

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 55  
Average Utilization: 86.9%  
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	54.6%	2,548	2,585	98.5%	93.6%	Optimized
	Dallas, TX	47.0%	1,561	2,342	95.8%	90.9%	Optimized
Distribution Center B	Atlanta, GA	79.2%	1,956	3,271	97.2%	72.9%	Improvement Needed
Distribution Center C	Los Angeles, CA	39.2%	1,367	1,943	95.7%	91.9%	Optimized
Distribution Center D	Newark, NJ	61.8%	1,879	3,981	95.8%	85.4%	Optimized
Distribution 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