



Good Practice Guide



Factory Improvement Programme

USING INSPECTION CHECKLISTS FOR QUALITY CONTROL

A checklist is a structured form or questionnaire for collecting and analyzing data. This is a generic tool that can be adapted for a wide variety of purposes. Collecting and analyzing data is important for identifying and understanding problems and thus making appropriate changes to solve these problems. This Good Practice Guide focuses on the use of inspection checklists for quality control.

PROSPECTIVE USERS:

Inspection checklists are useful for any factory that wants to improve quality and productivity, reduce defect rates, and reduce re-work.

This practice can be applied to all kinds of manufacturing factories.

PROBLEMS ADDRESSED

- Increasing or high frequency of product faults.
- High rates of defective products requiring repair or re-work.
- High levels of waste materials.
- Low productivity.

PROCESS

This practice requires line managers and quality control staff to collect information about the number and sources of defects in the production process. Information about the number, causes and frequency of the defects are recorded in checklists and tallied to show totals. These totals can then be analyzed to see the times most defects are made, the types of defects and the most common causes of defects. This information can then be used to reduce defects.

Steps in implementation

1. Decide what event or problem will be observed or inspected. Develop clear operational definitions.
2. Identify the period to be observed or inspected. This period should be relevant to the problem.
3. Develop a standard table or form for each type of checklist, e.g. inspection reports which are designed so that all workers can use them to record information in a simple way. (See sample form below)
4. Name the columns and rows in the table.
5. Information about the buyers, style, items and quantity, the production line, the dates of inspection and observed period (e.g. one day) should be clearly displayed in the top row of the table.
6. The checklist form is usually an A4 sheet with a table with rows indicating types of defects and columns indicating the time the mistakes are detected. The QC inspector fills in the number of defects of each type in the cell of the relevant defect and time period. The final cell in a column shows the total number of defects for the period of time observed, while the last cell of the row shows the total number of defects of each type. This checklist helps to identify the major types of defects, their frequency and the peak times defects are made. (See sample form below)
7. Make standard format check sheets available at each production line or quality control point.
8. For each defected product, identify the source or time period of the defect by recording it in the check sheet by marking a dash.
9. At the end of the observed period, summarise the frequency of defects by sources or time period by adding up the total number of mistakes and note this down in the final column and final row.
10. Ensure that each check sheet is signed by the responsible people such as the relevant inspector, line manager and quality control chief.
11. Discuss the results and draw conclusions.
12. Discuss possible actions for improvement.
13. The inspection checklists should be stored in a safe place.
14. The summary of the inspection report can be used as input for a quality improvement programme. The checklist totals can be used to identify which errors are most common, and to try to prevent these errors in the future. Workers may need additional training or guidance in order to avoid making such errors. The time of the error can be useful to identify needs for more rest breaks for staff or times when additional supervision is required.

Figure 1. Example of Inspection Checklist for Quality Control

INSPECTION SEWING REPORT															
Buyer: Lis		Style: 2157			Item: Pants			Qty:							
Line: 3		Cell: D			Date: 3.3.2007										
Description of reject	8:20	9:10	10:00	10:50	11:40	13:20	14:10	15:00	15:50	16:40	17:30	18:20	Total	%	Note
Defect 01													8		
Defect 02													8		
Defect 03													5		
Others													9		
Total	4/21	3/21	2/21	2/21	3/22	2/22	2/22	3/22	2/22	2/22	3/22	2/22	30/260		
INSPECTION BY: Nguyen Van															
						Leader	SPV Sewing	Chief	Chief QC	ABTS Manager	P. Manager	G. Manager			

RESOURCES REQUIRED

- Line managers and quality controllers' involvement.
- Check sheets.
- Paper and pens.

CHALLENGES AND PITFALLS

- Staff may feel they have more work to do.
- Difficulty in maintaining efforts to collect information.

POSITIVE IMPACT

- Helps to record all faults and sources of faults.
- Creates inputs for developing Pareto charts.
- Creates inputs for developing a quality improvement programme.
- Saves money by helping to eliminate major sources of defects.

INDICATORS FOR MONITORING

- Check sheets form created and made available.
- Check sheets filled, summarised and discussed.

Further Information Available:

FIP References:
Module 2 - Quality

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