

Quality Practices used in Manufacturing Industry



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In industry, quality control is most important parameter. Quality control is used to prevent the manufacturing of wrong product. Quality control is a process that ensures customers receive product free from defects and meet the customer needs. Some common tools used to support quality control are Statistical process control (SPC) and six sigma.

SPC monitors & control quality by tracking production metrics:

Six Sigma uses various principles to ensure products quality & meet customer's need with zero defects. Six Sigma is supported by lean tools like Total Productive Maintenance (TPM), 5S & Kaizen.

Benefits of Quality Control in Manufacturing- When customer receive quality product fulfilled following points.

- Increase customer loyalty
- Gain repeat business
- Gain new customers from referrals
- Maintain or improve your position in the market
- Improve safety
- Reduce liability risks



Benefits of Quality Control

Contribute to overall positive branding of your product Discover how you can avoid costly recalls and support your quality control system with TPM. Graphic Products' Best Practice Guide to Total Productive Maintenance (TPM) will help you on the road to total quality. Improve quality, eliminate defects, and increase your profits. By monitoring products at the end of production as well as reviewing the products' design, companies can solve problems more efficiently, saving time and money.

Quality Assurance with Quality Control-Quality assurance streamlines production and helps to ensure that the final products meet the company's quality criteria. It ensures that the processes used to design, test, and produce products will be done correctly. In manufacturing, quality assurance approaches, like ISO 9001, help manage and improve many processes, including:

- Acquiring raw materials
- Purchasing third-party components and sub-assemblies
- Designing and using inspection procedures
- Complying with production processes

Responding to defects

For every business, quality assurance is different. However, ISO 9001 works for businesses both large and small and can be adapted for most any need. It provides the means for creating a lasting quality assurance program, ensuring that everything, from raw materials to inspection procedures is of the highest quality. Issues and defects from poor quality materials or third-party components are all but eliminated.

Quality Control, QA and Lean Manufacturing-



Total Productive Maintenance (TPM)

Lean manufacturing tools can bolster your company's quality program. Lean revolves around improving quality and safety while increasing efficiency and profits. Some powerful lean manufacturing tools that can bolster your quality system include:

- **TPM** improves product quality by eliminating downtime, defects, and accidents. TPM accomplishes this through **comprehensive maintenance programs and operator training**.
- **Kaizen** helps eliminate problems at their source by empowering workers to find and solve problems on a daily basis.
- **5S** helps organize and standardize the workplace. Take control with the **5S**

System Best Practice Guide, by Graphic Products. Improve procedures and eliminate errors in your facility.

- **How to Implement Quality Control in Manufacturing**-To implement an effective quality control program, first create and document your approach to quality control. This includes:

- Defining the quality standards for each product
- Selecting the quality control method
- Defining the number of **products/batch** that will be teste
- Creating and training employees for quality control
- Creating a communication system for reporting defects or potential issues.

- Next, you will need to create procedures for handling defects. Consider the following:

- Will **batches** be rejected if defected items are found?
- Will there be further testing and potential repair work involved?
- Will production be halted to ensure that there are no more defective products created?
- How will new product versions be handled? Finally, use a method like 5-Whys to identify the root cause of the defect, make any needed changes, and ensure your products are defect free.