ	118.7%	1,826	2,101	97.6%	83.5%	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