

Produce Packers – Track & Trace Barcodes

Application Focus: Provide a means for Produce Packing house to easily print industry recommended track and trace bar codes on their cases

Target SICs:

Citrus Fruit Processing	0723-03
Citrus Packers	0723-04
Fruit & Produce Packers	0723-07
Nuts Edible Processing	0723-08

Target Customers:

Produce Packing Houses

Key Benefits

- Produce Industrial standard, verifiable barcodes directly on cases.
- Retain low per box coding costs with a higher quality and more legible code.

Application Brief: The Produce Marketing Association has developed recommendations for case bar coding formats to support the produce packing house track and trace initiative. The components of the bar code are a manufacturer/product code and lot code embedded into a bar code that follows GTIN bar code recommendations. Currently most packing houses utilize either pre-printed cases with the product bar code pre-printed on the side of each case. Since the lot code is variable this solution will no longer work. The packing houses need to implement on-line case coding system. The two possible solutions are high resolution ink jet or a labeling system.

Equipment List:

Before



After





Application Analysis

Customer: Medium to Large Produce Packing Houses.

Customer Goals:

1. Add industrial standard barcode to existing print format
2. Simplify Lot Code Changeover
3. Maintain low box coding costs

Customer's Current Carton Coding The current coding equipment that the Packing houses typically use pre-printed cartons, low resolution valvejet type systems, or roller coders.

Process:

Example of Customer's Current Label Layouts (does not include barcode now required):



*Note: 675842 is the Product Number
DEC 01 2005 is the date*

Proposed System: Utilizing the Marksman Pro controller and the ProSeries 384 or 768 printhead, the customer will print both the human readable information as well as the industry standard barcode in a single pass without the modification of any existing machinery. The advanced task creation software will allow the user to input all formats before the production run to simplify batch changeover time. When the operator starts a message task the message will prompt the operator to enter the lot number via the keyboard. Once the operator presses the enter key the message is ready to print with the lot code encoded into the bar code. Additionally the Marksman Pro is capable of accepting data and commands via the serial port or Ethernet port enabling the process to be automated.



Installation Details

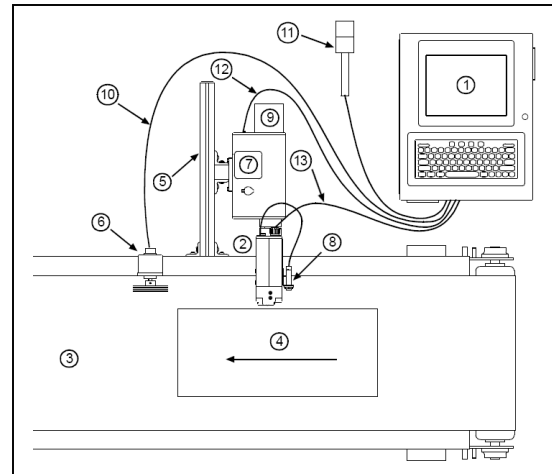
Installation Brief: Each system takes approximately 4 - 6 hours to install and train line workers to operate and maintain. In addition, the person who is responsible for all message design should expect to spend a few hours with the distributor technician learning how to create, edit and otherwise manage the message database.

Equipment Layout:

See Figure on Right (Note Modular Units not shown)

1. Marksman Pro Controller
2. ProSeries 384/768 Printhead
3. Conveyor*
4. Produce Carton*
5. Bracketry System
6. Encoder
7. Ink Bottle
8. Photosensor
9. APS Waste Collection Bottle
10. Encoder Cable
11. Strobe Beacon
12. APS Data Cable
13. Printhead Data Cable

*Customer Supplied Equipment



Total System Cost: \$12,500 for the ProSeries 384 systems and for the ProSeries 768 system, \$16,500, excluding one day installation and training labor.

(Per Line)

Goal Analysis:

1. Low cost per case: the cost per print for with the ProSeries 384 is \$0.0036 per print at \$245 per bottle with 67,500 prints per bottle. The cost per print for with the ProSeries 768 is \$0.0076 per print at \$245 per bottle with 33,000 prints per bottle.
2. Meet the recommended track and trace compliance requirements as outlined by the Produce Marketing Association.
3. Implementation target times:
 1. Brand Owners must assign 14-digit GTINs for all case configurations. COMPLETE BY: Q1 2009
 2. Brand Owners must provide and maintain their GTINs (and corresponding data) to their buyers. COMPLETE BY: Q3 2009
 3. Those packing the product are responsible for providing human-readable information on each case GTIN and LOT #). COMPLETE BY: Q3 2010
 4. Those packing the product are responsible for encoding the GTIN and the Lot # in a GS1-128 barcode and human readable. COMPLETE BY: Q3 2010



ProSeries 768 Print with 29 mil barcode



ProSeries 384 Print with 22 mil barcode



Standard Industrial Classification Code

0723: Crop Preparation Services for Market, Except Cotton Ginning

SIC Code Description:

Establishments primarily engaged in performing services on crops, subsequent to their harvest, with the intent of preparing them for market or further processing. Establishments primarily engaged in buying farm products for resale to other than the general public for household consumption and which also prepare them for market or further processing are classified in Wholesale Trade. Establishments primarily engaged in stemming and redrying tobacco are classified in Manufacturing, Industry 2141.

Product Examples:

Bean cleaning
Corn shelling
Cotton seed delinting
Drying of corn, rice, hay, fruits, and vegetables
Flax decorticating and retting
Fruit precooling, not in connection with transportation
Fruit vacuum cooling
Grain cleaning
Grain fumigation
Grain grinding, custom
Moss ginning

Nut hulling and shelling
Packaging fresh or farm dried fruits and vegetables
Peanut shelling, custom
Potato curing
Seed cleaning
Sorting, grading, and packing of fruits and vegetables
Sweet potato curing
Tobacco grading
Vegetable precooling, not in connection with transportation
Vegetable vacuum cooling