

Implement Pull System For PPM Reduction

PROBLEM:

High rejection and WIP pile up

BACKGROUND:

This case is of a cable assembly line for a networking application. Here, the layout was organized in a manner that saw four operators carrying alignment and orienting cables, and placing it on hangers for crimping, testing and packing. The methodology used led to the entanglement of cables and excess WIP on the line. This was because the 4 operators pushed the sub-assembled cables to the hangers at a faster rate than that was consumed by the crimping machine operator.

SOLUTION :

This appeared to be a straight forward case of balancing the line and moving to a pull system instead of the current push system. The pile of sub-assembled cable assemblies was not only leading to defects but was also slowing production pace. The cell was reorganized to ensure that the crimping machine operator pulled oriented cables directly from orientation activities and moved crimped cables one at a time towards testing and packing.

RESULT:

This pull system and almost single piece flow prevented entanglement of cables and thereby reduced PPM from 33000 to 3800. Also, the new layout helped reduce space by 42% and total cycle time reduced by 45% as it was a single piece flow; there was no WIP in the line.