

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 69
Average Utilization: 80.4%
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	89.7%	2,782	2,797	97.3%	79.6%	Improvement Needed
Distribution Center B	Dallas, TX	48.3%	2,195	2,124	98.2%	71.0%	Improvement Needed
Distribution Center C	Atlanta, GA	102.0%	2,273	1,506	97.1%	80.7%	Optimized
Distribution Center D	Los Angeles, CA	31.4%	1,064	3,835	95.5%	76.8%	Improvement Needed
Distribution Center E	Newark, NJ	114.8%	1,592	1,959	98.0%	94.0%	Optimized

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for all automated systems

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