

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: 83.8%
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	42.7%	2,980	3,391	98.5%	67.1%	Improvement Needed
Distribution Center B	Dallas, TX	82.4%	1,170	2,727	97.0%	87.4%	Optimized
Distribution Center C	Atlanta, GA	74.9%	1,864	1,842	95.9%	94.0%	Optimized
Distribution Center D	Los Angeles, CA	91.8%	1,563	1,668	98.5%	89.5%	Optimized
Distribution Center E	Newark, NJ	96.1%	2,350	2,463	97.1%	80.7%	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