

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 30
Average Utilization: 78.6%
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 | 107.4% | 1,016 | 3,323 | 96.8% | 93.2% | Optimized |
| | Dallas, TX | 49.4% | 1,551 | 3,155 | 95.3% | 80.3% | Optimized |
| Distribution Center B | Atlanta, GA | 68.5% | 2,422 | 2,134 | 98.6% | 70.9% | Improvement Needed |
| Distribution Center C | Los Angeles, CA | 54.8% | 1,319 | 3,088 | 97.9% | 71.1% | Improvement Needed |
| Distribution Center D | Newark, NJ | 94.1% | 2,762 | 1,804 | 95.3% | 77.5% | 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