

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 53
Average Utilization: 81.3%
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 | 61.6% | 2,089 | 3,980 | 99.0% | 92.7% | Optimized |
| | Dallas, TX | 94.7% | 1,020 | 3,322 | 95.1% | 88.5% | Optimized |
| | Atlanta, GA | 65.5% | 1,014 | 2,772 | 97.6% | 61.2% | Improvement Needed |
| Distribution Center B | Los Angeles, CA | 48.9% | 1,649 | 3,361 | 99.5% | 69.5% | Improvement Needed |
| Distribution Center C | Newark, NJ | 80.2% | 2,990 | 1,788 | 98.8% | 94.8% | 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