

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 48
Average Utilization: 80.8%
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	63.6%	2,966	3,197	96.8%	76.1%	Improvement Needed
Distribution Center B	Dallas, TX	89.9%	1,392	1,816	96.1%	79.4%	Improvement Needed
Distribution Center C	Atlanta, GA	46.2%	2,335	3,282	95.6%	69.4%	Improvement Needed
Distribution Center D	Los Angeles, CA	62.9%	2,567	1,870	97.9%	94.0%	Optimized
Distribution Center E	Newark, NJ	51.6%	2,045	2,777	96.7%	85.2%	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