

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 63
Average Utilization: 77.2%
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	53.2%	2,940	2,656	97.1%	64.1%	Improvement Needed
Distribution Center B	Dallas, TX	57.5%	2,200	3,271	98.9%	67.7%	Improvement Needed
Distribution Center C	Atlanta, GA	80.2%	2,106	1,676	97.2%	82.6%	Optimized
Distribution Center D	Los Angeles, CA	51.6%	2,600	1,644	96.5%	77.3%	Improvement Needed
Distribution Center E	Newark, NJ	84.3%	1,788	3,485	99.0%	94.2%	Optimized

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