

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 31
Average Utilization: 82.2%
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	109.5%	2,060	2,786	98.4%	71.6%	Improvement Needed
Distribution Center B	Dallas, TX	98.5%	1,488	3,918	96.9%	79.8%	Improvement Needed
Distribution Center C	Atlanta, GA	55.7%	1,962	3,867	96.7%	93.5%	Optimized
Distribution Center D	Los Angeles, CA	79.4%	2,628	1,674	99.0%	90.3%	Optimized
Distribution Center E	Newark, NJ	57.8%	2,939	2,640	98.2%	76.0%	Improvement Needed

Optimization Opportunities

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