

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: 85.3%
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	93.0%	2,161	1,519	99.5%	85.9%	Optimized
	Dallas, TX	47.8%	1,276	1,799	96.4%	91.8%	Optimized
Distribution Center B	Atlanta, GA	75.3%	2,392	2,627	96.0%	94.5%	Optimized
Distribution Center C	Los Angeles, CA	53.6%	1,337	1,743	99.3%	66.0%	Improvement Needed
Distribution Center D	Newark, NJ	110.4%	2,862	2,752	96.8%	88.3%	Optimized
Center E							

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