

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 33
Average Utilization: 80.8%
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	78.3%	1,166	3,138	97.8%	62.6%	Improvement Needed
Distribution Center B	Dallas, TX	70.8%	1,031	2,746	96.7%	93.5%	Optimized
Distribution Center C	Atlanta, GA	116.2%	2,127	2,991	95.4%	67.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	61.6%	1,022	2,400	96.0%	88.3%	Optimized
Distribution Center E	Newark, NJ	37.9%	1,472	2,205	96.2%	92.0%	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