



# JR AUTOMATION TECHNOLOGIES, LLC

## ROBOTIC VISOR ASSEMBLY CELL CASE STUDY

### INTELLIGENT DESIGNS

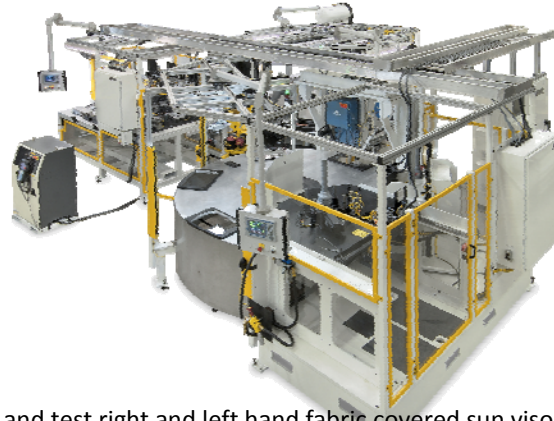
#### FAST FACTS:

- In business since 1980
- 120,000 sq. foot facility
- 210 employees
- North of Holland, MI

JR Automation Technologies, LLC staffs ingenious, qualified professionals who design and build solutions for efficiency and speed, customized for your specific needs. Whether that means machines or process development, the JR team has a smart, lean solution to your challenging project.



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#### CHALLENGE:

To assemble and test right and left hand fabric covered sun visors on a single assembly system with minimal operator contact and a 15 second cycle time. Cleanliness is important to avoid staining the light colored fabric.

#### SOLUTION:

- Multiple Vision Inspection Systems
- Robotic, Servo actuated inline, and indexing dial material handling systems
- Electrical & mechanical part testing
- Heated edgefold
- Label Application
- Heatstake
- Grease application
- Automated Mechanical Assembly

The JR team creates an effective assembly solution by integrating several different assembly processes and part handling methods. This solution decreases cycle time, reduces labor content and floor space, and improves part quality over the customer's existing stand alone assembly cells.

The resulting machine is capable of running several different versions of the customer's part, as well as right and left hand models with minimal changeover. At 13.5 seconds, the cycle time is well under the customer's expectations.

With the challenge of the sensitive material handling and the precision of the heated edgefold technique, this cell is a straight forward solution, but with a little added cool.

#### OUTCOMES & BENEFITS:

- Reduced labor content
- Less Work in Progress (One piece flow)
- ½ the floor space
- 13.5 second cycle time
- Slide out edgefold tool pack for ease of maintenance