Application Note: Stamped Pins

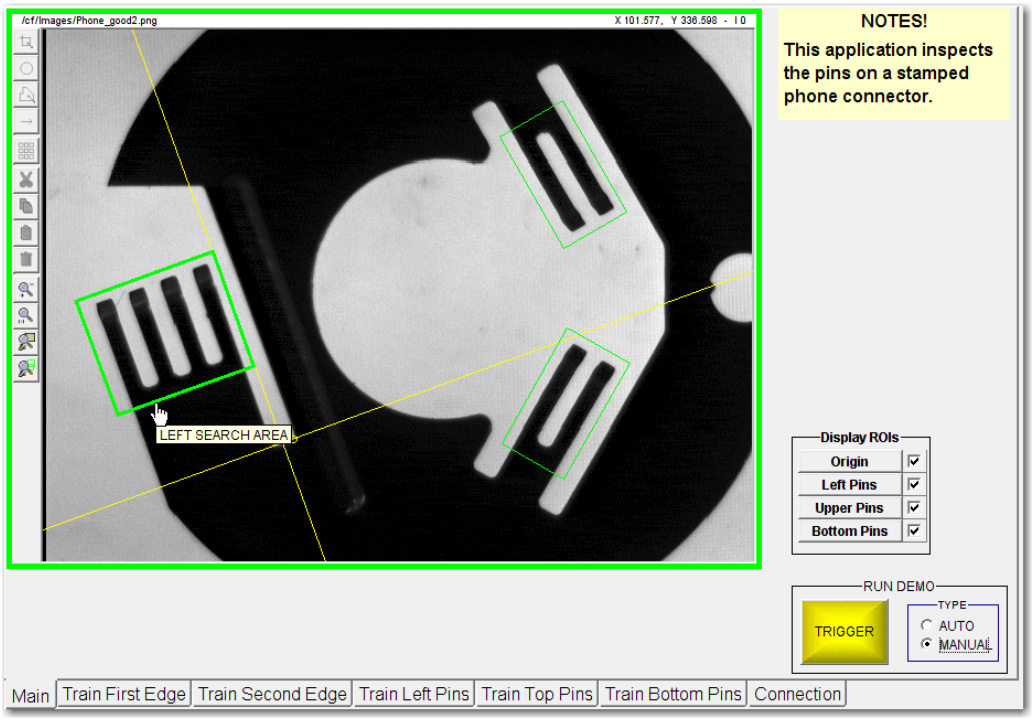
IMPACT Software Suite Information:

Software Version: 8.1

Files Included: ☒ Images ☒ VPM Program ☒ CP Program

☐ Others:

Application:
Inspection of stamped pins used in a cell phone. Pins may be bent or missing parts.
Image Example(s):



Lighting Used:
Unknown

Lensing Used:
Unknown

Tools Used:
1. Line Find Tool; used to find a consistent edge on the left side of the part. This edge is used for the Origin X.
2. Origin Tool; sued to find a consistent edge on the bottom of the part. This edge is used for the Origin Y.

3. Data Instance Tool; used to create an origin from the X generated by the Line Find tool combined with the Y generated by the Origin tool.
4. Greyscale Template Tool; trained to a specific pin pattern and background on the left side of the part. This tool is enhanced with a blob algorithm to identify any anomalies (changes) in the pins or background and display them. This tool is also available to be trained from its control panel.
5. Greyscale Template Tool; trained to a specific pin pattern and background on the right side of the part. This tool is enhanced with a blob algorithm to identify any anomalies (changes) in the pins or background and display them. This tool is also available to be trained from its control panel.
6. Greyscale Template Tool; trained to a specific pin pattern and background on the bottom side of the part. This tool is enhanced with a blob algorithm to identify any anomalies (changes) in the pins or background and display them. This tool is also available to be trained from its control panel.
7. Pass Fail Tool; three are used. Two to make a decision whether the left and right print passed or failed and one for a global pass fail.
8. Discrete Output Tools; four are used to tell the PLC to reject failing containers and keep passing containers. Two for each container.

Other Notes: