

# Bottoms UP! Labeling Automotive Frames from Underneath

Automation Integrator



FOX IV Technologies, Inc.  
6011 Enterprise Dr., Export, PA  
15632  
724-387-3500  
sales@foxiv.com  
www.foxiv.com  
<https://www.youtube.com/foxiv>

*FOX IV's reputation in the automotive industry, the ease of integration of their 6954 print and apply, along with the proven industrial design made FOX IV equipment the best choice for automatically applying labels to the bottom of automobile frames.*

## Growth & Impact



**Increased**  
throughput  
rate



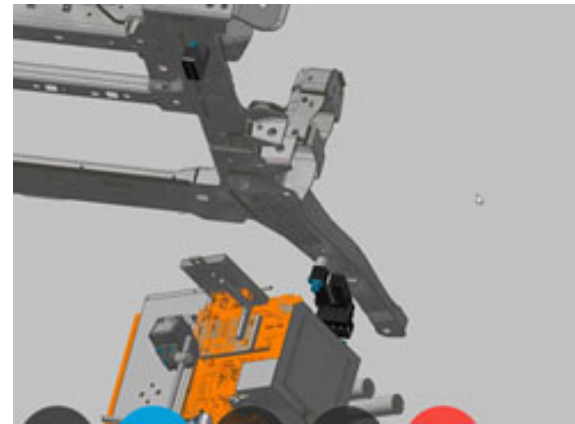
**Improved**  
label  
placement  
accuracy



**Enabled**  
labor to be  
reassigned

# Bottoms UP! Labeling Automotive Frames from Underneath

FOX IV's labeling system automated a previously manual process as part of a robotic line installation.



## Background

A national automation integrator and machinery manufacturer needed an industrial label print and apply for a project that were building for an automotive supplier to a major American automobile manufacturer. The print and apply would be integrated with a robotic system to automate a previously manual application.

### APPLICATION:

The end-user required a 25 mm x 50 mm label to be printed with a QR code and text then automatically applied to the bottom of their automotive frame at an average rate of 15 per minute with periodic maximum application rate of 20 per minute. Additional criteria included a very accurate label placement (+/- .063") and the ability to operate 24/7.

The labeling unit needed to be able to be mounted in an under-the-line position by the automation company, easily integrate with their robotic control system, and be durable enough for the industrial environment.

Industrial robots would place the automotive frames onto holding structures and the control software would send a signal to the print and apply unit for label printing and application. Afterward, the robots would remove the frame and return it to the production process.

### ENVIRONMENT/SPECIAL CONDITIONS:

Temperature controlled factory environment. Print and apply mounted by automation company to frame holding structures.

## Solution

FOX IV provided a 6954R2 Print and Apply system with PLC applicator control system, Ethernet connectivity, and a 203 dpi print engine and a 10" label applicator assembly. Two 6954's were mounted in an under-the-line orientation to holding structures for labeling the automotive frames after being alternately placed into the holding structures by a single industrial robot. The main control panels for the printer applicator were rotated accordingly so that they would be "right reading."

The FOX IV 6954s included a robotic interface package complete with Ethernet and Digital I/O, a three-color status light tower, and low label sensor. The 6954s received individual activation signals from the control system after the frames were accurately placed in the holders.

The addition of the FOX IV 6954 Print and Apply systems eliminated the supplier hand labeling, significantly increased efficiency, and improved label placement accuracy. Additionally, the proven industrial design provides the ability for the unit to continually function in the long term, given proper maintenance, as many FOX IV units have lasted over 20 years in service.

### SYSTEM COMPONENTS:

Two 6954 print and apply units, 10" tamp application assembly with swing-away bracket, Ethernet connectivity, robotic interface package, light tower, and low label sensor.

"The applicators save the cumbersome task of hand applying labels to difficult-to-reach places."

George Burns, Service Technician