

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 54
Average Utilization: 79.0%
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 | 33.4% | 2,076 | 2,948 | 95.6% | 82.2% | Optimized |
| | Dallas, TX | 81.1% | 1,642 | 2,845 | 97.0% | 74.2% | Improvement Needed |
| Distribution Center B | Atlanta, GA | 82.1% | 1,618 | 2,912 | 97.6% | 82.3% | Optimized |
| | Los Angeles, CA | 98.4% | 1,324 | 1,856 | 95.1% | 91.4% | Optimized |
| Distribution Center D | Newark, NJ | 81.5% | 2,431 | 2,140 | 97.7% | 64.9% | Improvement Needed |
| | | | | | | | |

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