

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 80.2%
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	59.4%	1,737	3,327	96.2%	61.5%	Improvement Needed
Distribution Center B	Dallas, TX	52.5%	1,012	3,173	99.5%	86.4%	Optimized
Distribution Center C	Atlanta, GA	120.4%	2,221	2,486	97.0%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	63.1%	2,926	1,974	95.0%	89.9%	Optimized
Distribution Center E	Newark, NJ	73.3%	2,465	2,494	96.9%	68.4%	Improvement Needed

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