

## **Abstract**

*PT. ABC is a well-known company in Indonesia which is known for its electronic products in the form of home appliances, one of which is a refrigerator. The first material handling process carried out in the company's system occurs in the Incoming Quality Assurance section or in the Material Quality Control (MQC) Department, this section checks raw material by the sampling method determined by the company. In mid-2018 improvements were made to reduce production costs by bringing in raw material with original color material so that the material will go directly into the production stock without going through the process of painting at production support. In its implementation, the repairs made using original color material turned out to cause problems that affect the quality of refrigerator products at PT. ABC. Lots of defects found in the material that can usually be overcome by the process of paint in production support. Such as different colors, contaminated, flowmark, scratch, bruises, and others. Although the sampling process was carried out before the material entered the production area by the MQC, many materials were found to be problematic in the production department with 52 lots or 14% of the total lots received. This causes losses for the company. For this reason, there needs to be an improvement, especially in handling raw materials so that the material received by the production is not found defects by planning the sampling of the original color material into double sampling according to the ANSI / ASQ Z1.4 2008 standard. After applying the dual sampling system, the original color material those found to be problematic in the production department were reduced to only 19 lots with a 6% process. In addition, total rejected lots also increased from the previous 69 lots (16%) to 109 lots (25%) from a total of 444 lots inspected by the MQC department. With the increase in lots rejected the process of checking in the MQC department is more stringent so that defective materials can be detected early in the material handling process before entering the production stock.*

**Key words :** *Acceptance sampling plan, ANSI / ASQ Z1.4 2008, double sampling*

# BAB 1

## PENDAHULUAN

### 1.1 Latar Belakang Masalah

Dewasa ini persaingan industri di Indonesia maupun mancanegara terus mengalami perkembangan yang pesat, produk yang dihasilkan juga semakin kompetitif terutama produk elektronik. Setiap perusahaan berupaya memberikan kemampuan yang terbaik mereka untuk menarik minat konsumen salah satunya dengan memberikan jaminan kualitas yang sangat bagus. Para pelaku industri produk elektronik bersaing dengan ketat agar produk yang mereka hasilkan memberikan kepuasan kepada para konsumennya sehingga produk mereka semakin laris di pasar.

Karena faktor persaingan tersebut perusahaan berupaya meningkatkan kualitas produk mereka, selain produk jadi mereka harus berkualitas, proses produksi dari mulai bahan baku (*raw material*) sampai ke unit akhir mereka harus dipastikan terdapat proses pengendalian kualitas yang ketat agar tidak terjadi kesalahan ataupun ditemukan produk cacat di proses produksi bahkan dikonsumsi. Karena jika konsumen menemukan produk cacat di pasar tentu mereka akan meragukan produk dari perusahaan atau brand tersebut dan bahkan konsumen bisa beralih ke produk lain. Hal ini tentu dapat menimbulkan efek yang buruk bagi perusahaan.

PT. ABC adalah satu perusahaan ternama yang ada di Indonesia yang dikenal dengan produk – produk elektroniknya yang berupa produk *home appliances* terutama produk kulkas. Perusahaan ini sudah memasarkan produk kulkas ke seluruh Indonesia dan bahkan sudah merambah ke pasar internasional seperti Asia dan Eropa. PT. ABC telah memiliki sertifikat resmi ISO 9001 : 2008 tentang Sistem Manajemen Mutu. Meskipun telah tersertifikasi proses produksi yang terjadi di perusahaan tersebut masih saja ditemukan kendala berupa kecacatan yang ditemukan pada *raw material* maupun di unit jadi.

Proses penanganan material yang pertama dilakukan dalam sistem perusahaan ini terjadi di bagian *Quality Assurance Incoming* atau di *Departemen Material Quality Control* (MQC), bagian tersebut bertugas untuk melakukan pengecekan