

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 82.7%
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	57.8%	1,912	2,116	96.8%	69.8%	Improvement Needed
Distribution Center B	Dallas, TX	81.9%	2,213	2,441	96.4%	93.6%	Optimized
Distribution Center C	Atlanta, GA	41.2%	2,670	1,865	97.6%	83.9%	Optimized
Distribution Center D	Los Angeles, CA	76.3%	2,205	3,036	99.1%	84.1%	Optimized
Distribution Center E	Newark, NJ	123.1%	1,384	1,753	97.4%	82.0%	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