

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 70
Average Utilization: 77.9%
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 | 102.4% | 2,903 | 1,829 | 95.2% | 89.4% | Optimized |
| | Dallas, TX | 60.8% | 2,503 | 3,003 | 95.3% | 65.4% | Improvement Needed |
| Distribution Center B | Atlanta, GA | 64.3% | 2,201 | 3,275 | 97.6% | 93.7% | Optimized |
| Distribution Center C | Los Angeles, CA | 74.7% | 1,740 | 3,329 | 98.9% | 78.4% | Improvement Needed |
| | Newark, NJ | 68.1% | 1,336 | 2,511 | 98.9% | 62.8% | Improvement Needed |

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