

The Client is a Chinese collective multinational consumer electronics and home appliances company headquartered in Qingdao, Shandong province, China. It designs, develops, manufactures and sells products including air conditioners, mobile phones, computers, microwave ovens, washing machines, refrigerators, and televisions.

Solution:

WIP.

Problem / Pain Point:

The client has 3 products namely refrigerators, washing machines & air conditioner being manufactured at their manufacturing plant. These products passed through 16 stations during the production process. The client required a solution which would provide product line authentication at each station.

Objective of Project:

To enable authentication at each station during production process.

Solutions Proposed:

For all 3 products (refrigerator, air conditioner & washing machine) the following process will be followed.

At the 1st of 16 stations, UID barcodes will be printed onto each internal component. For printing purpose, a high end industrial printer will be used.

As the products pass through the various stations, each individual product component is scanned by a fixed mount scanner, corded linear scanner & omni directional scanner. At each stage the scanners check for absence or presence of motor parts & wires and other required parameters.

Once the product passes through the stations and reaches the final station, a master carton label is printed pasted on the carton. The label is then scanned thereby updating the data in real time.

Benefits:

1. Barcode printing & sensing technology ensures that only valid products pass into the open market.
2. Automation reduces the chances of errors that may occur during manual validation.
3. Automation ensures efficient utilization of resources (time, space & manpower)