

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 44
Average Utilization: 83.5%
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	50.9%	2,303	2,646	97.5%	93.6%	Optimized
	Dallas, TX	47.8%	2,468	2,652	98.8%	69.7%	Improvement Needed
Distribution Center B	Atlanta, GA	52.4%	2,493	3,633	95.6%	84.9%	Optimized
Distribution Center C	Los Angeles, CA	108.9%	2,673	3,646	97.9%	75.5%	Improvement Needed
Distribution Center D	Newark, NJ	60.1%	2,493	3,793	96.9%	93.9%	Optimized
Distribution 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