

Automate your pallet identification process with the Integrated Pallet Labeling System



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Introduction

AutoCoding Systems provide a fully integrated pallet labeling solution that improves the efficiency of the palletizing process and ensures that pallets of products are identified and labeled correctly.

If your manufacturing plant produces a variety of goods for different customers, our automated solution can help save time and eliminate the risk of costly human error.



Features and Benefits

Integrates with the rest of your Business

- ☞ Easily integrates with critical business layers like ERP and WMS systems
- ☞ Works with all leading pallet labeling equipment
- ☞ Increases efficiency of warehouse management organization
- ☞ Interacts and interfaces with palletizer conveyor controls
- ☞ Removes the need for operators to input data on labels or control labelers



Built-in Exception Handling

- ☞ Detects and accurately labels non-sequential pallets from multiple lines
- ☞ Monitors printer status and notifies operators of alarms through a web-based user interface
- ☞ Includes a manual label station as back-up
- ☞ Ability to reprint a previously printed label without affecting unique codes



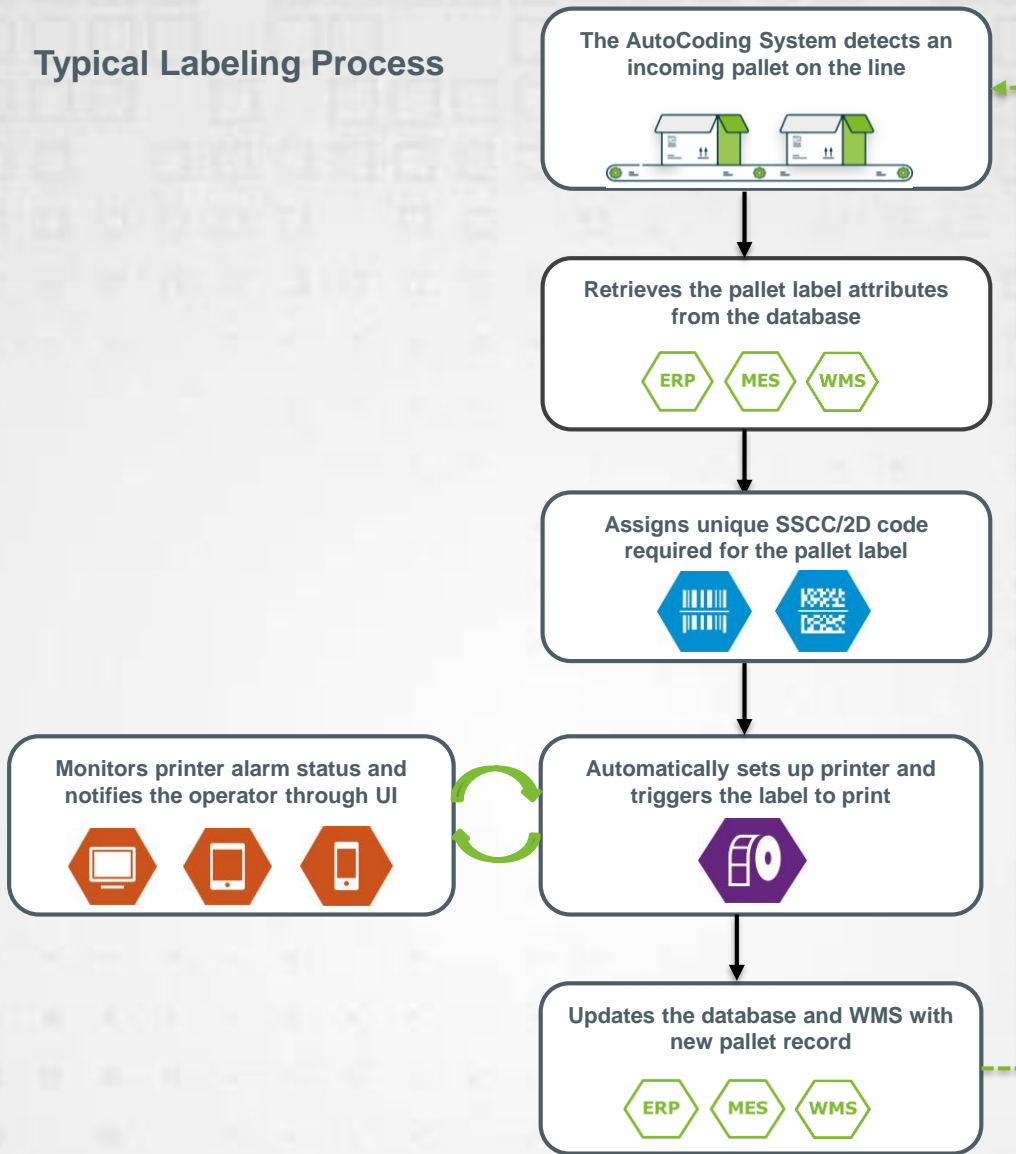
Shortcut to GS1 Compliance

- ☞ Auditable and controlled labeling of pallets ensures compliance with various food safety, retailer and distribution standards, including GS1
- ☞ Custom label layouts allow forklift operators to quickly locate pallets within the warehouse
- ☞ Provides a platform for full traceability of product, case and pallet aggregation



System Architecture

Typical Labeling Process



Once an incoming pallet is received, the AutoCoding system detects the pallet through I/O communication with an existing PLC or by triggering a scan of the cases of product on the pallet.

Connectivity to existing business systems, such as ERP/MES/WMS allows the AutoCoding system to retrieve the work order data for the product on the pallet. Date fields will be calculated and unique coding applied, as required.

Printer Status and Line Control is continuously monitored and visible through the web UI, allowing for automated job selection, label printing and application and resolution of any line controller or label applicator issues.

After the label is printed and scanned successfully, the AutoCoding system updates ERP/MES/WMS with completed pallet data and waits for the next pallet.

User Interface

The Integrated Pallet Labeling System user interface provides comprehensive visibility of the entire labeling process in real-time. It can be accessed from any PC, tablet, or mobile device via a standard web browser, allowing management or quality personnel to easily and efficiently oversee operations without the need to physically attend the palletizing line.

Functionality

System Status

Identifies the current position of the workflow for operators – includes; Waiting for Pallet, Pallet Received, Updating Printer, Printing Label, Applying Label, Updating Data Records, Pallet Complete

Device Status

Alerts operators to equipment status using color indicators - green, amber, red. This status may be mirrored to a nearby stack light if desired.

Label Preview

Offers a live visual of the label to be applied.

Database Record

Displays all data attributes recorded against the incoming pallet.

Pallet Release

Customizable manual overrides can be built into the system to allow operators to deviate from the standard workflow if necessary.

Search Pallets

Provides the ability to look up or check details on completed pallets in the system. Can be used for quality purposes or for reprinting a damaged or lost label.

The screenshot displays the AutoCoding software interface for 'Automatic Labeling'. The top navigation bar shows 'Line: Palleting - Automatic', 'Workflow: Line', and 'Operator: ADM'. The main content area features a table with the following data:

WID Number	ProductID	Description	CountryCode	Quantity	Pallet ID	RotationDate	BedBeforeDate	RunDate
650032	040688	Honey Roast Peanut	USA	001	08616505	20180806	06-AUG-18	27/07/18

Below the table, there are three panels: 'Updating Printer...' (showing a progress indicator), 'Label Preview' (displaying a sample label for 'Honey Roast Peanut' with barcode and date '06-AUG-18'), and 'Device Status' (showing 'Palletizing Automatic Printer - M2200' in green, 'Pallet Label Automatic Printing' in green, 'Palletizing Incoming Data - PLC' in green, and 'Pallet Data' in green). At the bottom, there are buttons for 'Pallet Release' and 'Search Pallets'.

Pallet labeling overview

Controlled Labeling

GS1 Compliance

Validation is paramount in GS1-compliant unit tracking. This GS1 standard includes the concept of Application Identifiers (AI's) to standardize printed elements, so they can be read and understood by any system in the supply chain.

The AutoCoding system ensures that each AI is valid by encoding the data directly from the product attributes held in the database and through calculated date fields such as the Best Before and Production Date. Unique SSCC codes can be generated by the system and include the Company ID, pallet Serial Number and calculated check digits.

Communicates with WMS, making pallets easier to identify in the warehouse. 2D codes can be embedded with works order numbers to help fork lift drivers identify and transfer pallets quickly.

PLC / IO integration to record and gather production data.

Connectivity to existing business planning systems in combination with Calculated Best Before Dates from the AutoCoding System Database ensures 100% accurate labels.

Generates code in compliance with GS1 standards (GS1-128 and SSCC-18)

865052

Line ID: 6 ProductionDate/Time:27/07/18 16:07 Qty: 055

(01)05000137236964

SSCC# 350001685386165052

Honey Roast Peanut Product # **0049683**

Best Before Date **06-AUG-18** Pallet # **38616505**

(02)05000137236964(11)180727(15)180806(30)055

(00)350001685386165052

Full Traceability

Through system integration, traceability elements like Production Line ID, Lot Code and Production Date/Time can be added to the label and subsequently stored in the production database. This information is invaluable for linking production activities to shipping activities in the event of a recall without destructive teardown of finished pallets.



With over 10 years' experience and a new product platform which is the result of over 40 man years of recent development, AutoCoding Systems is a leader in packaging and coding control systems in the food and beverage industry. With over 800 lines under AutoCoding Systems' control in the US, UK and Australia, we are proud to name many of the world's largest food companies as our customers.

With a full product installation and after sales support team, AutoCoding Systems manages the compliance of coding and packaging on millions of products every single day. AutoCoding Systems offers a completely vendor independent solution which provides our customers with complete freedom of choice of coding and printing technologies from all the leading suppliers in the industry, thanks to our historic and continued development of our driver library and the excellent partnerships we have with all the world's leading coding and marking equipment suppliers.

For more information, please don't hesitate to contact us for a free, no obligation review of your pallet labeling needs.

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