

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 46
Average Utilization: 80.1%
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	73.3%	1,431	3,040	95.7%	77.5%	Improvement Needed
Distribution Center B	Dallas, TX	79.8%	1,237	3,739	95.6%	69.7%	Improvement Needed
Distribution Center C	Atlanta, GA	113.5%	1,991	3,799	99.1%	86.0%	Optimized
Distribution Center D	Los Angeles, CA	83.9%	1,455	3,465	99.1%	88.2%	Optimized
Distribution Center E	Newark, NJ	73.1%	1,254	1,589	96.9%	79.4%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robots in Warehouse 1 to reduce downtime by 15%

ment voice-
picking
system to
improve
accuracy to
99.8%

- Upgra
de WMS
integration
for real-time
inventory
visibility

- Add au
tomated
sortation
system for
small
package
handling

- Imple
ment
predictive
analytics for
demand-
based
staffing

- Consid
er AS/RS
system for
high-
velocity
SKUs