

Refrigerator Panel Inspection



Client

Our client is one of the leading consumer electronics manufacturers across the globe and one amongst fortune 50 companies. Their products are sold in more than 80 countries across the globe and they have employed more than 300,000 employees by having a market share of 21.8%.

Problem Faced


In order to get the total number of holes present at the base and the side part of the panel, the bottom cabinet of the refrigerator has to be inspected. Currently, it is a tough and time-consuming process to identify the count and see whether the hole has been drilled properly.

Technology introduced by Qualitas

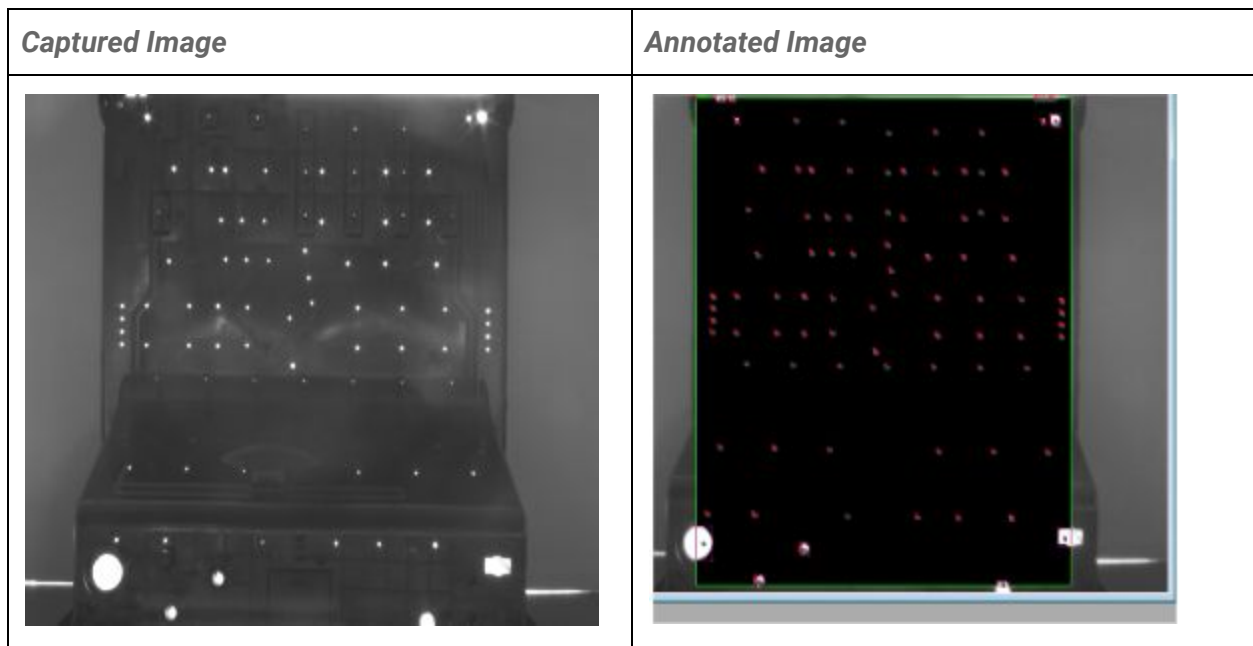
An area scan camera along with rule-based image processing software which counts the total number of holes present in the bottom cabinet. Since the lighting had to be uniform, a back-light was used to get the uniform lighting from all the holes. BLOB (binary large object) detection approach was used for counting.

Solution

An area scan camera along with rule-based image processing software which counts the total number of holes present in the bottom cabinet. Since the lighting had to be uniform, a back-light was used to get the uniform lighting from all the holes. BLOB (binary large object) detection approach was used for counting. The light was able to penetrate the holes which were drilled with the help of an area scan camera and a backlight setup. After successfully acquiring the image, we applied BLOB detection on the complete rectangular region of interest to count the holes. The same result was displayed on the user interface.



Images



Results

The exact number of holes present in the bottom cabinet was measured and thus the issue was resolved.

Rajarajeshwarinagar, Bangalore 560098, INDIA



<http://www.qualitastech.com>



+91 (80) 4709-1438