

**Reduce box inventory and associated costs**

**Application Focus:** Replace large volumes of preprinted boxes and outdated date and time coding equipment with low-cost, high-resolution direct to case coding equipment.

**Target SICs:**

Cosmetics and Perfumes      2844

**Target Customers:**

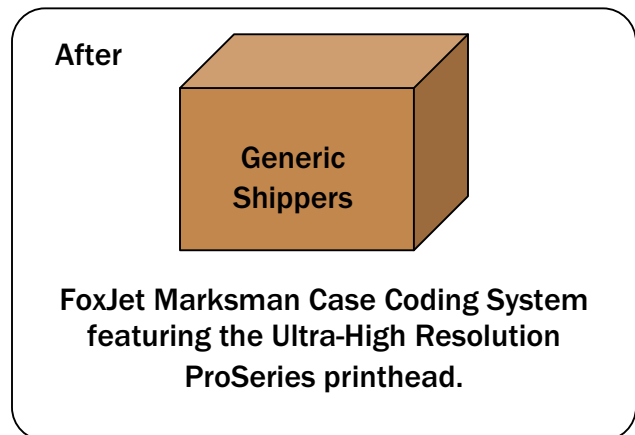
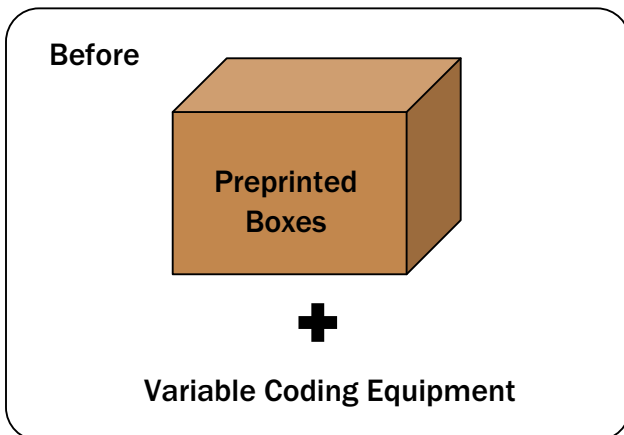
Shampoo and Hair Care Manufacturers  
Shaving and Toiletry Manufactures

**Key Benefits**

- Reduce Box Inventory requirements
- Eliminate or Reduce Box changeover costs
- Replicate preprinted box side with single ProSeries 768 printhead
- Reduce product changeover time by quickly and easily changing the label format using the integrated Marksman Pro touchscreen.

**Application Brief:** In order to meet the varying demands of consumers, almost all manufacturers produce multiple items whose only difference is a flavor or style. The corrugated box size is the same, the brand is the same, but the carton contents may slightly change from batch to batch. Customers who continue to use pre-printed boxes accumulate an enormous box inventory rivaling their raw inventory for the actual consumer product they manufacture. In addition, retailers require a variable identification mark to be applied to each individual shipper case in order to identify batch, lot, and other variable information. To accomplish this, the manufacturer must marry the pre-printed box with a typically low resolution coder. The solution for these manufacturers is generic cases, possibly as few as one or two boxes sizes, paired with an ultra-high resolution ProSeries printhead able to code logos, product identification, and variable lot/date information. Ultimately, the customer is left with a manageable box inventory, lower labor costs, and high-quality reproductions of the pre-printed box format.

**Equipment List:**





### Application Analysis

**Customer:** High-volume hair care manufacturer located in the northeast.

**Customer Goals:**

1. Reduce Box Inventory and costs associated.
2. Maintain or Beat Pre-printed Coding Quality
3. Simplify Existing Carton Coding Process

**Customer's Current Carton Coding Process:** Currently, the customer utilizes a dual-coding system. A pre-printed box provides the fixed product information such as logos and product description. In addition, the customer is using outdated low-resolution inkjet coders to print variable date and time information. Before each batch, inventory personnel must transport the previous batch's pre-printed leftover boxes to the box inventory warehouse and transport the next batch's pre-printed boxes to the factory floor. While the line is down waiting for this process to complete, the line worker must change the code on the variable coder, which in this case is a manual process. Typically, the size of the shipper does not change only the internal product. The customer also maintains significant warehouse floor space for the pre-printed box inventory.

**Example of Customer's Current Pre-printed Layout (identical code on each side):**



**Proposed System:** By installing a Marksman Pro controller with two ProSeries 768 printheads, the manufacturer will be able to reproduce the preprinted boxes at nearly the same size and same quality. Frequent movement of boxes in and out of the warehouse facility to meet varying batch needs will be eliminated and a minimal set of generic shippers will be used for all products. The Marksman Pro will code all of the product information and variable date and time information in one single pass. Costs associated with maintaining pre-printed inventory noted in the payback section are reduced or eliminated. The process of batch changeover was reduced to simply starting a task and entering the Batch information that was automatically prompted for by the system.



**Installation Details**

**Installation Brief:** The customer initially installed ten production lines as detailed 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:**

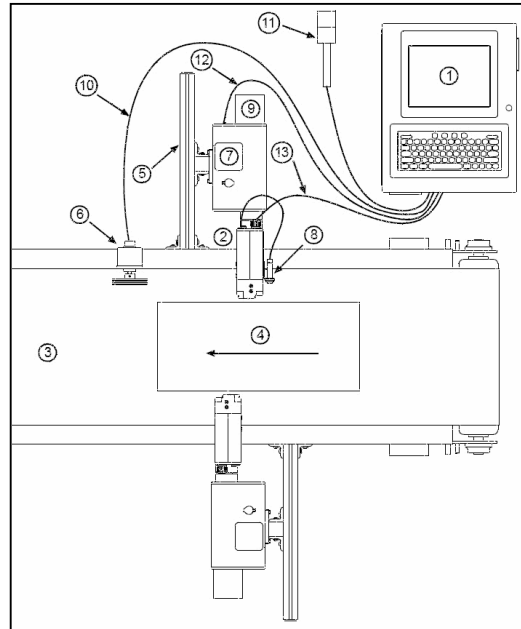
See Figure on Right

- |                                |        |
|--------------------------------|--------|
| 1. Marksman Pro Controller     |        |
| 2. ProSeries 768 Printhead     | Qty. 2 |
| 3. Conveyor Belt System*       |        |
| 4. Generic Shipper*            |        |
| 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. Controller Power Cable

\*Customer Supplied Equipment



**Total System Cost:** \$28,000 including one day installation and training labor.  
(Per Line)

**Payback:** Payback occurred at just over **10 weeks** with annual savings of **\$140,000**.  
(Per Line)

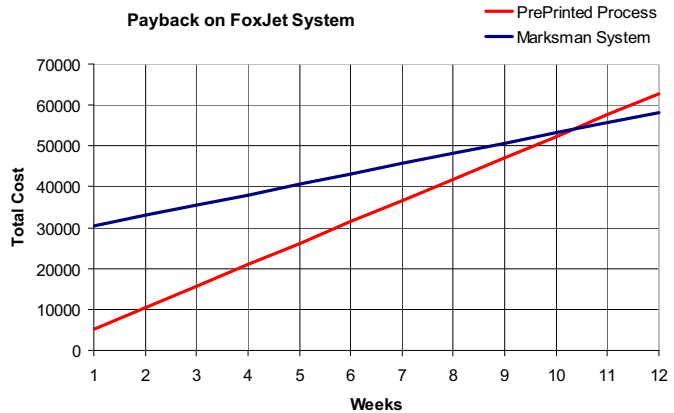
**Based On:** 125,000 weekly box volume

Old System

- \$.005 Variable Coder Ink Cost
  - \$.035 Variable Cost per Box\*
  - Forklift Maintenance/Labor and associated production downtime
  - Box Inventory & Warehouse costs
  - Fees associated with small pre-printed box runs
  - Pre-printed box waste for damage
- \*Calculated by Customer's Analysis

FoxJet System

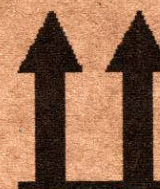
\$28,000 System & \$.02 cost per box





24-300 ML BOTTLES  
LEAVE-IN CONDITIONER  
FRESH BREEZE

FOR U.S. EXPORT ONLY



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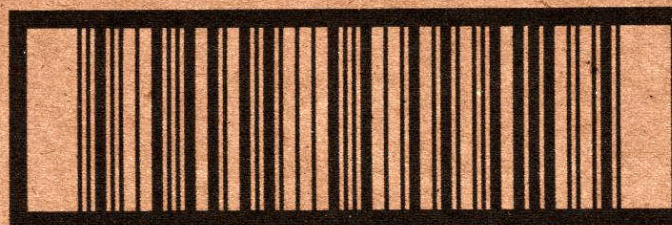
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ACME HAIR CARE  
123 BROAD ST.  
BUFFALO, NY 01234



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Reformatted code produced with the ProSeries 768 printhead



## Standard Industrial Classification Code

### *2844: Perfumes, Cosmetics, and Other Toilet Preparations*

#### SIC Code Description:

Establishments primarily engaged in manufacturing perfumes (natural and synthetic), cosmetics, and other toilet preparations. This industry also includes establishments primarily engaged in blending and compounding perfume bases; and those manufacturing shampoos and shaving products, whether from soap or synthetic detergents. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in Industry 2869, and those manufacturing essential oils are classified in Industry 2899.

#### Product Examples:

Bath salts	Home permanent kits
Bay rum	Lipsticks
Body powder	Manicure preparations
Colognes	Mouthwashes
Concentrates, perfume	Perfume bases, blending and compounding
Cosmetic creams	Perfumes, natural and synthetic
Cosmetic lotions and oils	Sachet
Cosmetics	Shampoos, hair
Dentifrices	Shaving preparations: e.g., cakes, creams, lotions, powders, tablets
Denture cleaners	Soap impregnated papers and paper washcloths
Deodorants, personal	Suntan lotions and oils
Depilatories, cosmetic	Talcum powders
Dressings, cosmetic	Toilet creams, powders, and waters
Face creams and lotions	Toilet preparations
Face powders	Toothpastes and powders
Hair coloring preparations	Towelettes, premoistened
Hair preparations: dressings, rinses, tonics, and scalp conditioners	Washes, cosmetic