



## END-OF-LINE INSPECTION

End-of-line inspection is conducting inspection at the end of the production process and is important to ensure that the products of each production line meet the required quality level before they are transferred to the next process. End-of-line inspections can also provide feedback to the production line managers and in-line inspectors to ensure better and more timely quality control.

### PROSPECTIVE USERS:

Quality control function and end-of-line quality inspectors are involved in implementing this practice.

This practice can be applied to all kinds of factories.

### PROBLEMS ADDRESSED

- Low quality and high defect rate of semi-final products or line products.

### PROCESS

This process includes assigning end-of-line inspectors, providing them with inspection instructions and samples of good or bad semi-final products, conducting inspections of semi-products at the end of each production line and providing feedback for production and in-line inspection.

## Steps in implementation

1. Establish an end-line inspection workstation at the end of every production line.
2. The end-line inspection workstation should be logically arranged. It should include a large table with sufficient space for placing products for quality control as well as a white board or wall for posting samples or any other aids for the use of the end-line inspector.
3. Any tools necessary for quality inspection or measurement should be provided. Sufficient light is also essential.
4. Assign end-line inspectors, who should be trained in conducting end-line inspection and providing feedback to in-line inspection and production.
5. End-line inspectors should wear a special uniform, shirt or hat so that all staff can identify them.
6. Provide end-line inspectors with end-line inspection report forms. (See FIP Good Practice Guide: *Using Checklists for Quality Control*).
7. Specification sheets should be posted on the wall or whiteboard at the end-line inspection workstation. (See FIP Good Practice Guide: *Specification Sheets*)
8. QC instructions should also be clearly posted at the end-line inspection workstation for easy reference.
9. Create an end-line inspection points list, which should also be made available at the end-line inspection workstations.
10. Samples of defected products should be displayed so that inspectors can easily see and access them.
11. End-line inspectors check products for defects. Once any errors are detected, a defect ticket should be attached to the products and returned to the line for quick repair.
12. Use end-line inspection reports or checklists to record the defects.
13. Summarise the major defects for reporting and discussion for improvement.
14. Provide feedback about major defects to in-line inspectors, supervisors and workers to help them understand how to prevent defects.



### RESOURCES REQUIRED

- End-line inspection workstations including tables and white boards.
- List of key end-line inspection points.
- Sample defects available at the each end-line inspection point.
- End-line inspection checklists or report forms available to inspectors.
- Involvement of end-line inspection staff.

### CHALLENGES AND PITFALLS

- Time consuming to fix the defects.
- May overlap with in-line inspection.

### POSITIVE IMPACT

- Lower level of pre-delivery defects.
- Feedback available to enhance in-line inspections and production.
- Data available for analysis to enhance quality.

### INDICATORS FOR MONITORING

- End-line inspectors assigned.
- End-line inspection is conducted in all working shifts.
- End-line inspection reports filled with all observed defects.
- All end-line products conform to quality standards.

#### Further Information Available:

FIP References:

Module 2 - Quality

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