

Design Quality Versus Inspection Strategy

What is this?

The optimum solution in making a good quality product is to develop the product and the process that creates it that is impossible or very unlikely to go wrong. The results of designing quality into a product and its process will be that subsequent inspection is not needed, and 100% perfect employee attention is no longer required. The latter point is especially important in real life, because few employees can stay 100% alert for every minute of a workday.

Examples:

The disadvantages of relying on inspection to make good quality versus designing it in good quality are twofold as follows:

- First, how can you expect the inspectors to be 100% alert, 100% of the time? Counting on them to make sure no defective product gets through is unrealistic. Additionally, inspecting for quality defects does not address any root causes.
- If employees know that there is an inspection process downstream from them, it may make them feel that their own quality performance is less important.

For example, real-life auto mechanics should be a part of the design process for a new car model, because they can add valuable input into how easy or hard it might be. For example, to change the oil filter, given the product design ideas being considered for the engine compartment.

Why?

- Designing quality into a product and its process will have huge monetary savings and will also address the root causes of potential quality issues.

Who?

- This is important to a firm's owners, senior managers, and employees who are affected by this different approach to quality improvement, as well as customers whose expectations may not be met.

How?

- To design quality into a product and process is primarily accomplished by having representatives from all stakeholder groups be a part of the design process.

When?

- Design quality should be used whenever a new product or intended product revision is being planned.