

Making An Impact - Use Case

Goal:

Add a Lineside Printer to produce real time re-work labels

Target Process:

Any process which includes an inspection, the failure of which must be reworked offline

Current Process:

Client has a robotic inspection machine inspecting 85 surface mount solder points. Upon finding a solder defect, the operator is notified of the defects via the machine HMI. The associate removes the part and sends the defective part to an offline rework process station where the rework associate must definitively locate the defect(s) (via an illuminated magnifying glass) and manually make the repairs and reintroduce the repaired part into the assembly line. Rework time must be quick enough to keep up with production rates.

Objective:

Client requested a means of minimizing eye fatigue, worker stress, and resulting mistakes

Solution:

The customer utilized elliTek's Data Commander™ MES Gateway to handle data movement both to and from the robotic inspection machine. elliTek suggested that an Intermec lineside industrial printer be added nearby the machine. Because the Data Commander can access the machine's data registers without requiring controller code changes, the data bits pertaining to the 85 potential defect locations (as displayed on the local HMI) were immediately available. elliTek's support group was able to easily provide the customer with a downloadable solution that would connect via TCP/IP to the Intermec printer to print a label when any defect occurred. The result is a printed label which is populated with the words "Pass" or "FAIL" based upon each defect status. The label is removed and adhered to the defective part. The rework associate merely reviewed the list, confirmed the defect, and repaired the part.

Impact:

Rework eye fatigue and general moral improvement for the rework station associates was instantaneous. Rework time was reduced nearly 500%. Rework mistakes were nearly eliminated.