

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 51
Average Utilization: 79.5%
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	47.7%	1,707	2,116	96.6%	74.7%	Improvement Needed
Distribution Center B	Dallas, TX	71.9%	2,193	2,053	97.0%	74.2%	Improvement Needed
Distribution Center C	Atlanta, GA	57.2%	1,100	3,432	95.5%	72.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	80.8%	1,025	2,176	97.4%	89.3%	Optimized
Distribution Center E	Newark, NJ	71.0%	2,612	1,983	96.5%	87.0%	Optimized

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