# *Industrial standard barcodes on Tray Packaging*

**Application Focus:** Replace manual entry low-resolution coders such as valve printers and roller coders with the sophisticated and easy to use Marksman Pro controller with the capability of printing industry standard barcode directly to the case.

**Target SICs:**

| | |
|---|---|
| Canned Specialties | 2032 |
| Canned Fruit/Jams/Jellies | 2033 |
| Dog and Cat Food | 2047 |
| Canned and Cured Seafood | 2091 |

**Target Customers:**

Canning Manufacturers using tray packs

**Key Benefits**

- Produce Industrial standard, verifiable barcodes directly on tray packs.
- Retain low per box coding costs with a higher quality and more legible code.
- Quickly and easily change print formats utilizing the Scan and Shoot Process.

**Application Brief:** In the past, canning facilities were simply required to place product information as well as variable date and time information. End-users of these products such as distribution centers are now requiring the addition of a shipping barcode to be placed on the cartons to correctly sort in an automated receiving system. To accomplish this, pairing a Marksman Pro controller with a ProSeries 192 printhead, the customer is able to code required human readable information along with an industry standard barcode that is 99.9% decodable. No modification to the production line machinery is necessary as the ProSeries 192 printhead can be fitted with a special nosepiece and modular ink system to fit into the tight quarters that are required on tray packing machinery.

**Equipment List:**

**Before**

MANUAL LOW RESOLUTION CODER

**After**

FoxJet Marksman Pro Case Coding System featuring the ProSeries 192 printhead

## Application Analysis

**Customer:** Large nationwide vegetable canning facility.

**Customer Goals:**
1. Add industrial standard barcode to existing print format
2. Simplify batch changeover process
3. Maintain low box coding costs

**Customer's Current Carton Coding Process:** The current coding equipment that the bottler uses is a low-resolution valve inkjet system. As the system is limited in its variable coding capabilities, the operators must manually key in much of the data that is printed on the tray pack. Because the customer utilizes a britepack canning process producing small batches, this human interface with the controller is time consuming and in some instances results in keystroke and other errors. In addition, evolving standards in the industry require the application of barcodes on each case shipped. Valve printers do not have the capability of printing these barcodes.

**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 of canning*

**Proposed System:** Utilizing the Marksman Pro controller and the ProSeries 192 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. In order to "call-up" these formats for printing, the line operator will use a PSC hand scanner and simply scan a barcode on the individual vegetable can. The Marksman Pro will receive and start the corresponding task for printing on the Marksman Pro controller. The ProSeries 192 printhead with the modular kit option will enable the customer to add the printhead to their existing tight-quarters production line without any modification to their canning machinery.

## Installation Details

**Installation Brief:** After removing the existing valve coders, the customer installed ten full systems as documented below. Each line took approximately 6-8 hours to install and train line workers to operate and maintain. In addition, the production line supervisor, who is responsible for all message design, spent a few hours with the distributor technician learning how to create, edit and otherwise manage the message database.

**Equipment Layout:**

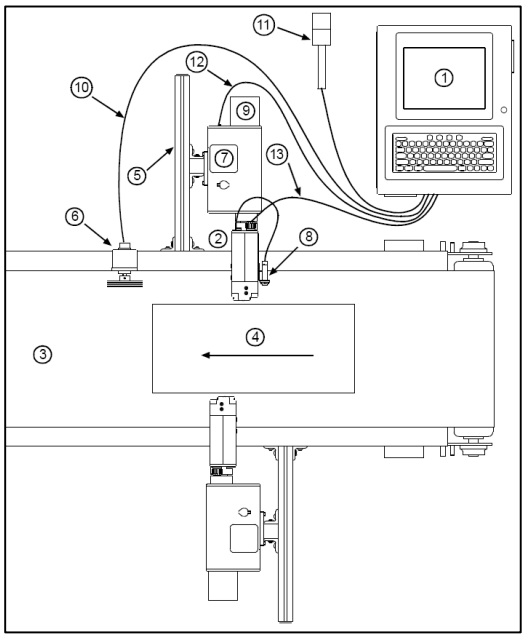
*See Figure on Right (Note Modular Units not shown)*

1. Marksman Pro Controller
2. ProSeries 192 Printhead Qty. 2
3. Canning System*
4. Can Tray Pack*
5. Bracketry System Qty. 2
6. Encoder
7. Ink Bottle Qty. 2
8. Photosenser
9. APS Waste Collection Bottle Qty. 2
10. Encoder Cable
11. Strobe Beacon
12. APS Data Cable Qty. 2
13. Printhead Data Cable Qty. 2

*Not Shown*

1. Modular Printhead Kit Qty. 2
2. PSC PowerScan Scanner
3. Controller Power Cable

**Customer Supplied Equipment*



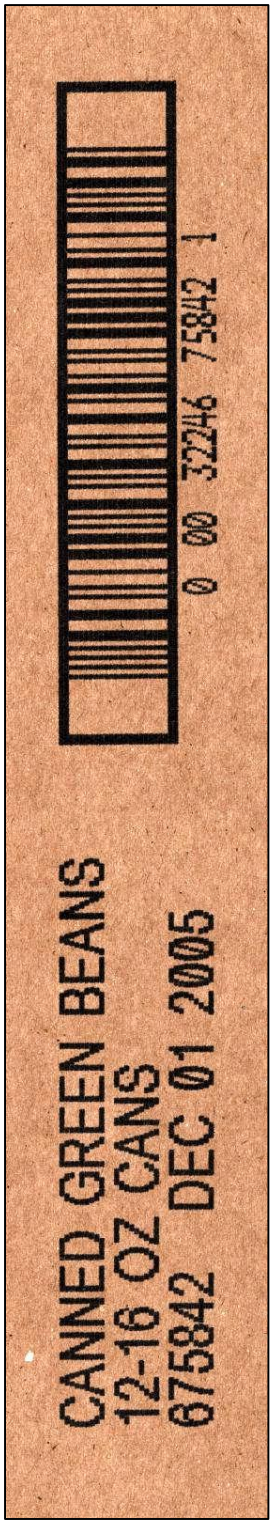

**Total System Cost:** $20,000 including one day installation and training labor. (Per Line)

**Goal Analysis:**

1. After the Marksman system was installed, the customer instigated a barcode verification sampling process. Over a period of three months, barcode decodability proved to be at levels higher than 99% satisfying the requirements of the customer.

2. Batch changeover time was dramatically reduced involving almost no line operator attention to setup the next code for printing. The line operator need only scan the individual vegetable can's UPC code to start the corresponding tray pack code for printing.

3. Although the high resolution coding solution turned out to be slightly higher than the valve counterparts averaging around $.006 per box. During the quoting phase, the customer found that competing technologies such as labels could average as high as $.05 per box.




**Reformatted code produced with the ProSeries 192 printhead**

## Standard Industrial Classification Code

### *2032: Canned Specialties*

SIC Code Description:

Establishments primarily engaged in canning specialty products, such as baby foods, nationality specialty foods, and soups, except seafood. Establishments primarily engaged in canning seafoods are classified in Industry 2091.

Product Examples:

Baby foods (including meats), canned
Bean sprouts, canned
Beans, baked: with or without meat-canned
Broth, except seafood: canned
Chicken broth and soup, canned
Chili con carne, canned
Chinese foods, canned
Chop suey, canned
Chow mein, canned
Enchiladas, canned
Food specialties, canned
Italian foods, canned
Macaroni, canned
Mexican foods, canned
Mincemeat, canned
Nationality specialty foods, canned
Native foods, canned
Pasta, canned
Puddings, except meat: canned
Ravioli, canned
Soups, except seafood: canned
Spaghetti, canned
Spanish foods, canned
Tamales, canned
Tortillas, canned

### *2033: Canned Fruits, Vegetables, Preserves, Jams, and Jellies*

SIC Code Description:

Establishments primarily engaged in canning fruits, vegetables, and fruit and vegetable juices; and in manufacturing catsup and similar tomato sauces, or natural and imitation preserves, jams, and jellies. Establishments primarily engaged in canning seafoods are classified in Industry 2091; and those manufacturing canned specialties, such as baby foods and soups, except seafood, are classified in Industry 2032.

Product Examples:

Artichokes in olive oil, canned
Barbecue sauce
Catsup
Cherries, maraschino
Chili sauce, tomato
Fruit butters
Fruit pie mixes
Fruits, canned
Hominy, canned
Jams, including imitation
Jellies, edible: including imitation
Juice, fruit: concentrated-hot pack
Juices, fresh: fruit or vegetable
Juices, fruit and vegetable: canned or fresh
Ketchup
Marmalade
Mushrooms, canned
Nectars, fruit
Olives, including stuffed: canned
Pastes, fruit and vegetable
Preserves, including imitation
Purees, fruit and vegetable
Sauces, tomato-based
Sauerkraut, canned
Seasonings (prepared sauces), tomato
Spaghetti sauce
Tomato juice and cocktails, canned
Tomato paste
Tomato sauce
Vegetable pie mixes
Vegetables, canned

## Standard Industrial Classification Code (Cont.)

### *2047: Dog and Cat Fooc*

SIC Code Description:

Establishments primarily engaged in manufacturing dog and cat food from cereal, meat, and other ingredients. These preparations may be canned, frozen, or dry. Establishments primarily engaged in manufacturing feed for animals other than dogs and cats are classified in Industry 2048.

Product Examples:

Cat Food
Dog Food

### *2091: Canned and Cured Fishand S eaf oods*

SIC Code Description:

Establishments primarily engaged in cooking and canning fish, shrimp, oysters, clams, crabs, and other seafoods, including soups; and those engaged in smoking, salting, drying, or otherwise curing fish and other seafoods for the trade. Establishments primarily engaged in shucking and packing fresh oysters in nonsealed containers, or in freezing or preparing fresh fish, are classified in Industry 2092.

Product Examples:

Canned fish, crustacea, and mollusks
Caviar, canned
Chowders, fish and seafood: canned
Clam bouillon, broth, chowder, juice: bottled or canned
Codfish: smoked, salted, dried, and pickled
Crab meat, canned and cured
Finnan haddie (smoked haddock)
Fish and seafood cakes: canned
Fish egg bait, canned
Fish, canned and cured
Fish: cured, dried, pickled, salted, and smoked
Herring: smoked, salted, dried, and pickled
Mackerel: smoked, salted, dried, and pickled
Oysters, canned and cured
Salmon: smoked, salted, dried, canned, and pickled
Sardines, canned
Shellfish, canned and cured
Shrimp, canned and cured
Soups, fish and seafood: canned
Stews, fish and seafood: canned
Tuna fish, canned