

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 30
Average Utilization: 83.2%
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	89.1%	2,417	2,516	98.4%	76.9%	Improvement Needed
Distribution Center B	Dallas, TX	50.9%	2,260	3,539	97.5%	80.7%	Optimized
Distribution Center C	Atlanta, GA	52.9%	1,075	1,949	98.4%	89.7%	Optimized
Distribution Center D	Los Angeles, CA	68.9%	2,271	2,908	95.5%	86.7%	Optimized
Distribution Center E	Newark, NJ	64.6%	2,314	2,523	97.0%	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