



## **FOX IV Supplies Made-to-Application Labeling Systems for Automotive Industry Supplier**

### **Features and Benefits**

- Automation of labeling onto existing production lines
- Accurate label placement
- Systems designed for specific applications
- Large capacity for extended production

### **Industry Group:**



***FOX IV's ability to build systems to meet application specific requirements along with their rugged, reliable equipment design enabled the customer to implement the correct labeling solution on both production lines as well as on their product transfer line.***



*FOX IV's 6956 Zebra based print and apply labeling system applying a 6" x 4" label to the plastic cover of automotive front seats.*

### **AUTOMOTIVE SEAT LABELING**

#### **BACKGROUND:**

A large automotive industry supplier needed to automate the labeling on two production lines. The customer had previously purchased FOX IV automated print and apply systems for two of their other plant locations. Due to the success of the systems in the other locations and FOX IV's ability to design application specific systems, the company went forward with purchasing their new print and apply systems from FOX IV.

#### **APPLICATION:**

Customer needed to print and apply 4 x 6" labels to various configurations of automotive seats and to their transfer carts. The front automotive seats were fully assembled and upright. The customer wished to place the label onto the loose plastic cover over the seat on the front/seating side at a specific height. The distance from the edge of the conveyor to the label contact area was between 23 and 26". The seat would be stopped when the label was applied and a print/apply signal would be provided by the customer.

In addition to the front automotive seats, several configurations of folding rear seats also needed to have

labels applied to the backs of the seats that were presented in a folded position. The folded seat backs were angled and the labels would not be in the same position on every folded seat configuration. There was an eight inch variance in the folded seat heights that had to be accommodated in addition to being able to adjust for the different angles and label locations on each type of seat. Once again, the seats would be stopped for labeling.

Finally, the customer needed to apply two labels simultaneously to their product transfer carts. Two carts were stacked and conveyed via tracks to the labeling station. The carts would be in the same position every time. The customer wanted both labels to be printed and applied at simultaneously. One label needed to be applied at 19" above floor level and the other at 66" above floor level.

The maximum label application rate per minute would be 4 labels/minute and the systems would need to operate 24/7.

#### ***ENVIRONMENT/SPECIAL CONDITIONS:***

Temperature controlled factory environment.

#### **SOLUTION:**

FOX IV designed three labeling stations as needed for the various production lines. The customer requested that Zebra print engines be used; therefore, FOX IV models 6954 and 6956 [Zebra print and apply systems](#) with Programmable Logic Controllers (PLCs) were chosen for ease of integration and product consistency.

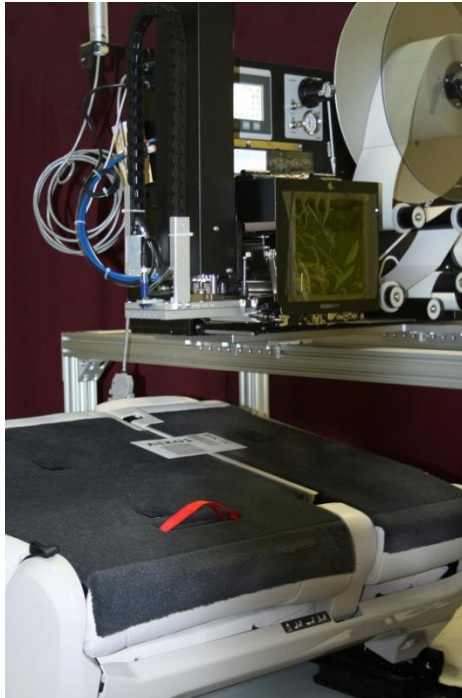
The front seat labeling system consisted of a 6956 with an extended 34" tamp tilt pad label applicator assembly including random distance sensing, Ethernet communications, a Ethernet/digital I/O package, fault/warning light tower, low label sensor, and a standard mounting stand. The system was set up in a "nose up" orientation to print and apply the label in a horizontal orientation 56" above floor level to the plastic cover over the seat. The customer's material handling control system sends a print/apply signal to the 6956 after the seat is in the proper position.

The rear seat labeling system required customization on the mounting. The model 6954 was mounted on a gantry style applicator mounting support over the folding seat production line for top down labeling of the folded seats. The gantry was designed and built by FOX IV to

accommodate the production line conveyor and available floor space. Additionally, the position of the print and apply system was able to be adjusted via a slide mechanism. The slide mechanism also enabled the 6954 to be moved to a more convenient position for label roll changes. The system itself consisted of the 6954 print and apply with a 17" tamp-blow application arm outfitted with random stroke. It also included Ethernet communication, Ethernet/digital I/O package, fault/warning light tower, and low label sensor.

For the transfer cart labeling, FOX IV supplied two 6954 print and apply systems mounted on a tower gantry, both applicators in the nose up orientation. The 6954's were mounted one over top of the other. Both had standard tamp application on 27" length cylinders, Ethernet communication, Ethernet/digital I/O packages, and fault/warning light towers. The print/apply signals were synced in order that both labels would be printed and applied at the same time.

Additionally, the customer chose to purchase their labels from FOX IV to ensure quality print and extend their factory warranty.



*Different configurations of rear folding seats are labeled with the FOX IV 6954 print and apply mounted on a FOX IV designed over-the-line gantry with equipment positioning slides.*

## **EQUIPMENT PROVIDED**

1 X 6956 Print and Apply System with options

- 16" OD label roll capacity for extended operation
- Zebra print module - 6" print width
- 34" extended length applicator arm
- Random stroke sensing
- Tilt-pad
- Ethernet/digital I/O package with light tower
- Ethernet Connectivity

1 x 6954 Print and Apply Systems with options

- 16" OD label roll capacity for extended operation
- Zebra print module - 4" print width
- 17" length applicator arm
- Random stroke sensing
- Tamp-Blow label application
- Ethernet/digital I/O package with light tower
- Ethernet Connectivity

2 x 6954 Print and Apply Systems with options

- 16" OD label roll capacity for extended operation
- Zebra print module - 4" print width
- 27" extended length applicator arm
- Tamp-pad label application
- Ethernet/digital I/O package with light tower
- Ethernet Connectivity

T-based mounting stand

FOX IV designed over-the-line gantry with slide system

FOX IV designed tower gantry

6 x 4 Direct Thermal Labels

4 x 6 Direct Thermal Labels

## **SERVICES PROVIDED:**

FAT Testing via video

Installation



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## **VIDEO URL:**

<https://youtu.be/vTLX3XjTZJ8>