

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 50
Average Utilization: 74.5%
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	75.7%	2,507	3,017	98.0%	71.2%	Improvement Needed
Distribution Center B	Dallas, TX	67.4%	1,154	2,149	96.1%	86.8%	Optimized
Distribution Center C	Atlanta, GA	41.6%	1,577	3,061	97.9%	81.7%	Optimized
Distribution Center D	Los Angeles, CA	45.7%	1,553	3,672	95.2%	61.5%	Improvement Needed
Distribution Center E	Newark, NJ	47.6%	2,561	1,536	97.1%	71.3%	Improvement Needed

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Imple

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