



Quality Management Checklist



Top tips to improve quality processes

The role of quality management within a manufacturing environment is essential to maintain customer relations for positive brand reinforcement, whilst ensuring regulatory compliance. As a quality or production expert you face issues on a daily basis, which we know are frustrating and often arise from the systems or processes in place, the machinery in use, or the people that operate them.

Read the quality management checklist to gain expert insight into the common quality challenges facing food and beverage and FMCG manufacturers and what steps can be taken to improve quality processes.

1. Avoid costly product recalls

Quality issues such as product recalls can be time-consuming and costly, not forgetting the damaging effects on brand reputation.

Are all of your products sent out with the knowledge that it is a safe, well produced product, suitable for customer consumption?

It is essential that affected products are identified quickly and accurately, but eliminating these common quality problems completely and reducing the number of defect products can encourage a healthier bottom line.

Do you have the ability to identify all parts, materials, and components that created a final product?

The ability to track, trace and record the genealogy of raw materials and Work In Progress (WIP) throughout each stage of the production process and product life-cycle is imperative. The ability to track and trace a product from 'Farm to Fork' will lead to increased product quality, safety, transparency and greater recall responsiveness,

while full genealogy will help eliminate the risk of cross contamination between batches.

Product Genealogy will reduce the cost of product recall and the damaging affects to brand reputation caused by poor quality products. Having accurate genealogy and traceability ensures that recalls can be targeted quickly, efficiently and then contained before it is shipped further down the supply chain, reducing the impact of the recall.

2. Reduce high levels of scrap & giveaway

One way to cut production costs and to improve overall efficiency is to reduce the amount of scrap and rework produced. High scrap levels can lead to high material costs and lost production time.

Do you feel as though your company has a high level of scrap and giveaway? Determining current scrap rates and the main causes of scrap is the first step to managing it. Set goals for improvement and educate everyone as to what those goals are.

Are the raw materials you are using, the standard you expect them to be at? It is pointless using cheaper materials if the scrap value is greater than the cost savings.

Are people trained properly to handle the raw materials and the production process? Vast reductions in waste can be made simply by educating staff on handling, storing and the correct production processes.

Reduced scrap levels can save time, reduce interruptions to the production cycle times – and ultimately result in the production of higher quality products first time round. Replacing paper-based methods with electronic systems can help you to identify root causes for scrap and rework, enabling you to better manage scrap levels and set goals for improvement.

3. Minimise mix-up risks

Preventing product ingredient mix-ups is vital to avoiding cross-contamination, costly product recalls and for maintaining product safety and quality.

Do you have a platform to monitor and manage quality issues, such as mix-up prevention? It can help standardise local and global quality processes in order to improve the way that quality is managed and controlled.

Visibility of real-time quality information enables quality managers to monitor events such as material mix-ups or non-conformance, therefore they can identify effective resolutions to reduce future events from occurring. Radio Frequency Identification (RFID), barcode technology and vision systems can be used as a tool alongside an Electronic Quality Management System (EQMS) to adopt mix-up prevention techniques.

4. Reduce process variability

Process variability in manufacturing is inevitable, and many factors can contribute to this. It is important to validate these processes, and reduce process variability using root cause analytics. Statistical Process Control (SPC) is a method of quality control using statistical methods to observe the performance of production processes in order to detect significant variations. Monitoring and controlling a process ensures that it is operated to its full potential, reducing waste and cost of production.

5. Improve first pass yield

Having an indication of First Pass Yield (FPY) also known as Throughput Yield (TPY) metric shows how good the overall process is at producing good/correct output the first time, without having to rework items to customer requirements. It's an important metric for measuring quality and



production performance. The number of good units produced is divided by the number of total units going through the process. First Time Yield (FTY) considers only what went into the process and what went out, so is a good measure of process effectiveness, accounting for the cost of rework. FPY is also a good measure of continuous improvement success, as waste and efficiency levels are analysed. It's useful to benchmark yield performance metrics against similar manufacturing companies. Higher yields can be achieved through having the visibility and knowledge of the root causes of quality issues, so that they can be resolved quickly. Digital quality management systems can be used as a tool for providing the visibility to achieve higher yields, whilst maintaining the control of waste and production processes.

6. Make KPI targets visible for continuous improvement

- Do your employees know the business KPI targets?
- Do they have targets which contribute to the business goals?
- Are they able to strive for continuous improvement within the workplace?
- All KPI targets should be visible to all management and operators.

Display these alongside individual achievements and it will inspire operators to continuously improve their performance to hit their monthly KPI targets, and those of the business. Visibility allows operators to understand their own development needs alongside the businesses needs.

7. Utilise digital technology to manage quality processes

An Electronic Quality Management System (EQMS) provides the real-time visibility and historical data required to meet regulatory compliance and customer audits; it can also be used to capture and manage critical quality-related events, engaging personnel in quality initiatives.

Cimlogic help manufacturers bring quality management and operations together seamlessly, to highlight ways to improve yield, reduce waste and avoid costly product recalls. To find out more please call us on +44(0)1274 599955 or email enquiries@cimlogic.co.uk.

