

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 49
Average Utilization: 72.5%
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	42.3%	1,617	1,854	98.5%	69.6%	Improvement Needed
Distribution Center B	Dallas, TX	50.5%	2,369	3,788	97.5%	71.2%	Improvement Needed
Distribution Center C	Atlanta, GA	79.4%	1,775	1,933	96.3%	91.5%	Optimized
Distribution Center D	Los Angeles, CA	71.2%	1,510	3,373	97.6%	69.4%	Improvement Needed
Distribution Center E	Newark, NJ	41.9%	2,662	3,953	96.8%	61.0%	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