

# 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: 75.2%  
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	35.2%	1,809	2,878	95.6%	85.9%	Optimized
	Dallas, TX	85.7%	1,605	2,072	95.1%	73.0%	Improvement Needed
Distribution Center B	Atlanta, GA	70.5%	2,966	1,738	98.8%	82.1%	Optimized
Distribution Center C	Los Angeles, CA	68.8%	2,222	2,145	95.7%	62.0%	Improvement Needed
	Newark, NJ	54.0%	1,923	3,799	95.5%	73.1%	Improvement Needed

### Optimization Opportunities

- Deploy 5 additional AGVs in Warehouse 3 to increase throughput by 20%
- Implement predictive maintenance for robotic arms

ment voice-  
picking  
system to  
improve  
accuracy to  
99.8%

- Upgra  
de WMS  
integration  
for real-time  
inventory  
visibility

- Add au  
tomated  
sortation  
system for  
small  
package  
handling

- Imple  
ment  
predictive  
analytics for  
demand-  
based  
staffing

- Consid  
er AS/RS  
system for  
high-  
velocity  
SKUs