

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 81.3%
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	63.3%	2,310	2,924	99.2%	76.2%	Improvement Needed
Distribution Center B	Dallas, TX	82.6%	1,530	2,412	97.6%	92.4%	Optimized
Distribution Center C	Atlanta, GA	38.0%	2,751	1,878	95.3%	74.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	74.3%	1,130	2,869	97.9%	71.1%	Improvement Needed
Distribution Center E	Newark, NJ	107.3%	2,816	3,131	97.0%	92.1%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for all automated systems

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