

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 57
Average Utilization: 84.1%
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	77.6%	1,425	1,641	97.5%	73.4%	Improvement Needed
Distribution Center B	Dallas, TX	53.0%	1,674	3,511	97.4%	83.5%	Optimized
Distribution Center C	Atlanta, GA	86.0%	1,104	1,961	96.6%	91.9%	Optimized
Distribution Center D	Los Angeles, CA	56.2%	2,558	2,412	98.1%	84.4%	Optimized
Distribution Center E	Newark, NJ	60.4%	2,207	2,547	98.9%	87.6%	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