

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 42
Average Utilization: 86.1%
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	50.7%	1,517	2,623	97.1%	65.1%	Improvement Needed
Distribution Center B	Dallas, TX	46.4%	1,912	3,308	98.5%	91.1%	Optimized
Distribution Center C	Atlanta, GA	78.4%	2,240	2,097	98.2%	94.8%	Optimized
Distribution Center D	Los Angeles, CA	90.2%	1,215	3,364	98.9%	87.1%	Optimized
Distribution Center E	Newark, NJ	88.7%	1,316	2,911	95.5%	92.4%	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