

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 22
Average Utilization: 72.1%
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	41.3%	1,266	2,798	95.8%	61.3%	Improvement Needed
Distribution Center B	Dallas, TX	38.4%	1,539	2,691	98.4%	60.7%	Improvement Needed
Distribution Center C	Atlanta, GA	31.6%	1,870	3,801	96.3%	67.5%	Improvement Needed
Distribution Center D	Los Angeles, CA	65.8%	1,192	3,410	96.2%	88.5%	Optimized
Distribution Center E	Newark, NJ	68.8%	2,325	3,082	96.4%	82.4%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

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