

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 64
Average Utilization: 77.0%
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	40.6%	2,030	1,701	96.7%	64.7%	Improvement Needed
Distribution Center B	Dallas, TX	70.4%	1,193	3,448	98.2%	70.2%	Improvement Needed
Distribution Center C	Atlanta, GA	51.4%	1,158	1,887	97.4%	79.7%	Improvement Needed
Distribution Center D	Los Angeles, CA	93.2%	2,820	2,050	97.4%	92.8%	Optimized
Distribution Center E	Newark, NJ	65.4%	2,884	2,477	98.3%	77.7%	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