

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 43
Average Utilization: 86.9%
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	64.0%	1,103	3,886	96.1%	72.9%	Improvement Needed
Distribution Center B	Dallas, TX	41.0%	2,987	1,873	96.2%	89.7%	Optimized
Distribution Center C	Atlanta, GA	61.2%	2,097	3,004	97.0%	94.7%	Optimized
Distribution Center D	Los Angeles, CA	55.9%	1,925	2,243	98.1%	89.1%	Optimized
Distribution Center E	Newark, NJ	41.7%	2,521	1,725	96.7%	88.0%	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