

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 63
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	53.2%	2,678	3,759	97.5%	72.5%	Improvement Needed
Distribution Center B	Dallas, TX	97.3%	1,816	3,331	96.5%	70.1%	Improvement Needed
Distribution Center C	Atlanta, GA	111.3%	2,354	3,572	98.5%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	59.1%	2,249	2,111	98.5%	89.2%	Optimized
Distribution Center E	Newark, NJ	42.1%	1,061	2,650	95.1%	89.2%	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