

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 38
Average Utilization: 75.7%
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 | 38.4% | 2,399 | 3,084 | 97.2% | 70.7% | Improvement Needed |
| Distribution Center B | Dallas, TX | 55.7% | 2,285 | 3,896 | 98.6% | 80.1% | Optimized |
| Distribution Center C | Atlanta, GA | 97.0% | 1,725 | 1,909 | 95.8% | 69.5% | Improvement Needed |
| Distribution Center D | Los Angeles, CA | 74.0% | 2,058 | 3,002 | 98.5% | 69.5% | Improvement Needed |
| Distribution Center E | Newark, NJ | 44.2% | 1,833 | 2,619 | 96.6% | 88.7% | 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