

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: 78.6%
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	86.1%	1,213	1,734	96.1%	72.6%	Improvement Needed
Distribution Center B	Dallas, TX	32.9%	1,543	3,541	98.3%	76.4%	Improvement Needed
Distribution Center C	Atlanta, GA	37.9%	2,350	1,917	97.8%	85.9%	Optimized
Distribution Center D	Los Angeles, CA	43.0%	2,651	3,363	95.4%	68.1%	Improvement Needed
Distribution Center E	Newark, NJ	78.4%	1,036	2,041	97.2%	90.1%	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