

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 39
Average Utilization: 78.4%
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	77.6%	2,385	1,524	99.1%	78.8%	Improvement Needed
Distribution Center B	Dallas, TX	90.0%	1,106	3,811	95.2%	79.0%	Improvement Needed
Distribution Center C	Atlanta, GA	98.1%	2,727	1,994	99.0%	63.6%	Improvement Needed
Distribution Center D	Los Angeles, CA	37.3%	1,642	2,125	96.5%	84.0%	Optimized
Distribution Center E	Newark, NJ	132.5%	1,950	3,210	96.3%	86.7%	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