

Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 41
Average Utilization: 84.1%
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 | 85.8% | 1,667 | 2,917 | 97.8% | 92.9% | Optimized |
| | Dallas, TX | 67.3% | 1,753 | 2,076 | 97.8% | 86.8% | Optimized |
| Distribution Center B | Atlanta, GA | 60.3% | 2,355 | 2,907 | 97.5% | 88.8% | Optimized |
| Distribution Center C | Los Angeles, CA | 79.1% | 1,844 | 2,458 | 97.8% | 64.7% | Improvement Needed |
| Distribution Center D | Newark, NJ | 72.1% | 2,830 | 2,087 | 95.4% | 87.4% | Optimized |
| Center E | | | | | | | |

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