Warehouse Automation Analytics

Performance metrics and automation optimization insights

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Use Case: warehouse-automation

Automation Overview

Total Warehouses: 5
Total Robots: 32
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	45.4%	1,802	3,655	99.5%	90.7%	Optimized
Distribution Center B	Dallas, TX	105.3%	2,292	3,704	96.4%	87.6%	Optimized
Distribution Center C	Atlanta, GA	55.7%	2,283	3,424	95.4%	87.1%	Optimized
Distribution Center D	Los Angeles, CA	69.7%	1,700	3,030	98.2%	89.4%	Optimized
Distribution Center E	Newark, NJ	64.3%	2,793	2,898	97.1%	65.8%	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