

# Warehouse Packing System

A barcode-driven, video-recorded packing solution solution that delivers real-time tracking and verifiable proof for every order — built for accountability at scale.

# The Problem: Packing Without Proof

## No Tracking

Manual packing processes leave no digital trail. Orders move through fulfillment with zero visibility into who packed what and when.

## No Proof

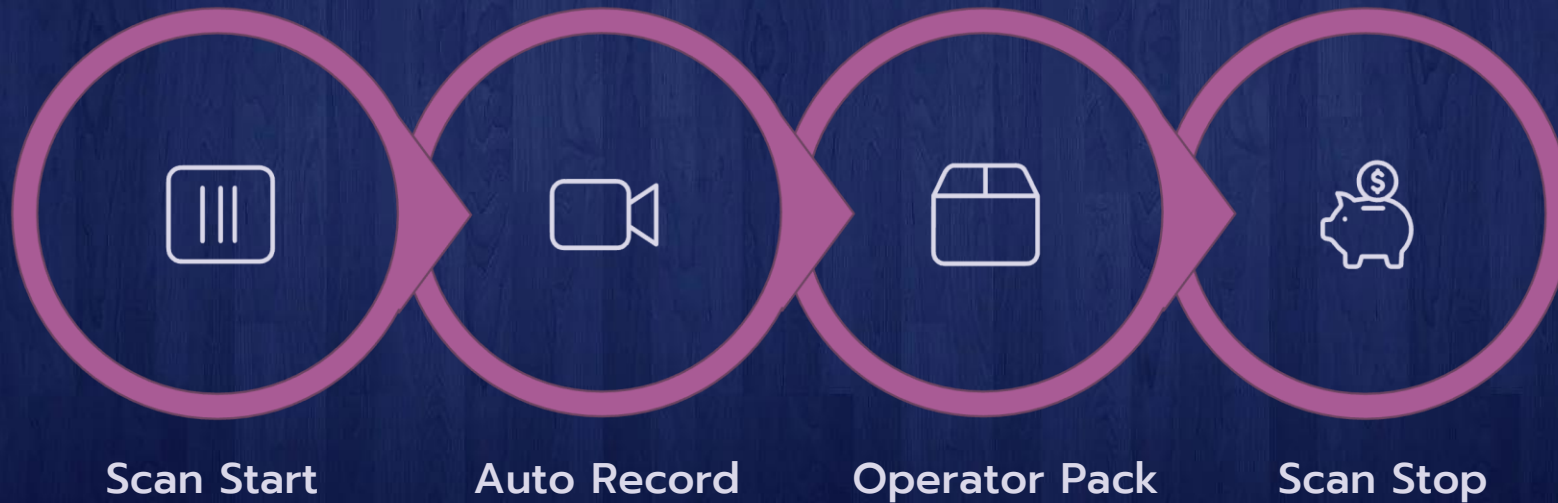
Without video or timestamped records, disputes over damaged or missing items are impossible to resolve fairly.

## No Auditing

Supervisors cannot audit operations in real time or after the fact, making it hard to identify bottlenecks or errors.

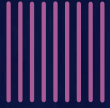
# Solution Overview

A streamlined, scan-first workflow that automatically captures video evidence for every packed order — with no extra steps from the operator.



Every scan triggers a timestamped video record, linking each order to a specific user, table, and camera — creating an immutable audit trail.

# Key Features



## Auto Scan Detection

System instantly recognizes barcode scans and triggers recording without manual input.



## Live 2-Min Timer

On-screen countdown keeps packers on pace and flags unusually long or short sessions.



## Video Proof Per Order

Every order gets a dedicated video clip stored with metadata for instant retrieval.



## User-Table-Camera Mapping

Admins assign each station to a specific user and user and camera for precise accountability.



## Admin Dashboard

Centralized control panel for managing users, stations, and reviewing all packing records.

# How It Works: The Packing Workflow



01

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## Scan Order Barcode

Operator scans the order to initiate the session.

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## Timer & Recording Start

Camera activates automatically; 2-minute countdown appears on screen.

03

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## Pack the Item

Operator completes packing while video captures the full process.

04

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## Stop timer to save video

Second scan ends recording and saves the video with a timestamp.

05

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## Video Saved to Database

Clip is linked to the order, user, and station for future audit.

# Admin Dashboard

## User Management

Create and manage operator accounts, assign roles, and control access control access to packing stations.

## Table & Camera Assignment

Map each packing table to a specific camera and user for precise station-level tracking.

## Live Scan Monitoring

Supervisors can view all active and recent scans across the warehouse in real time.

## Reports & Audit Logs

Generate reports by user, date, or order — with direct access to linked video evidence.




# Operator Dashboard

## Designed for the Floor

The operator interface is intentionally simple — minimal clicks, clear prompts, and zero friction during high-volume packing.

- Scan-first operation — no typing required
- Live timer popup keeps pace visible
- Real-time status updates on screen
- Works on low-spec hardware

 Operators can complete a full pack-pack-and-record cycle in under 2 under 2 minutes of active interaction.



# Measurable Benefits

## 100%

### Orders with Video Proof

Every packed order is automatically recorded — no gaps, gaps, no exceptions.

## 2 min

### Max Pack Timer

## 0

### Manual Logging Steps

Fully automated capture eliminates data-entry errors errors and saves operator time.

## 24/7

### Audit Availability

Recordings and logs are accessible anytime for dispute resolution or compliance reviews.

# What's Next: Future Enhancements

The system is built to scale. Upcoming enhancements will add intelligence, flexibility, and deeper insights for growing operations.

## Multi-Table Scaling

Support for high-density packing floors with dozens of simultaneous stations.

## AI-Based Monitoring

Automated anomaly detection to flag unusual packing behavior or missed steps.

## Cloud Storage

Offload video archives to the cloud for long-term retention and remote access.

## Analytics Dashboard

Advanced reporting on throughput, error rates, and operator performance trends.