

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: 72.0%
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	45.6%	1,907	1,663	98.1%	80.2%	Optimized
	Dallas, TX	44.5%	1,830	3,766	97.4%	66.7%	Improvement Needed
Distribution Center B	Atlanta, GA	115.9%	2,380	2,219	95.5%	64.2%	Improvement Needed
Distribution Center D	Los Angeles, CA	47.6%	2,312	1,878	98.0%	80.7%	Optimized
Distribution Center E	Newark, NJ	116.6%	1,968	2,398	96.7%	68.3%	Improvement Needed

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