

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 34
Average Utilization: 80.2%
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 | 60.3% | 1,867 | 2,198 | 97.0% | 93.3% | Optimized |
| | Dallas, TX | 98.9% | 2,084 | 1,985 | 97.9% | 78.5% | Improvement Needed |
| Distribution Center B | Atlanta, GA | 123.3% | 2,528 | 2,728 | 97.3% | 81.7% | Optimized |
| | Los Angeles, CA | 114.6% | 1,460 | 2,296 | 95.4% | 67.0% | Improvement Needed |
| Distribution Center C | Newark, NJ | 53.4% | 1,276 | 1,552 | 97.1% | 80.4% | Optimized |

Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement voice-

picking
system to
improve
accuracy to
99.8%

- Upgrade WMS integration for real-time inventory visibility

- Add automated sortation system for small package handling

- Implement predictive analytics for demand-based staffing

- Consider AS/RS system for high-velocity SKUs