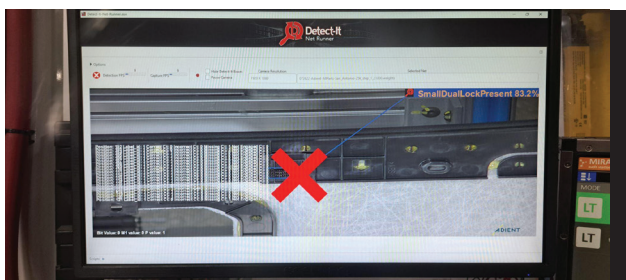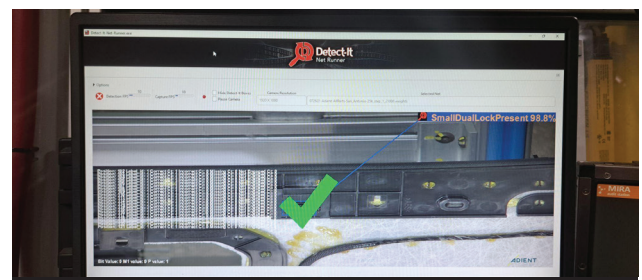# PTZOPTICS INDUSTRIAL MANUFACTURING CASE STUDY
with Adient Inc.

Adient Inc. is a global automotive industry manufacturer who builds Headliners and Seats. Based just outside Detroit, Adient Inc. operates a manufacturing facility in San Antonio, TX that was interested in using artificial intelligence to improve the overall quality of the manufacturing processes and reduce bad parts. The facility managers were particularly interested in detecting manufacturing defects that can periodically occur with the new "Dual Lock" systems they were building for the Toyota Motor Company.
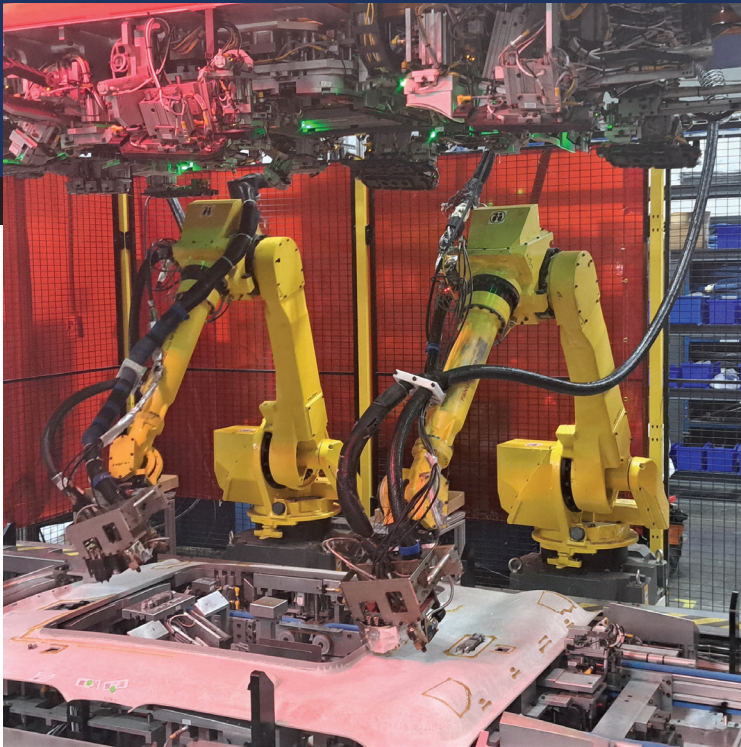
The new Dual Lock systems are considered a "mid-cycle" product change by Toyota and human operators were not reliably detecting manufacturing defects and missing components. Adient Inc. tested several artificial intelligence powered detection systems and concluded that Detect-It Software's Net Builder and Net Runner AI tools for manufacturing were the ideal solution. Each Dual Lock system can require up to 20 area checkpoints to be monitored by Detect-It. Instead of using a slate of static cameras moving over each part, Detect-IT designed their system to use 2 PTZOptics pan, tilt, and zoom (PTZ) cameras to scan each part from overhead.

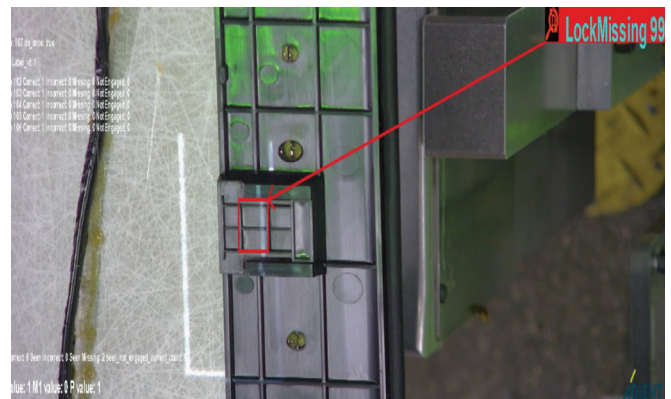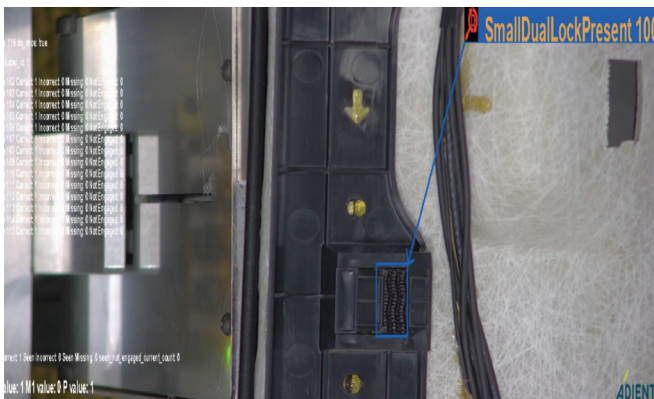*When a defective part is found the manager on duty is notified and the part does not advance further into production.*

Each successfully manufactured part is notated with a green check mark and allowed to continue the build process.

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The PTZOptics 20X-SDI cameras were set up with 20 PTZ preset locations which are recalled in sequence for multiple different components being built. For each part the Detect-IT system will instruct the camera to move quickly, scanning over 20 areas in less than 30 seconds. PTZOptics cameras feature preset recall accuracy of 0.1° which keeps the system moving quickly and efficiently.

Each Over Head System (OHS), is set up with two PTZOptics 20X-SDI-G2-WH cameras mounted to metal trussing and connected to Detect-It's system via ethernet cabling. Three systems have been set up in the facility to perform similar but unique processes to greatly improve the manufacturing process and reduce and almost eliminate bad parts from being produced.

You can learn more about Detect-IT's award winning AI system at: www.detect-it.ai.