

# Warehouse Automation Analytics

## Performance metrics and automation optimization insights

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Use Case: warehouse-automation

### Automation Overview

Total Warehouses: 5  
Total Robots: 44  
Average Utilization: 86.6%  
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	77.4%	2,244	3,978	96.8%	94.5%	Optimized
	Dallas, TX	47.6%	1,278	3,448	97.2%	81.3%	Optimized
Distribution Center B	Atlanta, GA	89.8%	1,993	1,635	95.8%	80.2%	Optimized
Distribution Center C	Los Angeles, CA	40.4%	2,235	3,161	96.7%	84.9%	Optimized
Distribution Center D	Newark, NJ	88.5%	1,357	3,731	97.4%	91.9%	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