

PRODUCTION QUALITY CONTROL AS AN IMPORTANT FACTOR TO MEET BUYER QUALITY STANDARDS AT THE GARMENT COMPANY PT. SUKABUMI SINGLE ESTUARY

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ABSTRACT

KEYWORDS

Quality control; quality standards; achievement of quality standards

The objectives of this study were achieved through the use of qualitative descriptive analysis, quantitative statistical analysis, and quality control. To meet the quality target set by the Buyer, which is below 1.9%, it is necessary to know how many types of defects are found in the Finishing section and in the Final Inspection and how to reduce defects through the use of control strategies and methods applied by PT. Single Estuary. The data for this study comes from the statistics of production and damage to the Finishing department between May and August. Based on the findings of the study, it can be said that the implementation of quality control in this enterprise has been carried out quite successfully, with a noticeable improvement and a good quality improvement and is worthy of appreciation. These results show the seriousness or level of commitment of the management of PT. Muara Tunggal to continuously improve the quality according to the requests of buyers or buyers. The reduction in defects was first seen in early September 2022 with a defect rate of around 1.4%. Regarding the recommendations that can be made based on the findings, these include selecting raw materials according to Buyer's standards, hiring skilled labor, maintaining strict work ethics, providing training to employees to improve their skills, maintaining machines regularly, and improving neatness, comfort, and a safe workplace.

INTRODUCTION

Manufacturers must be able to produce high-quality goods in order to compete in an increasingly cruel world of globalization and rapid scientific and technological advances (Suryono, 2019). One of the most important aspects of a production process, whether the product is intended for domestic consumption or export, is product quality (Sherly et al., 2021). Since all goods manufactured by the company for the American market must meet the quality standards, or AQL 2.5 quality, which are strict and are the standards that have been established for garment products to be marketed in America, the quality issue of clothing products is very important. Today's companies need to have a competitive advantage to compete in this cruel market. Only a business that can provide a high-quality product or service in accordance with the wishes of the consumer will succeed in the market (Rossanty et al., 2018).

Competition is more about product quality than about the level of productivity of the company or the price of products (Ariani, 2011). High-quality products at competitive costs are just one of the requirements to dominate the market, and both can be achieved by increasing productivity, efficiency, and quality. A high-quality product must, on the one hand, meet the requirements set by the buyer, but on the other hand, it must satisfy the user or customer (Musfar & Se, 2020). Customer satisfaction is a concern for product

quality because during manufacturing, the product is in accordance with what the customer (buyer) wants or expects, making product quality a crucial factor that significantly affects customer satisfaction. performance of other business fields (Rangkuti, 2013). Product quality improves along with a decrease in the failure rate or rejection of the product.

Quality is one of the key determinants of a company's ability to survive in the face of intense industry competition. Defined as the totality of product attributes that support its ability to meet specific or defined needs, while quality control is an effort to organize the production process to run smoothly in accordance with established quality standards to maintain the company's capabilities. to produce high-quality products (Tirtayasa et al., 2021). According to Crosby (1979), quality is conformity with requirements, meaning that according to what is required or standardized, a product is said to be of high quality if it meets established standards. Quality standards include raw materials, production processes, and finished products. Handoko (1999) defines quality as a factor contained in a product that causes the product to be of value according to the purpose for which the product is produced. On the contrary, a product is said to be of high quality if it can fully satisfy the customer, that is, if it meets what the customer expects from a product, according to Feigenbaum (1986), who also claims that quality is full customer satisfaction.

The purpose of quality control is to continuously avoid the production of goods that do not meet the intended quality standards (second quality) and be able to select, organize and evaluate quality so that customers are happy and the business does not suffer (Chandra & Ratnamurni, 2022). The entrepreneur's goal in managing QC is to generate profits in a flexible way while ensuring customer satisfaction, return on investment, and long-term business profitability. If there are unique problems during QC testing and inspection, studies need to be carried out so that they can be used to address problems in the production area.

As a result, the company uses the following procedures for the main stages of the quality control process, namely:

1. Cost Control

Cost control with the aim of producing goods at affordable prices

2. Production Control

Production control seeks to accelerate, streamline, and ensure the quantity produced in accordance with the target achievement strategy

3. Standard Control Product Specifications

This supervision includes product appearance, comfort, and physical characteristics

4. Delivery Control

The arrangement to keep items on a delivery schedule has an impact on how quickly the item is delivered.

There are three kinds of control times based on the length of time it takes to carry out quality control of garment products:

1. Preventive control

That is the checking that is carried out before the production process begins. Its purpose is to ensure that production goes according to plan and to avoid the creation of substandard goods or defects.

2. Monitoring Control

That is the type of control used in the manufacturing process. Its purpose is to keep an eye on the actions involved and, if there are any irregularities, immediately correct them and track them.

3. Repressive Control

4. Control and supervision activities are carried out after the completion of all production processes.

PT. Muara Tunggal is a clothing business engaged in CMPH (Cutting, Making, Packing, and Handling). Although most of the company's sales come from America, the company accepts orders from vendors for outside markets. Businesses implement systems to check product quality so that they meet the requirements for products sold in America. In the current era of globalization, free trade has forced manufacturers to engage in competition to increase the quantity and quality of goods and services produced or provided in response to the demands and tendencies of the global market. The company is dedicated to producing high-quality goods for export and anticipates that as a result of the quality received by customers, cooperation will be developed in the production of high-value and good-quality apparel.

Conducting quality control over manufacturing process activities carried out is important to ensure consistency in the quality of the products produced and in accordance with market needs (Novansyah & Harahap, 2022). Quality control is very important because it can decide whether a business is successful or unsuccessful in achieving its goals (Yuliana et al., 2022). Product control is an attempt to determine the minimum damage limit, identify the root cause of the damage, and determine what steps must be taken first to reduce the damage in order to occur quickly and handled properly (Saputra & Mahbubah, 2021). Many damaged or damaged goods can be produced as a result of constantly inefficient control activities, and production goals in terms of quantity and quality may not be met. Every manufacturing activity requires quality control because the quality of a product or service is a reflection or benchmark of how successfully the business carries out its production activities. A planned process called quality control is used to achieve, maintain, and improve the quality of a product or service so that it meets the requirements and can satisfy customers (Oakland, 2012).

The reality on the ground shows that a successful and survivable business must have a quality program because a quality program will be able to eliminate waste and increase business competitiveness, leading the business to view quality as an important element. which brings success. Therefore, quality control is a guarantee of the company's products, aiming to ensure that the products produced meet the requirements or quality standards that have been set by the buyer and the company (Akbar, 2018). However, the company's strategy can vary, all based on company policies or also adjusted to the company's vision and mission, as well as company goals and environmental factors that can affect the company.

The objectives of quality control of garment products are:

1. Obtain assurance that the quality of the goods or services produced meets the quality criteria set by the buyer at the most reasonable or cost-effective price.
2. Provide instructions to each employee in charge of the garment quality control department and to each employee directly involved in the production process.
3. Realizing high-quality clothing products that meet the needs of users or buyers.
4. Provide clients or buyers with the best service to ensure that they are satisfied with the

quality level of the company's clothing production.

The business will conduct inspections or inspections to guarantee the high quality of the goods or products. An important component of quality control is inspection, which includes finding out whether the input or output meets the quality requirements of the brand (Winarko, 2018). Stopping the production of defective parts or useless services is the purpose of inspection activities. When inspecting a garment order, an inspector must follow the flow chart or process flow of the quality inspection system according to established or regulated criteria, regardless of whether the order is ready to ship or not and regardless of its quality. Additional name: AQL (Acceptable Quality Level). Moreover, the objectives of this study were achieved through the use of qualitative descriptive analysis, quantitative statistical analysis, and quality control.

RESEARCH METHOD

This research method is qualitative descriptive analysis, quantitative statistical analysis. It was carried out at PT. Muara Tunggal Jl. Perintis Ke-merdekaan No.126 Kp. Kebon Randu RT.03/22 Kel.Cibadak Kec.Cibadak Kab.Sukabumi West Java Indonesia. The case study approach is used in this research method, which is to take a problem, evaluate it by quality control using a chart or chart, specifically to control the number of errors per unit of output, and then apply it to the case.

This observation is carried out by making a number of direct observations on the object of study, then documenting any information or events that are directly related to the production process and become the basis for subsequent writing.

RESULT AND DISCUSSION

Direct observation is the method the author uses to collect data. The author makes direct observations by collecting company data and conducting direct interviews with company owners, section heads, or department heads. Based on information collected from PT. Muara Tunggal during the time span of May 2022 to August 2022 for clothing products. Whether the finished garment item meets the quality requirements set by the buyer or business, quality control is implemented. Clothes are advertised as good quality, but only if there are no signs of damage such as broken seams, discarding dirty, torn, or dirty threads, etc. The author will do so by using statistical quality control analysis, a problem-solving strategy that utilizes statistical techniques to monitor, organize, analyze, manage, and improve products and production processes. In the Finishing stage and during the Final Inspection at PT. Single Estuary, will be proven by a Pareto diagram to determine the type of damage and a Fishbone Diagram to determine the cause of clothing damage.

The author uses qualitative descriptive techniques, which seek to explain theory or practice in the field or describe the nature of a situation, to provide a descriptive, methodical, and accurate picture of quality control procedures and their use in PT. Single Estuary. According to theory and research in PT. Muara Tunggal, the company performs quality control by direct inspection using statistical quality control, or SPC (Statistical Processing Control). When goods or services are produced, standards are monitored, measurements are taken, and corrective actions are performed using the SCP process can be exported, allowing the production and quality control departments to carry out effective production prevention and control before the goods are delivered to the buyer (Fournier et al., 2021).

The use of statistical quality control PT. Muara Tunggal uses quality control tools from SPC, which has seven (seven) main statistical tools that can be used as such tools:

Data Analysis (Check sheet)

The first step in statistical quality control analysis is to create a table of the number of products and products that are damaged or damaged, and the creation of this table will facilitate the process of collecting data and analyzing.

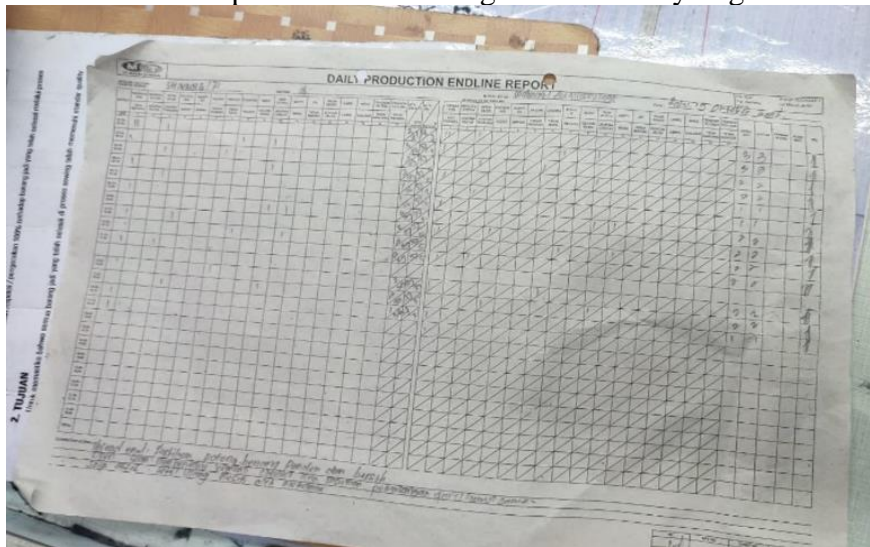


Figure 1. Data Analysis

Histogram

A histogram is a graphical representation of the distribution of data or the frequency of different values that occur in a data set. Its purpose is to inform management and support decision-making in an effort to continuously improve operations.

DEFECT PERCENTAGE QC FINISHING

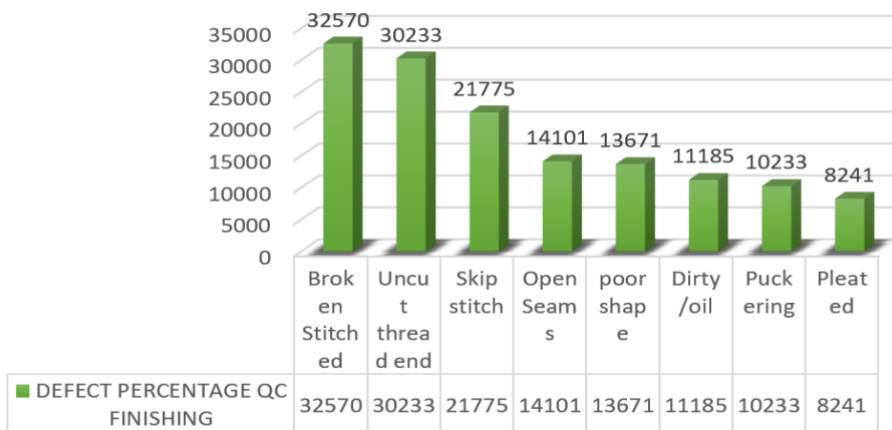


Figure 2. Defect percentage Finishing period May – August

In the Histogram table, it can be seen that the types of defects in the finished wear that most often occur are Broken stitch or broken stitch, Remove the thread is not clean or still long, and Skip stitch or jump stitch.

Control Map (P-chart)

After making a histogram, the next step is to create a control map chart (p-chart) which is used to find out whether quality control is carried out in PT. The first step in creating a control map of whether a Single Estuary is under control or not is:

Calculating the percentage of disability

Create a center line or line that shows the middle or average value

The line above the center line that displays the upper control boundary is known as the UCL (Upper Control Limit).

The lower control limit, or LCL, is the line that appears below the center line and displays the lower control boundary.

We can determine whether the process variation is consistent (within the control limit) or outside the control boundary by using the control chart.

Below is the formula in the P chart:

$$p = \frac{x}{n}$$

$$\bar{p} = \frac{\text{Total produk cacat}}{\text{Total produk ceking}}$$

$$CL = \bar{p}$$

$$UCL = \bar{p} + 3 \sqrt{\bar{p}(1 - \bar{p})}$$

$$LCL = \bar{p} - 3 \sqrt{\bar{p}(1 - \bar{p})}$$

Information:

p: the percentage of inaccuracy of each sample

X: The proportion of damaged items in each sample.

n: how many samples were collected during the inspection.

\bar{p} : Error proportion control map centerline

Table 1. P Chart control map

Damage types	Total	Median	UCL	LCL	Average	17751
Broken Stitched	32570	17751	45793,79	-10291,54	Std deviation	9347,55
Uncut thread end	30233	17751	45793,79	-10291,54	Average range	
Skip Stitch	21775	17751	45793,79	-10291,54		
Open Seams	14101	17751	45793,79	-10291,54		
Poor Shape	13671	17751	45793,79	-10291,54		
Dirty/ oil	11158	17751	45793,79	-10291,54		
Puckering	10233	17751	45793,79	-10291,54		
Uncut thread end	30233	17751	45793,79	-10291,54		

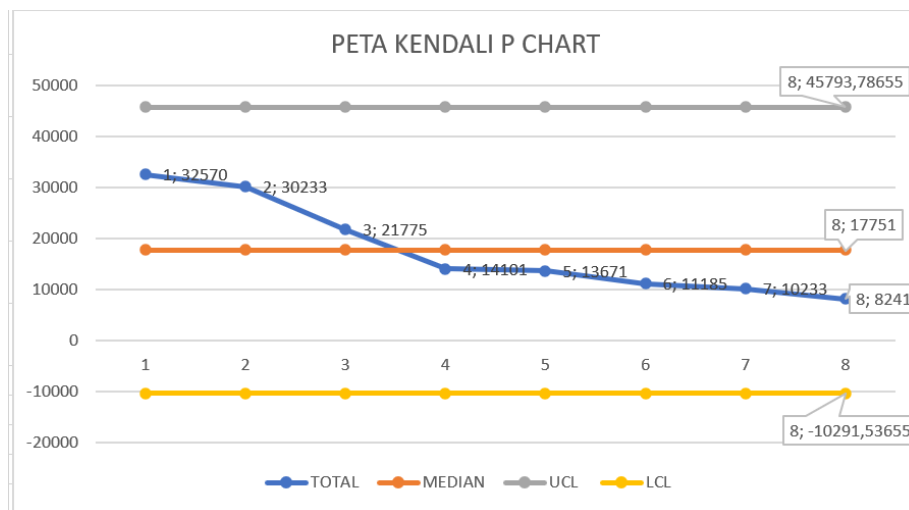


Figure 3. P Chart control map

Diagram Pareto

Pareto diagrams are one of the tools that are often used in quality control. Basically, a Pareto chart is a bar chart that displays problems in order of number of events; The sequence starts from the most to the least. In its application, the Pareto diagram is very helpful in determining and identifying the priority of the problem to be solved; The most frequent problems are the top priority for action.

Table 2. Data on damage type results in QC Finishing Period May - August

Damage Type	Total	Total Cumulative	Percentage	Percentage Cumulative
Broken Stitched	32570	32570	23%	23%
Uncut thread end	30233	62803	21%	44%
Skip Stitch	21775	84578	15%	60%
Open Seams	14101	98679	10%	69%
Poor Shape	13671	112350	10%	79%
Dirty/ oil	11185	12353	8%	87%
Puckering	10233	133768	7%	94%
Pleated	8241	142009	6%	100%

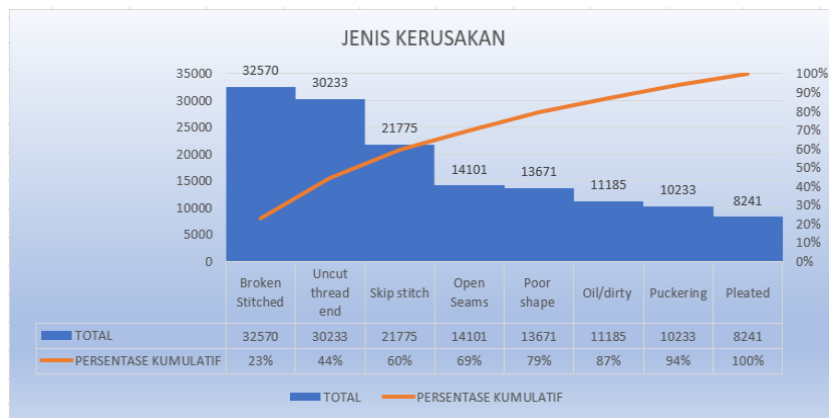


Figure 4. Pareto Diagram Data on damage type results in QC Finishing

Pareto diagram analysis from the data mentioned above shows that the Finishing part suffered the most damage to the garment production process from May 2022 to August 2022., for the highest level of damage, namely clothing damage from Broken stitch or broken stitches which was 32,570 pcs or 23%, for the second level of damage, namely Uncut thread end or discard unclean thread, which was 30,233 pcs or 21%, this is likely due to the lack of care for sewing operators when after the completion of the sewing process, they do not dispose of the thread cleanly in accordance with the SOP.

For the third damage, namely skip stitch of 21,775 pcs or 15% caused by poor machine quality, dull needles, and lack of prevention carried out during the production process, for example, routinely changing needles regularly.

Fish Bone Chart

The shape of the tool was similar to that of a fish bone, with the fish head representing the root cause and each bone standing as a potential source of error. The way to start a causal diagram is to use four categories of materials, machinery or equipment, people, and methods. 4M serves as a good checklist for initial analysis, and as the chain progresses, each cause is connected in separate bones along the chain.

Below is an example of a causal diagram created by QA PT. Estuary Stay.

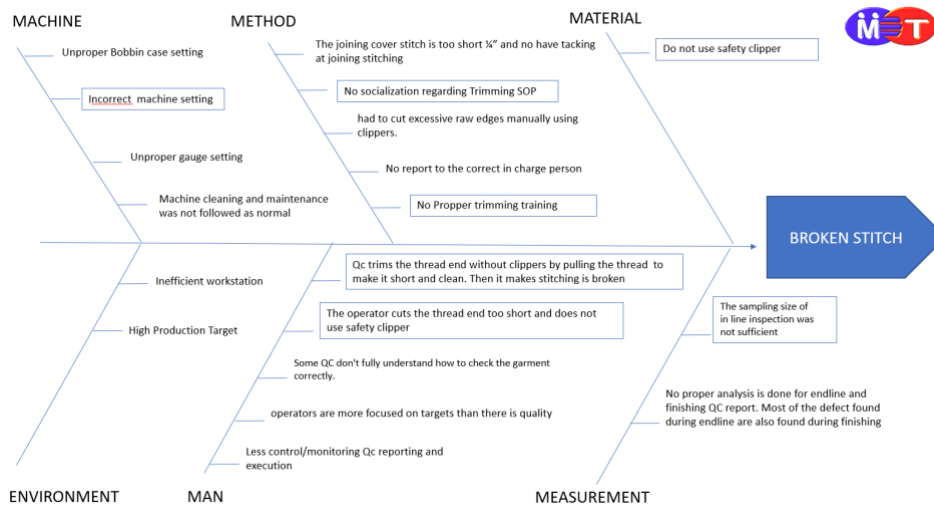


Figure 5. FishBone Analysis Broken Stitch

In making a causal diagram this time, it is to take from the data the most defects or damage found during checking in the QC Finishing section and during the Final Inspection (Broken Stitch).

In the case of the category of machines, the machine is the main equipment and an important component of the production process. If there is a serious problem with the machine or a discrepancy occurs in the machine, the production process must be temporarily stopped for repair, and if the machine damage is very severe then the production process must be stopped long enough. Alternatively, we can replace the machine with a new one from the same engine backup to avoid delay in results.

To solve this problem, the company must carry out regular and thorough maintenance of the machines used in the production process. This maintenance should be performed by a staff member experienced with the machine, ensuring that serious engine malfunctions are dealt with quickly, precisely, and correctly. In addition, businesses should have or provide a good spare machine so that it can be used as a replacement in the event of engine failure.

Concentration and experience are important components to help the production process succeed for the human or labor category. Employee discipline also results in employees being lazy, so that work is not carried out properly, lack of experience in the production process, and lack of understanding of clothing design. Employees are tired and lack concentration due to the large number of orders or production targets so that employees have to work quickly, sometimes even have to work overtime, and this causes the ongoing production process to suffer a lot of damage or defects. Companies should select candidates with experience in their respective fields when hiring new employees to solve this problem. In addition, to deal with workers who lack discipline, the company must offer bonuses for hard work, punctuality, perseverance, and compliance with goals. That way, workers will be encouraged to maintain discipline and put aside their laziness.

For the category of methods, the quality control method in the company's production process is quite good, but the implementation is less strict due to the lack of supervision from the supervisor, which results in still errors, and also the lack of training for which many operators still lack knowledge about how to sew properly.

To address this issue, businesses should continue to monitor the use of quality control procedures on operator expertise by conducting regular training sessions.

Research Project Management

Project management activities This research is carried out by involving each Division or each Department, and here it is explained what are the elements of the planning process of this research project and also project control, namely by ensuring that all activities have been identified and ensuring that tasks are completed in the correct order.

The Initiation stage or starting, namely the Commitment of PT. Muara Tunggal to improve Quality and achieve the IQP standard of 1.9%, in this stage the Management collects data and makes the data a tool to carry out improvement projects regarding quality.

Table 3. Number of defects for the period May – August

No	Damage Types	Total	Production Output	Percentage
1	Broken Stitched	32570	7666742	0.42%
2	Uncut thread end	30233	7666742	0.39%
3	Skip Stitch	21775	7666742	0.28%
4	Open Seams	14101	7666742	0.18%
5	Poor Shape	13671	7666742	0.18%
6	Dirty/ oil	11185	7666742	0.15%
7	Puckering	10233	7666742	0.13%
8	Pleated	8241	7666742	0.11%

The Planning stage is PT. Muara Tunggal conducts Brain Storming to carry out plans or corrective actions that will be taken to be able to make improvements immediately.

IMPLEMENTATION				
WHAT	WHO ?	WHEN ?	WHERE ?	STATUS ?
1. BRAIN STORMING WITH PRODUCTION STAFF	Tuti.W , Mrs.Yang ,Didin,Abdul,Iwan,Indra	July 23,2022	Production office	Done
2. TO CREATE TECHNICAL QUALITY TEAM AT PRODUCTION	Tuti.W, Ilah,Erna,Pipit Didin,Abdul,Iwan,Indra	July 23,2022	Production office	Done
3. TO CREATE TRAINING SCHEDULE	Tuti.W , Erna ,Pipit	July 25,2022	QA room	Done
4. TRAINING SOP PROPPER TRIMMING FOR NEW OPERATOR	Tuti.W, Erna,Pipit Didin,Abdul,Iwan,Indra	August 01,2022	Production	Done
5. PERFORM ASSESMENT TO OPERATORS	Didin,Abdul,Iwan,Indra	August 02,2022	Production	Still continue
6. EVALUATE TRAINING RESULT	Tuti.W, Ilah,Erna,Pipit Didin,Abdul,Iwan,Indra	August 31,2022	production	Still continue
9. REFRESHMENT QUALITY INSPECTION TRAINING FOR QC & QA	Tuti, QA & QC team	August 01,2022	Training room	Still continue

Figure 6. Improvement Plan



Figure 9. Research Experience

International Proceedings Writing

In order to increase the publication of scientific articles at the international level, the author really needs knowledge about increasing the knowledge of writing articles to the international level, how articles can be interesting so that International journals can publish them, therefore the author wants to share research experiences in writing international proceedings.

Here are the stages of the author writing International proceedings:

Stages of Scientific Article Creation

Determining the Subject, topic, theme, and focus of writing, Searching for referral sources is directed to access reputable repositories, citations are required using the references application.

Supervisor Revision Stage

After finishing making a scientific article, the author revises with the supervisor, where the plagiarism check is carried out later towards the end, after the plagiarism check, the stage is paraphrase to minimize similitary, proofreading is also carried out by the supervisor as the final examination regarding the typo.

Refinement Stage

At this stage, the author makes improvements to the writing of scientific articles when they have been revised with the supervisor, and also prepares scientific articles for the next stage.

Submit Stage

At this stage, the author starts from hunting what journals will be targeted for publication of the author's articles, the author knows what journals are suitable for the author's articles, then of course the author will target journals that are indeed focused on the field that the author is researching. How to submit articles through the system that has been provided. The author must first register to send, after which they will

receive a page for their own personal profile. All submission procedures, including writing titles, abstracts, and keywords, as well as uploading article content, are carried out on the profile page.

Research Results

The following are the results of research or research that has been carried out at PT. Single Estuary:

Define, which is the stage of defining defects or defects based on the type of cause based on several sources obtained, the 3 sources of problems that have the most potential to cause defects are derived from:

Machinery, For the category of machinery, the machine is the main equipment and an important component in the production process. When there are significant problems with the machine or non-conformity in the machine, the production process should be temporarily stopped for repair, and if the engine malfunction is severe, it should be stopped for quite a long time. Alternatively, we can replace the engine with a new one from the same engine backup to avoid delays.

To solve this problem, the company must carry out regular and thorough maintenance of the machines used in the production process. This maintenance should be performed by a staff member who is experienced working with the machine, as this will ensure that serious engine failures are dealt with as quickly and appropriately as possible. The business must also own or provide a good spare machine so that in the event of a breakdown, it can be used as a replacement.

Man, labor, Concentration and experience are important components that help the manufacturing process for the category of human or labor. Employee discipline also results in employees being lazy, so that work is not carried out properly; lack of experience in the production process; and a lack of understanding of clothing design; All of which causes the ongoing production process to suffer a lot of damage or defects. Employees are tired and lack concentration due to the large number of orders or production targets so that employees have to work fast and sometimes even overtime; also causes the ongoing production process to be damaged or defective. Companies can select candidates with experience in their respective sectors when hiring new employees to address these issues, and to address workers who lack discipline, they should reward employees for doing a good job, arriving on time, working attentively, and achieving their goals. Employees are encouraged to maintain discipline and put aside their laziness.

The quality control method, for the category of methods, the quality control method used by the company in the production process is quite good, but the implementation is less strict due to the lack of control from the supervisor so there are still some errors and also because of the lack of training to the operator so that many operators still do not understand how to sew properly. To address this issue, businesses should continue to monitor the use of quality control procedures on operator expertise by conducting regular training sessions.

After the improvement of the existing work system in production during May to August 2022, the results of reducing defects or production defects can be seen from the Factory Performance below:

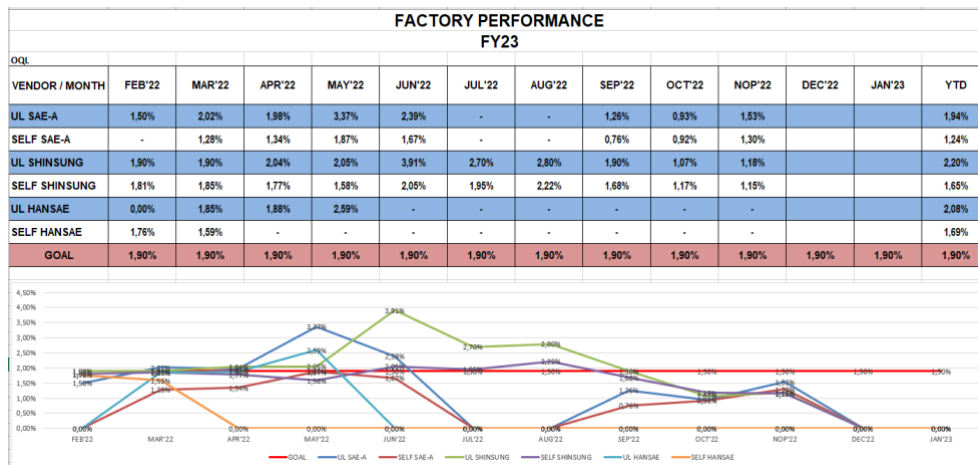


Figure 10. Factory Performance Update

The decrease in defects or production defects began to be seen in early September 2022 with a defect rate of around 1.4% and these results showed the seriousness or form of commitment from the Management of PT. Muara Tunggal to always improve Quality in accordance with buyer requests.

CONCLUSION

This can be inferred from the background of the research, data from the research as a whole, and the research that has been carried out:

There are several types of defects found in finishing and during final inspection including Broken stitch, discard unclean threads, skip stitch, stains, puckering etc., and these defects are found because they are less concerned about some employees about product quality and are also caused by the incomprehension of employees how important it is to maintain quality for a product.

The Quality Management system that is applied holds such an important responsibility in the continuity of the company's operational activities, including by communicating between each division intensely because effective communication is very important for all quality control efforts, and also training for all staff and operators to better understand and master their respective job desc, and after training will be carried out, an evaluation of the results of training will be carried out for See how much impact training has on the smooth running of the production process and quality control

Positive and significant quality improvement The decrease in production defects or de-fects began to be seen in early September 2022 with a defect rate of around 1.4% and these results show the seriousness or form of commitment from the Management of PT. Muara Tunggal to always improve the Quality as requested by buyers.

REFERENCES

- Akbar, D. C. (2018). *Analisa Pengendalian Kualitas Produk Gula Kelapa Organik dengan menggunakan Statistical Quality Control (SQC) pada PT. Pathbe Agronik Indonesia, Cilacap, Jawa Tengah.*
- Ariani, D. W. (2011). *Manajemen operasi jasa.* Universitas Terbuka.
- Chandra, N., & Ratnamurni, E. D. (2022). Pengendalian Kualitas Produk Tahu dengan Metode Analytical Hierarchy Process (AHP). *INOBISS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 5(3), 369–383.
- Fournier, P. L., Chênevert, D., & Jobin, M. H. (2021). The antecedents of physicians' behavioral support for lean in healthcare: The mediating role of commitment to organizational change. *International Journal of Production Economics*, 232. <https://doi.org/10.1016/j.ijpe.2020.107961>
- Musfar, T. F., & Se, M. M. (2020). *Buku Ajar Manajemen Pemasaran: Bauran Pemasaran sebagai Materi Pokok dalam Manajemen Pemasaran.* Media Sains Indonesia.
- Novansyah, R., & Harahap, U. N. (2022). Analisa Jumlah Produk Cacat untuk Meningkatkan Jumlah Produksi Lampu Halogen dengan Metode Quality Control Circle. *Blend Sains Jurnal Teknik*, 1(2), 97–106.
- Oakland, J. S. (2012). *Oakland on quality management.* Routledge.
- Rangkuti, F. (2013). *Customer Service Satisfaction & Call Centre Berdasarkan ISO 9001.* Gramedia Pustaka Utama.
- Rossanty, Y., Nasution, M. D. T. P., & Ario, F. (2018). *Consumer Behaviour In Era Millennial.* Lembaga Penelitian dan Penulisan Ilmiah AQLI.
- Saputra, A. E., & Mahbubah, N. A. (2021). Analisis Seven Tools Pada Pengendalian Kualitas Proses Vulkanisir Ban 1000 Ring 20 di CV Citra Buana Mandiri Surabaya. *STRING (Satuan Tulisan Riset Dan Inovasi Teknologi)*, 5(3), 252–262.
- Sherly, S., Herman, H., Halim, F., Dharma, E., Purba, R., Sinaga, Y. K., & Tannuary, A. (2021). Sosialisasi Implementasi Program Profil Pelajar Pancasila di SMP Swasta Sultan Agung Pematangsiantar. *Jubaedah: Jurnal Pengabdian Dan Edukasi Sekolah (Indonesian Journal of Community Services and School Education)*, 1(3), 282–289.
- Suryono, A. (2019). *Teori dan Strategi Perubahan Sosial.* Bumi Aksara.
- Tirtayasa, S., Lubis, A. P., & Khair, H. (2021). Keputusan pembelian: sebagai variabel mediasi hubungan kualitas produk dan kepercayaan terhadap kepuasan konsumen. *Jurnal Inspirasi Bisnis Dan Manajemen*, 5(1), 67–86.
- Winarko, S. (2018). *Analisis Pengendalian Kualitas Pada Produk Tahu Putih (Studi Kasus Pada Home Industry Tahu di Desa Klagen Tropodo Kec. Krian).* Universitas 17 Agustus 1945 Surabaya.
- Yuliana, Y., Rifa'i, M., & Setyawati, Y. (2022). *Pengendalian Kualitas Produk Melalui Penerapan Statistical Process Control (SPC) Pada Home Industri Sari Apel Brosem Kota Batu.* Fakultas Ekonomi Universitas Tribhuwana Tungadewi.

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Devotion - Journal of Research and Community Service



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