



Daffodil
International
University

Faculty Of Engineering

Department of Textile Engineering

**“Investigation on the final inspection Faild report to
find out the root causes of defects and their remedies”**

Course Title: Project (Thesis)

Course code: TE 4214

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A thesis that was turned in to partially complete the requirements for the degree of

Bachelor of Science in Textile Engineering

Advance in Apparel Manufacturing Technology

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Letter of Approval

To

The Head

Department of Textile Engineering

Daffodil Smart City, Ashulia, Savar, Dhaka.

Subject: Approval of project Report of B.Sc. in TE Program.

Dear Sir,

I would be appreciative if you could take this project report under consideration for your final assessment. The purpose of this message is to inform you that the project report entitled "Investigation on the final inspection report to find out the root causes of defects and their remedies" has been finished and submitted for final assessment by the students "A K M Nahian Hasan Nahid Talukder ID 201-23-963, Md. Salman Mollah bearing ID 201-23-947." The complete study is based on pertinent research that has been interrupted by a critical analysis of empirical data that has the required items. The students had an active part in both the report's creation and the project itself. Producing a large amount of insightful content for the viewers is essential.

So, if you could please accept this project report and take it into consideration for final appraisal, that would be greatly appreciated.

Yours Sincerely



Md. Abdullah Al Mamun

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DECLARATION

Thus, we hereby declare that we worked with **Mr. Abdullah Al Mamun**, Assistant Professor in the Textile Engineering Department of Daffodil International University, to finish this project. We further declare that, to the best of our knowledge, neither this project nor any portion of it has been offered elsewhere.

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We are most grateful to Allah for giving us the courage and skills necessary to complete our thesis, which was titled, **"Investigation on the Statement of the ultimate examination. to find out the root causes of defects and their remedies."**

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Abstract

The investigation of the Statement of the ultimate examination. Our thesis is to determine the root causes of issues and how to address them. The final stage of the garment checking process is the final examination before to shipment. The process that happens after the prefinal or lot pass examination is finished is known as the final inspection, and it is frequently scheduled by the final investigator prior to shipment. Additionally, "pre-shipment inspection" is mentioned. For high-quality manufacture, one must be aware of the complete clothing manufacturing process. In the apparel business, "quality" refers to items that are free from stains, handle problems, washing shrinkage, fabric flaws, stitching mistakes, button or buttonhole flaws, sizing or measurement inaccuracies, and other faults. The degree of acceptability of a commodity or service can be used to gauge its quality. Many textile producers employ management systems and AQL (Acceptable Quality Level) for garment inspection. With this project, we have gained a great deal of experience. We now have a better understanding of inspection processes, problems, and solutions. We found a number of flaws in the clothes, some of which were discovered after it had been inspected and approved for distribution. We find many ways to minimize mistakes during large-scale production and offer fixes for different kinds of errors. Four categories include all errors: random issues, finishing defects, fabric defects, and stitching defects. The results show that there are 15.18% miscellaneous defects, 24.11% fabric problems, 11.83% finishing defects, and 48.88% sewing defects. Upon research, we discover that a variety of garment malfunctions discovered during the final inspection account for the bulk of stitching problems. Some garment failures can also be attributed to defects in the fabric, finishing, or other unrelated areas. Lastly, a number of suggestions are made to raise the caliber of the clothing.

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CHAPTER - 1

Introduction

1. The study's historical background: Large amounts of ready-made garments are produced by the textile industry. People could simply get their hands on the clothes they wanted. People select their clothing from a wide range of beautifully designed fabric varieties. The process of making ready-to-wear apparel begins with the selection of the perfect raw material. A garment's production process involves several stages, from obtaining raw materials to shipment. In the stitching step, the desired product is finally shaped. Important inspections are performed on the clothes both before and after sewing. One of the most important sections in the clothing industry is the final garments inspection department. Garment flaws are a major manufacturing and quality issue. The division responsible for clothing inspection examines all types of defects. This part will be evaluated both before and after stitching, printing, dyeing, and finishing. Consequently, in the section devoted to garment inspection, we can discover a variety of flaws and their solutions.

1.2 The purpose of the study is to:

- Gain an understanding of the final garment inspection procedure.
- To be knowledgeable about the four-point inspection procedure.
- To comprehend quality
- To be aware of AQL.
- To be aware of the many kinds of clothing flaws.
- To be aware of how to reduce clothing flaws.

1.3 Methodology

- Textile factory
- Internet
- Practical information from the factory

CHAPTER 02

LITERATURE SURVEY

2. Review of the Literature

2.1.0. Final Garment Assessment: this is the last step in the garment inspection procedure. The purchaser now inspects the completed item. At this stage, the main fabric, trimmings, accessories, label, fabric problems, and other parts of the garment are all evaluated. The garment business uses a variety of techniques for final inspection. A final check is required before an export order is dispatched. The majority of garment inspections are finished during final inspections, even if there isn't a capability to carry out whole inspection before to this. This is a greater worry for the purchasing side. The final examination mostly looks at a garment's size, fit, and other defects. The item's size as stated on the label is the most important consideration. If the garment is not manufactured in the right size and per the specifications, it will be worthless and will be sent back to the customer. Both females and gentlemen have standard body measurements. When the clothing is made in accordance with this measurement, wiggle room must be allowed for. It is inspected for suitability for clothes manufacture based on the acceptable tolerance chart.

2.2 Final Inspection of Garments Quality:

First, the supplier needs to perform an internal quality assessment before sending the batch to the manufacturer's QA Auditor.

To verify product quality, execute these procedures using the AQL sample plan table-

- Using the AQL table to calculate the quantity of units that need to be examined
- Select a sample quantity at random from each size and color.
- Review the sample lot quantity for all quality performance standards (e.g., packing standards, function and testing standards, and visual standards).

2.3 Quality:

A quality product must satisfy the needs of the consumer. Customers and consumers place a high value on product quality, and in the past few years, this importance has grown steadily. It is accurate to say that a company's earnings and the quality of its products are related.

Generally, Customers accept quality as long as it is provided at an acceptable standard. In the clothing sector, Quality indicates that "after washing, colors won't fade or shrink, and it won't be easily torn or damaged during use." It also means that "there won't be any stains in the clothing, fabric flaws, sewing flaws, any defects of buttons or button holes, and faults of sizes or measurements". "Attain the highest level of compliance while creating products that satisfy customer requirements and are up to the buyer's desired quality.

The apparel and material industries utilize the fiber and yarn quality standard to determine the quality of an item. Construction of the final garment, structure, shading speed, and texture development. Quality is very important to today's customers. If the robust inspection technique can be maintained, then the customers will be motivated and higher-quality items may be generated. The concept of wearing eligibility may have something to do with apparel.

For clothing to be considered appropriate for use, it must have a proper style.

1. There must be no stains, flaws in the material, open seams, loose hanging threads, missing buttons and buttonholes, broken zippers, etc.
2. The item ought to suit the designated size properly.
3. It must work properly in everyday situations. This means that a piece of apparel shouldn't fade, shrink, rip, or have any other problems after going through routine laundering, dry cleaning, pressing, or other processes.

But it takes work to stay at a high level of performance. From the first investigation to ascertain the true requirements of the potential customer for a recently introduced product, to the design, specifics, and regulated manufacturing procedures.

2.3.1 Ambitions:

The main goal of quality control is making sure that products are manufactured in accordance with the standards demanded by buyers or consumers.

- To boost product output the first time around while correctly keeping the necessary tolerances.
- The aim is to create a fabric or garment design that meets the desired standards for design, style, and color selections.

Additionally, marketability and component compatibility must be considered.

2.3.2 The essential elements for producing high-quality clothing:

1. **Systems of Quality:** Ensuring that products are of the best possible quality from the beginning is facilitated by the implementation of quality systems. In order to ensure the intended quality at the end, checkpoints, also known as checkers, might be positioned along the process. Furthermore, ensure that no department moves inferior products to the following step.
2. **Quality of raw resources:** The standard of the items that were utilized to make garments is one of the most crucial factors in guaranteeing correct quality. For example, you may use a defective quantity of fabric to make exquisite clothes. The fabric, trims, and accessories used as raw materials must all meet the required standards. If required, each incoming raw material must have a professional checker check them.
3. **Human factor:** Quality systems are managed by people. In addition, humans operate all equipment, labor, and tools. If the personnel cannot run the equipment or complete their assigned jobs, and the officers are not able to adhere to quality systems, the factory will not be able to produce high-quality garments. Employers must provide training for operators and assistants, and supervisors must hold the necessary certifications.
4. **Neglecting Corrective Measures:** Error-free product manufacturing which have not been achieved. Therefore, errors could occur at any point during the process flow. Early

detection of flaws (defective components) or defective clothing is advised in order to mitigate the severity of the quality issue. Not acting quickly enough to address the issue makes it worse and could get worse.

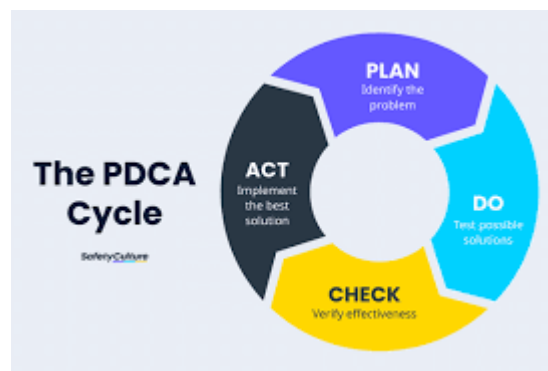
5. **Communication Gap:** The entire process is carried out through a convoluted supply chain. from the time an order is received until it is shipped. Departments and outside parties, such suppliers and customers, communicated often. The process could be made worse by inaccurate or inadequate information. Particularly with regards to just carrying out the customer's directive or request.

6. Managing materials is another really potent element. Making high-quality clothing would be difficult if materials and apparel were not handled well.

7. **Cleaning:** Factory cleanliness and housekeeping improve product quality. This is comparable to working with materials.

2.3.3 Requirements:

PDCA cycles are essential to the quality framework's needs. identifying the standards of excellence that customers expect.



- Establishing and directing the section of quality control.
- Make sure prompt of the quality requests receipt by the QC section.
- Making sure the manufacturing department receives the proper flow of quality requirements.

- Developing quality guidelines, standards, sampling protocols, frequency, inspection systems, and so forth.

- Measurement, testing, and inspection carried out according to the schedule.

Observe any discrepancies.

- Request feedback from the manufacturing division.

- Make plans for future upgrades.

2.3.4 Determining the Standards of Quality:

The first stage in the quality control process is to comprehend, specify, and accept the quality requirements set out by the clients. It is necessary to take the next steps.

1. Learning what the quality needs of the customers are
2. Making reference to our previous performance
3. Having a conversation with the QC division
4. Communication with the Production section
5. Receiving feedback from clients
6. Obtaining the most recent quality requirements from clients
7. Adopting the high bar for performance

2.4 AQL (Acceptable Quality Level)

When talking about clothing export quality, one of the terms that is most frequently used is AQL. Given that most acceptance decisions for clothing shipments meant for the export market are based on AQL -based sample plans. The term "acceptable quality level" (AQL) is used. Before accepting the finished goods from the producer, the buyer inspects the goods, as is typical in business procedures. This is particularly critical for the apparel export industry because international customers are quite particular about the caliber of the goods they buy. An AQL level for the product is supplied to the producer. Buyers use a random sample procedure to inspect the goods. When the AQL requirements are satisfied and the customer presents a certificate authorizing the product's shipment, the items are considered to be of an acceptable quality level. Procedure to procedure, item to item, and even customer to consumer all have different levels of AQL. An example of an inspection plan for the most recent shipment is shown here. The Acceptance Quality Level (AQL) is the

highest quantity of defective products that could be deemed acceptable after random sampling and inspection.

2.4.2 Categorizing Flaws:

The defects found during the inspection fall into three categories:

- **Serious flaw:** (Must be followed precisely. There's not a range that works well.) are those that infringe against fundamental legal rights, endanger the product, or harm the final consumer. For instance: There are insects around, there's a broken needle in the clothes, etc.
- **Serious flaws:** (Must be precise to the letter). There isn't a suitable range.) are those that break fundamental laws or jeopardize or deteriorate the product for the buyer.
- **Small Defects:** Generally, imperfections up to 4% are permitted. do not have an impact on a product's usability commercial feasibility, but they do highlight artisanal flaws that cause the product to fall short of industry requirements for quality. For instance, a small pucker, a subtle stain, etc.

2.4.3 How AQL Operates: The AQL system works by assessing a sample of goods from a batch. The AQL level determines how many products need to be evaluated, and a random sample is selected. Using the AQL method, a random sample of clothing is selected from a batch and examined to look for flaws or problems. The amount of clothing inspected and the number of faults permitted are determined by the AQL level, which is decided upon by the manufacturer and the customer.

2.4.4 Sampling Plan:

1. Single Sampling Plan - Normal Inspection:

Ensure an 80-piece sample size where the number of lot is 1200 where the AQL ensured 2.50%. If five garments are found to be defective, the entire batch is deemed "Acceptable." When there are six, everything is regarded as "Rejected or Re-Checking."

2. Regular Assessment and Double Monitoring System

The minimum number of the 80 pieces of the sample size and the number of lot is 1200 where the AQL ensured 4.0%. Should seven faulty items be found, the lot is deemed "acceptable". But the lot is tagged as "Reject/Re-Check" if eight problematic items are found.

Multiple-sampling plans, which employ a maximum of seven samples overall, employ comparable techniques. Main advantage of this method is the sample sizes are relatively small.

2.4.4 Benefits of Using AQL:

1. **Consistency:** The garment goods quality is monitored by the AQL system to ensure that it meets the objectives. This keeps both the brand's reputation and customers satisfied.
2. **Cost-effective:** Before products are supplied to clients, the AQL system helps identify and reject faulty ones, reducing the expense of rework, refunds, and potential liabilities.
3. **Objective evaluation:** Reduced probability of bias or subjective assessment is provided by this.
4. **Standardization:** The standardization method of QC where each parties involved to comprehend and provided by the AQL system.
5. **Early identification:** Early in the manufacturing cycle, the AQL system helps identify and address quality issues, reducing the risk of costly product recalls or production delays.

6. **Quality enhancement:** The garments industry can identify the root causes of quality issues and take necessary corrective action to improve the overall caliber of the products by monitoring and analyzing AQL data.
7. **Risk reduction:** The AQL method helps to lower the possibility of lawsuits regarding poor product quality, reputational damage, and financial losses from inferior products.

2.4.5 AQL Chart:

Acceptable Quality Limit Chart							
AQL Limit		AQL 1.5		AQL 2.5		AQL 4.0	
Lot Size	Sample Quantity	Major	Minor	Major	Minor	Major	Minor
51-90	13	0	1	1	2	1	2
91-150	20	1	2	1	2	2	3
151-280	32	1	2	2	3	3	5
281-500	50	2	3	3	5	5	7
501-1200	80	3	5	5	7	7	10
1201-3200	125	5	7	7	10	10	14
3201-10000	200	7	10	10	14	14	21
10001-35000	315	10	24	14	21	21	21
35001-150000	500	14	21	21	21	21	21

2.4.6 Requirements for AQL based on Products:

AQL and sample technique are typically chosen by the buyer. Sample plans can be classified into three types: single, double, and multiple sampling. Regarding each sample plan, there are three possible execution levels (regular, tightened, and decreased) based on the quality of the items and the requirements for the inspection. In order to determine acceptance, the apparel industry usually uses single sample techniques. The two-sample method is nevertheless employed by certain purchasers. Utilizing the AQL table, a single sample is selected at random from a large pool of clothing items, consisting of a predetermined number of items. To put it simply, lots that have more faults than the acceptable quality level (AQL) have to be rejected, while lots that have less defects than the AQL have to be accepted. However, since the acceptance decision is dependent solely on a tiny sample selected from the total lot, this is not feasible because there is a possibility that the judgment will be incorrect.

2. Inspection and Assessment

High standards are necessary in every aspect of the economic world. Consumers demand that they receive value for their money. As manufacturers of apparel, it is our constant responsibility to produce top-notch work.

The systems required to schedule and manage the various groups' operations within a company in order to maintain the required standard of quality. As a result, quality assurance or comprehensive quality control are considered to be embodied in quality control.

Quality control is applied throughout full garment manufacturing process, from obtaining raw materials to creating the finished product. In the textile and apparel sectors, the quality of a product is defined by its yarns, fabrics, fabric layout, durability, appear develops, and final garments. On the other hand, export quality standards are connected with commercial venues and consumer categorization.

Standards and quality control are essential components of training because they are among the most important aspects of any job's content.

2.4.8 Principles of Quality Control

Delivering a dependable product requires meeting the following requirements:

- A well-designed product that has undergone enough development testing to demonstrate its dependability in the conditions in which it will be utilized. This is the key component of the best product.
- A thorough explanation of this quality's requirements, which all parties involved in the production of the final product's component parts must comprehend.
- Confirmation that these specifications can be met by the manufacturing processes.
- Full acceptance by all parties involved in manufacturing of the obligation for

- During the manufacturing process, keep an eye on the product to spot any deviations from the standards.

In order to provide actionable proof, keep thorough records of the relevant data gathered from these checks.

- Communication channels, like feedback to output, should be established to make sure ensure the required adjustments are made to personnel, procedures, and resources in order to maintain future production within the parameter.
- Details about applications, limitations, and uses of the product.
- A departmental assessment of the user experience, prompt corrective action, and action.

2.4.9 Objectives:

To enhance the production rate while upholding the necessary criteria. In addition to marketability and component compatibility, a fabric or garment's design must satisfy in terms of style, color selection, and design complexity. Subpar quality can only be ensured at that point:

- Identifying and preparing to fulfill the demands of the customer.
- A perfect progression.
- Certifications related to performance and safety.
- Written instructions that are easy to follow
- Suitably packaged.

2.4.10 Maintaining quality

From the client's point of view, quality satisfaction may be ensured by providing:

- The suitable product.
- Good quality.
- The right time.
- Healthy

- condition.

To ensure that a garment is of the highest quality, we need to focus on a few specific areas:

1. Fabric without problems.
2. The way the colors of the clothes match.
3. Designing the pattern in accordance with the buyer's requirements.
4. Every piece of the clothing should fit flawlessly.
5. Superb stitching; the seams have to form precisely.
6. Additional accessories such as the button, tag, zipper, and level are positioned appropriately.
7. The packing and container.

2.4.11 Approach:

1. Recognize every variable that exists throughout the fabrication of textiles and clothing to produce a complete specification.
2. Make a specification that is broken up into different portions or components so that everyone in the manufacturing and design teams knows what is expected of them.
3. Give suitable working tolerances for each and every value included in the specification.
4. Put in place mechanisms to track fault rates.
5. Learn more about the product's technical aspects, such as the fabric's geometry and the relationships between pick count, loop length, yarn count, relaxation, and fabric attributes.
6. Sewing problems.
7. The underlying reasons and preventative measures for seam breakdown.

2.4.12 Quality control function:

- **Evaluate Yarn's Properties**

1. If regular yarn inspections are made, you will receive an average delivery in terms of tex (count, denier).
2. Check the tex of the supply intended for the sample if the yarn is arriving uninspected, and utilize it only when it falls within the allowed limits.
3. Conduct further relevant yarn tests.
4. Make notes about information

- **Specifications for Knit:**

1. Record all the information needed to make the fabric or clothing blanks, such as the stitch length, chain layout, and any instrument measurements.
2. Record each step involved in making the trimming.
3. Take note of any issues you encounter, such as stitch patterns that periodically result in drop stitches. Passing information to the cosmetics area is necessary.

- **Developing Specifications**

1. Keep a record of every aspect of the makeup, such as the kind and quantity of thread for sewing needed and the sequence in which the parts were put together.
2. Note down any difficulties you encountered, including a difficult collar-attaching process.

- **Analysis the Physical Properties of the Garments**

1. As soon as the garment is finished, record its measurements.
2. Find the appropriate weight for a fiber that experiences a large amount of moisture gain
3. After the clothes are washed, double-check the measurements.

4. The correspondence between Quality Control and the Cost Department
5. After completion, give the cost department all the information.
6. Give yourself wiggle room for any unforeseen difficulties or a slower-than-normal pace of seconds.

4. Generated quality control data

Every QC point produces data. To provide continuous visual verification, this has to be captured using straightforward procedures. These documents provide management with the opportunity to act quickly in response to timely feedback and employee accountability.

Raw Materials:

- Shading: verified within an acceptable range for the standard arrangement.
- Verify the delivery weight and report any discrepancy.

Yarns Check

- Staple Fiber Yarn Count Tests: Ensure that count variation occurs within the designated tolerance both inside cones and in between delivery. Yarn utilization is compromised if rough.
- Confirm homogeneity and filamentation
- Look for unsuitable circumstances.

Settings of Knit machine

- Yarn tension that is level and tailored to knitting.
- K.O. distribution; depth and dial height are adjusted in accordance with guidelines.
- Length of loop/course: Verified positive feed; run-in level and within specification.
- Release all of tensions, but be sure to do so consistently.

Checks for Fabric or Garment Blanks, Fabric Parameters

- Perfect color and appearance; precise jacquard design; absence of barrenness.
- Standard width; this grey fabric is just for illustration.

- Verified to be within specification tolerances
- There must tolerance of no more than one blank weight per dozen.
- Check the cloth for stains and imperfections.
- Total loss: an ongoing record of losses resulting from scouring, etc.
- The obligation of knitting

Sewing Checks

- It was confirmed that the stitches per centimeter and thread run-in ratio fell within the allowed tolerance.
 - Proper straightness, balance, and evenness; no stitches are missed
 - Proper extensibility and security (no cracking or laddering).
 - There isn't any skip sewing.
- The Responsibility of Machinists.

Final Inspection

- A consistent, accurate shade throughout the entire garment.
The pockets, collar, and sleeves, for instance, are all perfectly proportioned due to the precise cutting.
- Precise dimensions and weight within tolerance of specifications.
- Consistent patterns and an accurate look.
- Seams precisely completed, free of cracks, laddering, and missing stitches.
- Functioning accessories that are applied correctly.
- Stains and defects are absent from the cloth.
- Sufficient labeling.
- Accountability for corrective action (inadequate workload; dissection by categories of errors).

Recovery Inspection

- Check to make sure the corrective measures are effective.

Check to see how much work was successfully retrieved.

refusing to reuse tasks.

Product Tests

- Color fastness to approved agencies: cards with ratings for things like washing, rubbing, perspiration, and illumination are generated regularly and evaluated against requirements.
- Stability: Allowance for shrinkage and, when required, extension recovery within specification
- Endurance: when required, assessed for snagging, pilling, and abrasion. Evaluation in relation to the specifications
- Brightness

2.4.13 Quality Checkpoints

It should be mentioned that faulty apparel makes a firm less friendly and increases inefficiency. Why do defects show up in finished clothing? Many humans and pieces of machinery are used in the clothing manufacturing process. Due to malfunctioning machinery, ineffective procedures, or human mistake, some defective items will inevitably be created in every shipment during the garment production chain process. Even if it is initially easy to replace or repair the damaged parts, finding them in the end can sometimes be costly and time-consuming. If any defective products made it beyond the first step without being found and fixed, there will be a serious problem in the last stage., As compared to the first identification, the cost of repair or replacement will be significantly

higher.

Every time any of the materials, including textiles and accessories, are received in the warehouse, the production process starts. It concludes when the packed goods are delivered. To guarantee that only items of the highest caliber move on to the next phase, manufacturers usually set up quality checkpoints at the end of each stage.

2. 4.4 The Process of Quality Assurance



The department-specific check requirements for ensuring product quality are outlined in the following chart.

Fabric storage facility	According to Acceptable Quality examination must be done 100% of the time if random inspection is not acceptable.
Trim & accessories	According to AQL 2.5, inspection must be done 100% of the time if random inspection is not acceptable.
Cutting Section	Confirming markers Check the fabric type and test report. getting QA approval by slashing tests. The fabric should be spread, relaxed if necessary, and then sliced. Putting together Look over the panel that has been sliced.
Print and Embroidery	meticulous examination of the printing panel thorough examination of the panel containing the embroidered

Sewing Section	an in-line checkpoint (during an important process) Check the end of the line at random.
Finishing Section	reviewing the parts that underwent the initial inspection following completion (post-wash) Checking the final finishing (after pressing) Inspection of cargo made by the business

2.4.15 Quality Standards:

Quality assurance guidelines have to be incorporated into the planning stage of any project since quality control is one of the most crucial parts of any project. Using a Quality Standard, we propose the level (such as blame) at which the severity of a malformation is no longer appropriate. It is comparable to resilience associated with measurable variables. Having assistance with the following is part of methodical preparation:

1. Basic instruction.
2. Sufficient techniques.
3. Characteristics of grade.

Without this final component, delivery cannot be avoided. These standards are agreed upon after considering the requirements, the purchasing test, and additional elements. Reliability management involves the following stage, which entails monitoring and assessing each outcome region. The intrinsic value of an object is either discovered or it is not detected.

2.5 Types of defects and flaws in clothing

2. 5.1. Fault in garments

Products are deemed defective when they are not functioning as intended, have an unpleasant feature that is twisted in some way or has been utilized improperly. No one desires an inferior item. Goods with flaws lost quality on marketplaces.

A product could be flawed in several different ways. The phrases "flaw" and "reject" are interchangeable. In the garment sector, most people are used to being turned down. Rejected products are those that are no longer able to be sold. Producers suffer when customers don't buy their apparel. If there's even the smallest obvious defect in the most noticeable region, you can return the item of apparel. Both the initial stages of getting raw materials and the finished product are subject to quality control.

2.5.2. Classification

Defects are also classified into:

1. Significant flaws
2. Massive flaws
3. Small flaws

1. Significant flaws

- A majority severe problems (zero%), sometimes referred to as Significant flaws, bar an item about export.

2. Massive flaws

- Massive flaws which have serious imperfections which are not permitted to surpass a predetermined percentage (3%) according to the buyer's specifications.

3. Minor defects

- Minor defects are substantial imperfections that exceed a predetermined percentage (5%) that can be accepted in accordance with the buyer's demands.

2.05. Fault in garments

Clothing defects can occur in a variety of ways and at any stage of the manufacturing process, from design to production. Common types of faults in apparel include:

1. Textile defects: These defects can include stains, discolorations, or variations in the fabric's weave or texture.
2. Stitching errors: These include problems such as loose threads, skipped stitches, and uneven seams.
3. Mismatched Printing or Designs: When trimming or stitching, mismatched printing or designs might result in an unsightly finished product.
4. Uneven Bottom Lines or Corners: Poorly completed or uneven hems and edges can take away from the appearance and quality of an item of clothing.
5. Measurement Problems: Misfitting garments, whether they are too big, too small, or unevenly fitted, are frequent flaws that can leave customers unhappy.
6. Defective Buttons, Zippers, or Fasteners: These flaws can include incorrectly placed fasteners, damaged zippers, or missing buttons that impair the garment's use and functionality.

7. Color Fading or Bleeding: When laundered, poorly printed or dyed fabrics may suffer from color fading or bleeding, which will lessen their appearance.
8. Tears or Rips: Any rips or tears in the fabric or seams may be regarded as flaws, which could make the item unsaleable or unfit for wear.
9. Tastes: Distasteful smells, such those brought on by incorrect handling or storage of the clothing, may also be regarded as flaws.
10. Labeling or Packaging Mistakes: Inaccurate labels, tags, or packaging components may cause misunderstandings or inaccurate representations of the goods

To reduce the likelihood of these flaws and guarantee that only high-quality clothing is sent into the market, manufacturers usually put quality control procedures into place. Even with these precautions, mistakes can still happen, so it's critical for manufacturers to have policies in place for locating, resolving, and fixing any flaws that are discovered.

2. Term for the textile flaw:

1. Grinning: Usually the result of incorrect tension or stitching, puckering is the gathering or wrinkling of fabric along a seam.
2. Dash: In knitted or woven fabric, a run is a line of pulled or unraveled threads that is usually the result of snagging or ripping.
3. Distorting: An unevenly hung or draped garment is the result of cutting or sewing fabric off-grain.
4. placing: This flaw results in tangled threads and uneven stitching when the needle yarn gathers up below the fabric's surface while stitching.

5. Grinning: When there is insufficient seam allowance or fabric tension, the weft strands of the cloth show through the seams.
6. Darkening: Usually brought on by irregularities in the dyeing or printing process, shading is the term used to describe differences in color or tone across various areas of the garment.
7. Headset: During sewing, excessive tension or incorrect handling can result in a circular distortion in the fabric known as a fisheye.
8. Oil Stains: Visible marks on the fabric may result from oil stains that happen during the production process or from incorrect storage.
9. The wrinkles: Careless handling, storage, or shipping of the clothing may cause the fabric to wrinkle excessively or crease excessively.
10. Edge Slide: Usually the result of shoddy stitching or low-quality cloth, hem slippage is the beginning of the fabric's unraveling or coming undone.

2.6. Faults that emerge at various phases

2.6. Fault during the Assessment of the Garments

Frequently, defects were found when doing the inspection. Every flaw has a different importance, as they may not everyone created equal. While some of these errors are rather small, others are quite significant.

We often find it difficult to decide on even the smallest thing. Please be advised which these classifications are not set in stone and may vary based on the viewpoint of the customer.

Major defect: Something that, in the eyes of a discriminating customer, warrants an exchange, feedback, status because it adversely affects fit, appearance, performance, or customer satisfaction.

Any departure from the norm that isn't substantial enough to be classified as a large one is referred to as a minor defect.

2.6.2.1 Both major and minor garment defects

Use the items on this list as a reference to assess the severity of a clothing defect:

Major Defect in the Seam and Stitch:

1. The requirements for sewing are:

- a) Between 8 and 10 SPI
- b) 8.9 SPI upper stitching
- c) Additional needs as indicated

1. Pistachio flake
2. Snags in the threads
3. The decline of feeders
4. An abnormally high quantity of skip stitches
5. The pleats within the line of seams, except the patterns indicate elsewhere
6. A poorly repaired seam
7. Visible broken stitches, preferably two or more.
8. Open wounds caused by needles.
9. Fabrics that have damaged, fresh, or loose edges
10. An irregular and staggered stitch density.
11. Too many stitches result in a bright and fragile seam, while too many cause the fabric to bounce and break.
12. Inaccurate densities of stitches
13. Take out the slack stitching.
14. Leave out sewing details like buttonholes, snaps, and top stitching
15. Sewing edges that are extremely uneven, such as the pocket mouth, waistband bottom, etc.
16. Poor repairs and double stitching severely damage the product's appearance and functionality
17. Incorrectly constructed stitches or loose stitch tension, which can easily tear off surface loops.
18. Stitch tension breaks at normal force.
19. A thread with the wrong color match

20. Shading caused by improperly cut or stitched fabric that was mixed in with the garment.
21. There is evident blind stitching on the facing side.
22. Turn the clothing pieces inside out
23. A foreign object lodged in the seam
24. An incorrect seam
25. Inconsistent stripes or checks
26. Any seam that is puckered, pleated, overlapped, loosening, or tightening.
27. Incorrect or asymmetrical sewing line "run-offs"
28. An improper or unequal inlay width, such as seams that break apart or bare edges that show weave thread slippage

2. Manufacturing Error:

Principal Flaws:

The initial finished parts are hardly acceptable or proportional in terms of measuring or construction.

2. Completed clothing without measurements.
3. The internal contradiction to the specifications is removed.
4. Restricted pieces, dissolves, the hips groups, snaps, or catches, among other elements and attractions.
5. Missing or mismatched parts or elements.
6. Intentionally cockling, overfilled, too tight, and twisted connecting.
7. Total, cockling, folded. bending portions of the clothing.
8. Partially colored or shaded with texture clothing.

Minor Mistakes: Not removing the missing thread

3. Serious Flaws in Minor Elements.

- There are walks in the weave and gaps in the grain of the angled rib knit piece. Diagonal neck and cuffs.
- Wrongly shaped ends

2..6.1.3 Various Fabrics Fault

1. Broken Color Pattern: Typically brought on by yarn that has been wrapped in an unusually dark shade.
2. Fitness: A circular stitch. As the yarn was fed into the machine, which is what caused this. The texture will appear to have level stripes.
3. Wrinkle Mark: Unlike a wrinkle streak, this one is probably going to be on the entire roll.
4. The regions where texture overlap results in creases are indicated by the crease check once the process is finished. It's unlikely that final compression will be able to bring back the distinctive quality or texture of snoozed texturing. Frequently, staining is an issue.
5. Crease Streak: Refers to diseases with a cylindrical seam. consequences of using crushed rollers in the coloring procedure, which gave the texture wrinkles Drop
6. Holes: Cau sed by needle snapped.
7. Tangled: Caused by tying together spools of yarn.
8. Missing Yarn: When sewing in twists, this happens. results from twisting yarn that is too large or too thin. When filaments exhibit varying hue preferences, texture ought to be seen as either a distinct shading or a thick stop.

9. Mixed End (yarn): This texture is made on the twist outline by using yarn with a different fiber blend.
11. Needle Line: Erroneous lines are framed by a bent needle. Typically, there is a vertical line.
12. Press-Off: This occurs when all or a portion of the needles on a curved sewing machine break. As a result, the texture may fall off the computer or its arrangement may be totally ruined. When a horrible press off happens, sewing needles need to be replaced because they break easily. A new texture move is started with terrible press-offs for the majority of the phase.
13. Runner: The reason was a broken needle. The sprinter will show up as a vertical line. Most machines have a pausing mechanism that shuts down the computer when a needle breaks.
14. Thick Place: Often shown as a result of the filled yarn breaking and the persistent plan to keep going until the administrator detects the issue.
16. Water Spots: These are usually the result of a moist texture that is left unduly nice before drying. Shade shifts that cause problems

2.6. Various kinds of Finishing Flaws

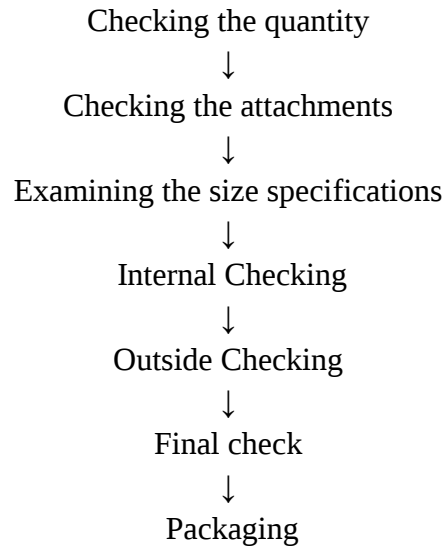
The following are the imperfections that are hidden throughout the polishing process:

1. Discolored spots on the fabric.
2. A colorless patch of cloth.
3. The hole was punched.
4. Turn Pucker Into Sulfur.
5. Swaying.
6. Medication.
7. Water Sources.
8. Cuts or Nicks.
9. A rip in the joint.
10. The earth.
11. Disparities.
12. Not Pushing Hard Enough.
13. Applying Pressure to the Fabric to Create Sheen.
14. Fragile Components.
15. Folding Errors.

2.6. Checking of Garments

Without the use of any technologies, visual inspections are conducted to control the quality of the products. The process of inspection involves assessing if the measurements of the garment, the stitching, the placket, the thread used in the closing mechanism, and other components all meet the required standards. Every area of the clothing business has a number of inspection facilities. Inspection seeks to reduce time and costs by identifying mistakes or flaws at every level of the clothing production process.

2.6.1.1. Flow Chart for the Garment Testing Method



2.7.2. Method for Garment Checking

1. Volume Acceptance: Counting every item is the first step in the inspection process, which verifies each clothing package's quantity by comparing it to the vendor's packaging record. The vendor is informed when the quantity differs from what is specified in the box and on the list of items being shipped.
2. Accessories Confirmation: The next action is to make sure the accessories are correct. In this case, we accept the price, demerit, brand, and other tags. If the buyer requests it, we may additionally approve woven labels, wash and care labels, and accessories.
3. Inspections of sizes specifications: Following the confirmation of the accessory, each item is examined to ensure that it satisfies the size specifications listed on the customer-provided instruction page. In the event that there are measurement issues, we promptly inform the client.

4. Third-party examination: At this stage, the exterior of the garment is examined to ensure that it is free of flaws, including color variations, issues with the fabric or printing, holes, poor stitching, odors, dyeing mistakes, stains, etc.
5. Final Inspection: The most crucial stage of the inspection process is the last review. If any defects are found, the item is inspected again to make sure that all testing and inspection were completed correctly and without omissions. If not, the item is rejected or returned for a refund.
6. Packaging: After being put back into their original poly bags, all "Grade-A" products are sent for needle inspection.

As a result, depending on the severity of the damage, some apparel is returned for repair and others

2.7.3. Different Garments Testing Procedure Options:

Procedure for quality control Before the consumer receives bulk pollutants, this is inspected to ensure that it complies with rules. Shoppers desire high-quality goods at reasonable prices. The products must be delivered to customers in the proper quality, based on the cost. Quality assurance refers to any internal business procedures that support the production of superior goods. Which is carried out within the delivery procedure as a whole. The control chart documents the results of assessment, that takes place through current production delegates. This acceptability of product quality is assessed using this process. Garment inspection is that method for visualizing examining Selections are made at arbitrarily from the shipment to ensure which the items seem as advertised and fit the instructions, descriptions, and/or sample that was received.

Types of Quality Control Inspection :



1. Initial production check:

Its finished before manufacturing begins. Where is the most recent examination of the fabric used, the design, cut, and workmanship of the garment to guarantee that it satisfies the client's requirements, or a pre-production sample.

2.Initially Productions Checks:

They are carried out at the beginning of manufacturing while the initial inventory of clothes is examined to look for any variations or abnormalities and to make it easier to make the required repairs before the manufacturing process begins. Initially, the examination focuses mostly on the general layout and appearance, the level of craftsmanship, the dimensions, the quality of the fabric and components.

1. Throughout the Du Pro Quality Check:

Monitoring takes place across the course of manufacturing for guarantee that any early errors or variations have been fixed. This inspection, which is often conducted a few days after the original production check, is essentially a follow-up, particularly if any anomalies were found.

4.Final Random Inspections:

This is completed when the full quantity of an order, or a component of a delivery, is produced. The buyer frequently designates the portion of the apparel that will be analyzed. Not simply the AQL sampling examination may be employed, but any inspection technique developed by the buyer.

CHAPTER - 03

3. Descriptions of the experiments and assessment of data

The report of the negative final assessments

A few most recent assessments from Metro Knitting & Dying Mills LTD. of various buyers are gathered below. We have gathered 17 audit failure reports from **KONTOR & TOM TAILOR**. The following is a list of the summary:

Purchaser Title: TOM TAILOR Article No: 1040582 Model size:6000 Pcs

TOM TAILOR GROUP				INSPECTION REPORT															
				FACTORY SIZE SET		PILOT RUN		IN-LINE EXTERNAL PROCESS											
				1st IN-LINE		1st Output		Packing Inline		FINAL									
PWN No:				Inspected By:		MD: NAJRUL ISLAM.													
Article No:		1040582		Supplier:		METRO -01		Inspection Date:		21.10.2023									
PO No:		450059877		Order Quantity:		6000 PCS.		Buyer Del. Date:		19.10.2023									
Color:		10348,34669		Shipment Quantity:				Buyer:		MAREN KUHLMANN									
Season		402-s		Sizes		S.M.L.XL.XXL.XXXL.													
PRODUCTION STATUS																			
Cutting / Knitting			Print / Embroidery			Sewing / Linking			Washing			Finishing			Packing				
6500 pcs						4550 pcs			2000 pcs			4550 pcs			2700 pcs				
ACCESSORIES			GOOD	NEED IMPRV	BAD	SEWING/LINKING			GOOD	NEED IMPRV	BAD	FINISHING/PACKING			GOOD	NEED IMPRV	BAD		
Print						Threads			x			Washing / Hand feel				x			
Embroidery						Seam / Linking				x		Cleaning			x				
Colour Combo			x			Stitching				x		Pressing							
Trims			x			Shape / Symmetrical				x		Folding			x				
CUTTING/KNITTING			GOOD	NEED IMPRV	BAD	Button / Hole						Hangtag			x				
						Label / Position			x			Polybag			x				
Fabric Check			x			Bartacking						Carton Quality			x				
Lot Check						Hemming						Carton Size			x				
Shading			x			Lining						Marking			x				
Stripe Match						Pocketing				x		Packing			x				
Checks Match						Zipper			x	x		Color			x				
Panel Check						Garment Weight			x			Size			x				
Yam Check					X														
BEFORE WASH			X			AFTER WASH			X			MAJOR				MINOR			
INSPECTION COMMENT												ACTION TAKEN							
QC 416 Washing & Dirty Spot												pls take care on Washing.		6		3			
QC 107 Yam Contamination												pls take care on check quality.		5		3			
QC 410 Neck Rib Looseness												pls take care on check quality.		3		3			
QC 214 Misplaced Labels / Trims												pls take care on check quality.		1		2			
QC 203 Uncut Thread												pls take care on check quality.		2		3			
FACTORY MUST TAKE CARE ALL THE BALANCE QTY AND PLEASE DO NOT PACK ANY DEFECTIVE GARMENTS INTO THE POLY BAG																			
Measurements												Within Tolerance		X		Exceed Tolerance			
Total Cartons and Numbers checked :														Total Defects		17		14	
														Total Pieces Checked		200 PCS			
Estimated Short Shipment due to:														AQL USE 2.5		7		11	
QA / QC SIGNATURE				SUPPLIER SIGNATURE				INSPECTION RESULT											
MD: HASAN SIBBIR				UTPAL KUMAR CHANDA.				Accept				Pending		Reject					
														X					
These findings do not constitute proof that goods are in accordance with contract and do not release the suppliers from their contractual responsibilities																			
Remarks																			

Fig- Statement of the ultimate examination.

Report-2: Purchaser Title: TOM TAILOR Article No: 1042353 Model size:6346 Pcs

TOM TAILOR GROUP		INSPECTION REPORT												
		FACTORY SIZE SET		PILOT RUN		IN-LINE EXTERNAL PROCESS								
		1st IN-LINE		1st Output		Packing Inline		FINAL						
PWN No. :		Inspected By:	MD: NAJRUL ISLAM.											
Article No. :	1042353	Supplier:	METRO -01		Inspection Date:	21.11.2023								
PO No. :	450061002	Order Quantity:	6346 PCS.		Buyer Del. Date:	19.11.2023								
Color :	27679,30105,	Shipment Quantity:			Buyer:	MAREN KUHLMANN								
Season	402-S	Sizes	S M L XL XXL XXXL											
PRODUCTION STATUS														
Cutting / Knitting 6690 pcs		Print / Embroidery pcs		Sewing / Linking 4850 pcs		Washing pcs		Finishing 4850 pcs		Packing 2800 pcs				
ACCESSORIES		GOOD	NEED IMPRV	BAD	SEWING/LINKING	GOOD	NEED IMPRV	BAD	FINISHING/PACKING	GOOD	NEED IMPRV	BAD		
Print					Threads	X			Washing / Handfeel	X				
Embroidery					Seam / Linking		X		Cleaning	X				
Colour Combo		X			Stitching		X		Pressing		X			
Trims		X			Shape / Symmetrical		X		Folding	X				
CUTTING/KNITTING		GOOD	NEED IMPRV	BAD	Button / Hole				Hangtag	X				
Fabric Check		X			Label / Position	X			Polybag	X				
Lot Check					Bartacking				Carton Quality	X				
Shading		X			Hemming				Carton Size	X				
Stripe Match					Lining				Marking	X				
Checks Match					Pocketing		X		Packing	X				
Panel Check					Zipper		X		Color	X				
Yarn Check					Garment Weight	X			Size	X				
BEFORE WASH		X		AFTER WASH						MAJOR		MINOR		
INSPECTION COMMENT						ACTION TAKEN								
QC 410 Poor shape / Asymmetry						pls take care on ironing.						1	1	
QC 107 Snag (Yarn pull)						pls take care on check quality.						2	3	
QC 204 Excess stitch/ Run off						pls take care on check quality.						2	0	
QC 203 Untrimmed/ Loose thread						pls take care on check quality.						2	3	
QC 211 Puckering, Pleats, Gathering, Looseness						pls take care on ironing.						0	1	
QC 202 Broken stitches/Open seams						pls take care on check quality.						2	0	
QC 207 Contrast seam /Loose stitch						pls take care on check quality.						0	2	
QC 214 Misplaced labels/Trims						pls take care on check quality.						0	2	
QC 407 Other stains						pls take care on check quality.						1	2	
FACTORY MUST TAKE CARE ALL THE BALANCE QTY AND PLEASE DO NOT PACK ANY DEFECTIVE GARMENTS INTO THE POLY BAG														
Measurements		Within Tolerance		X		Exceed Tolerance				10		14		
Total Cartons and Numbers checked :						Total Defects				125		PCS		
						Total Pieces Checked				5		8		
						AQL USE 1.5 / 2.5								
Estimated Short Shipment due to:						SUPPLIER SIGNATURE				INSPECTION RESULT				
QA / QC SIGNATURE				MD: HASAN SIBBIR				UTPAL KUMAR CHANDA.				Accept	Pending	Reject
														X
These findings do not constitute proof that goods are in accordance with contract and do not release the suppliers from their contractual responsibilities														
Remarks														

Fig- Statement of the ultimate examination.



Fig- faults

ARENA		GRADING	AFW816 V.3												
SPORTWEAR LIFESTYLE			REV2 15/6/2023						PAPER PATTERN REFERENCE AFW814W22 REV1						
			XS		S		M		L		XL		XXL		
A	HALF CHEST	2	50	+5	52	+5	54	+5	56	+5	58		60		9.5
B	FRONT LENGTH FROM HPS	2	83	+5	85	+5	87	+5	89	+5	91		93		1
B1	BACK LENGHT FROM CENTRE BACK	2	81	+5	83	+5	85	+5	87	+5	89		91		1
C	SLEEVE LENGTH FROM CENTRE BACK	2	60	+5	62	+5	64	+5	66	+5	68		90		1
E	FRONT RAGLAN	1	29	+5	30	+5	31	+5	32	+5	33		34		0
E1	BACK RAGLAN	1	36	+5	37	+5	38	+5	39	+5	40		41		0.5
F	BACK NECK WIDTH	0.5	19.5	+5	20	+5	20.5	+5	21	+5	21.5		22		0
G	FRONT NECKDROP "V" COLLAR	0.5	16.5	+5	17	+5	17.5	+5	18	+5	18.5		19		0
H	COLLAR HEIGHT CENTER BACK	0	7	+5	7	+5	7	+5	7	+5	7		7		0
I	SLEEVE CUFF WIDTH	0.5	8	+5	8.5	+5	9	+5	9.5	+5	10		10.5		0
L	BOTTOM WIDTH	2	53	+5	55	+5	57	+5	59	+5	61		63		0.5
M	HEM HEIGHT	0	2	+5	2	+5	2	+5	2	+5	2		2		0
N	SLEEVE HEM HEIGHT	0	10	+5	10	+5	10	+5	10	+5	10		10		0
O	SLEEVE WIDTH AT 20 CM FROM ARMHOLE	0.7	15.8	+5	16.5	+5	17.2	+5	17.9	+5	18.6		19.3		0
P	SLEEVE WIDTH BEFORE CUFF	0.5	11.5	+5	12	+5	12.5	+5	13	+5	13.5		14		0
T	BICEP	1	21.5	+5	22.5	+5	23.5	+5	24.5	+5	25.5		26.5		0
X	FRONT ZIP LENGTH		20	+5	20	+5	21	+5	21	+5	22		22		0
Y	COLLAR UP		30	+5	40	+5	41	+5	42	+5					0
	PRINT POSITION FROM CENTRE HPS	0.5	18	+5	18.5	+5	19	+5	19.5	+5	20		20.5		0.5
BACK SLEEVE PRINT POSITION AT 3 CM ABOVE RIB															

161923

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Fig- Assessment

Report -3 Purchaser Title: TOM TAILOR Article No: 1042347 Model size:2810Pcs

TOM TAILOR GROUP				INSPECTION REPORT									
				FACTORY SIZE SET		PILOT RUN		IN-LINE EXTERNAL PROCESS					
				1st IN-LINE		1st Output		Packing Inline		FINAL			
PWN No. :				Inspected By:		MD: NAJRUL ISLAM							
Article No. :		1042347		Supplier:		METRO -01		Inspection Date:		20.11.2023			
PO No. :		450061001		Order Quantity:		2810 PCS.		Buyer Del. Date:		19.11.2023			
Color :		15398,10668,		Shipment Quantity:				Buyer:		MAREN KUHLMANN			
Season		402-S		Sizes		S.M.L.XL.XXL.XXXL							
PRODUCTION STATUS													
Cutting / Knitting 3180 pcs		Print / Embroidery 3180 pcs		Sewing / Linking 2850 pcs		Washing pcs		Finishing 2850 pcs		Packing 1500 pcs			
ACCESSORIES		GOOD	NEED IMPRV	BAD	SEWING/LINKING	GOOD	NEED IMPRV	BAD	FINISHING/PACKING	GOOD	NEED IMPRV	BAD	
Print			X		Threads	X			Washing / Handfeel	X			
Embroidery					Seam / Linking		X		Cleaning	X			
Colour Combo		X			Stitching		X		Pressing		X		
Trims		X			Shape / Symmetrical		X		Folding	X			
CUTTING/KNITTING		GOOD	NEED IMPRV	BAD	Button / Hole				Hangtag	X			
Fabric Check		X			Label / Position	X			Polybag	X			
Lot Check					Bartacking				Carton Quality	X			
Shading		X			Hemming				Carton Size	X			
Stripe Match					Lining				Marking	X			
Checks Match					Pocketing		X		Packing	X			
Panel Check					Zipper		X		Color	X			
Yarn Check					Garment Weight	X			Size	X			
BEFORE WASH		X		AFTER WASH						MAJOR		MINOR	
INSPECTION COMMENT						ACTION TAKEN							
QC 410 Poor shape / Asymmetry						pls take care on ironing.						1	2
QC 211 Puckering, Pleats, Gathering, Looseness						pls take care on ironing.						2	2
QC 416 Parts shade (Shading within garment)						pls take care on check quality.						1	2
QC 407 Other stains						pls take care on check quality.						1	2
QC 410 Poor shape / Asymmetry/ chest panel wavy & un-even.						pls take care on ironing.						2	1
QC 201 Poor repairs						pls take care on check quality.						1	0
QC 205 Poor / Uneven stitching						pls take care on check quality.						1	1
QC 203 Untrimmed/ Loose thread						pls take care on check quality.						1	3
QC 505 Printing / Embroidery / Embellishment defects						pls take care on check quality.						1	1
FACTORY MUST TAKE CARE ALL THE BALANCE QTY AND PLEASE DO NOT PACK ANY DEFECTIVE GARMENTS INTO THE POLY BAG.													
Measurements						Within Tolerance		X		Exceed Tolerance			
Total Defects										11		14	
Total Pieces Checked										125		PCS	
Total Cartons and Numbers checked :										5		8	
AQL USE 1.5 / 2.5													
Estimated Short Shipment due to:						SUPPLIER SIGNATURE						INSPECTION RESULT	
QA / QC SIGNATURE						UTPAL KUMAR CHANDA.						Accept	
MD: HASAN SIBBIR												Pending	
												Reject	
												X	
These findings do not constitute proof that goods are in accordance with contract and do not release the suppliers from their contractual responsibilities													
Remarks													

Fig: Statement of the ultimate examination.

-4 Purchaser Title: TOM TAILOR Article No:1040908 Model size:3000 Pcs

TOM TAILOR GROUP			INSPECTION REPORT					
			FACTORY SIZE SET		PILOT RUN		IN-LINE EXTERNAL PROCESS	
			1st IN-LINE		1st Output		Packing Inline	FINAL
PWN No:		Inspected By:	MD: NAJRUL ISLAM					
Article No:	1040908	Supplier:	METRO -01					
PO No:	450061540	Order Quantity:	3000 PCS.		Inspection Date:	07.11.2023		
Color:	10348.34669	Shipment Quantity:			Buyer Del. Date:	05.11.2023		
Season	402-s	Sizes	S.M.L.XL.XXL.XXXL.					
PRODUCTION STATUS								
Cutting / Knitting			Print / Embroidery		Sewing / Linking		Washing	
3200 pcs			3200		3050 pcs		3050 pcs	
ACCESSORIES			GOOD	NEED IMPRV	BAD	SEWING/LINKING	GOOD	NEED IMPRV
							BAD	FINISHING/PACKING
Print				x		Threads		x
Embroidery						Seam / Linking		x
Colour Combo			x			Stitching		x
Trims			x			Shape / Symmetrical		x
CUTTING/KNITTING			GOOD	NEED IMPRV	BAD	Button / Hole		
						Label / Position	x	
Fabric Check			x			Bartacking		
Lot Check						Hemming		
Shading			x			Lining		
Stripe Match						Pocketing		x
Checks Match						Zipper	x	
Panel Check						Garment Weight	x	
Yam Check				x				
BEFORE WASH			X			AFTER WASH		
INSPECTION COMMENT						ACTION TAKEN		
QC 380 Placket Left & Right Up Down						pls take care on check quality		
QC 380 Pleat & Slanted At Placket Box						pls take care on check quality.		
QC 270 Uneven At Neck Topsin Area						pls take care on check quality.		
QC 505 Print Gape Not Even						pls take care on check quality.		
QC 203 Uncut Thread						pls take care on check quality.		
QC 380 Placket & Sleeve Shape with Body						pls take care on check quality.		
FACTORY MUST TAKE CARE ALL THE BALANCE QTY AND PLEASE DO NOT PACK ANY DEFECTIVE GARMENTS INTO THE POLY BAG								
Measurements			Within Tolerance			X Exceed Tolerance		
Total Cartons and Numbers checked :						Total Defects		
						20		
						Total Pieces Chocked		
						125 PCS		
Estimated Short Shipment due to:						AQL USE 1.5 /2.5		
						5		
						8		
QA / QC SIGNATURE			SUPPLIER SIGNATURE			INSPECTION RESULT		
MD: HASAN SIBBIR			UTPAL KUMAR CHANDA.			Accept		
						Pending		
						Reject		
These findings do not constitute proof that goods are in accordance with contract and do not release the suppliers from their contractual responsibilities								
Remarks								

Fig: Statement of the ultimate examination.

TOM TAILOR GROUP		INSPECTION REPORT					
		FACTORY SIZE SET		PILOT RUN		IN-LINE EXTERNAL PROCESS	
		1st IN-LINE		1st Output		Packing Inline	FINAL
PWN No:		Inspected By:	MD: NAJRUL ISLAM.				
Article No:	1040538	Supplier:	METRO -01		Inspection Date:	25.11.2023	
PO No:	450061000	Order Quantity:	6579 PCS.		Buyer Del. Date:	24.11.2023	
Color:	34757.34765	Shipment Quantity:			Buyer:	MAREN KUHLMANN	
Season	#02-s	Sizes	S.M.L.XL.XXXL.XXXXL				
PRODUCTION STATUS							
Cutting / Knitting	Print / Embroidery	Sewing / Linking	Washing	Finishing	Packing		
6800 pcs	6630pcs	6630 pcs		6630 pcs	3300 pcs		
ACCESSORIES	GOOD NEED IMPRV BAD	SEWING/LINKING	GOOD NEED IMPRV BAD	FINISHING/PACKING	GOOD NEED IMPRV BAD		
Print		Threads		Washing / Hand feel			
Embroidery		Seam / Linking		Cleaning			
Colour Combo		Stitching		Pressing			
Trims		Shape / Symmetrical		Folding			
CUTTING/KNITTING	GOOD NEED IMPRV BAD	Button / Hole		Hangtag			
		Label / Position		Polybag			
Fabric Check		Bartacking		Carton Quality			
Lot Check		Hemming		Carton Size			
Shading		Lining		Marking			
Stripe Match		Pocketing		Packing			
Checks Match		Zipper		Color			
Panel Check		Garment Weight		Size			
Yarn Check							
BEFORE WASH	X	AFTER WASH			MAJOR	MINOR	
INSPECTION COMMENT				ACTION TAKEN			
QC 325 Measurement Deviation At Body, Length & Chest Part (-) 1.5cm.-2.5cm., -3cm				pls take care on check quality			
QC 535 Bottom Shape Out				pls take care on check quality.			
QC 275 Poor Neck Shape				pls take care on check quality.			
QC 203 Loose Thread				pls take care on check quality.			
QC 210 Side Seam Stripe Up Down				pls take care on check quality.			
QC 505 Print Defect				pls take care on check quality.			
QC 125 Poor Shoulder Shape				pls take care on check quality.			
QC 520 Poor Armhole Shape				pls take care on check quality.			
FACTORY MUST TAKE CARE ALL THE BALANCE QTY AND PLEASE DO NOT PACK ANY DEFECTIVE GARMENTS INTO THE POLY BAG							
Measurements		Within Tolerance		X Exceed Tolerance			
Total Cartons and Numbers checked :				Total Defects		15 19	
				Total Pieces Chocked		200 PCS	
Estimated Short Shipment due to:				AQL USE 1.5 /2.5		7 11	
QA / QC SIGNATURE		SUPPLIER SIGNATURE		INSPECTION RESULT			
MD: HASAN SIBBIR		UTPAL KUMAR CHANDA.		Accept		Pending Reject	
These findings do not constitute proof that goods are in accordance with contract and do not release the suppliers from their contractual responsibilities Remarks							

Fig: Statement of the ultimate examination.

6Purchaser Title: TOM TAILOR Article No:991084532 Model size:7200 Pcs

TOM TAILOR GROUP			INSPECTION REPORT											
			FACTORY SIZE SET			PILOT RUN			IN-LINE EXTERNAL PROCESS					
			1st IN-LINE			1st Output			Packing Inline		FINAL			
PWN No:			Inspected By:			MD: NAJRUJ ISLAM			Inspection Date:			20.09.2023		
Article No:	1041292		Supplier:			METRO -01			Buyer Del. Date:			18.09.2023		
PO No:	450060599		Order Quantity:			8573 PCS			Buyer:			MAREN KUHLMANN		
Color:	34587_34891		Shipment Quantity:											
Season:	402-s		Sizes			S.M.L.XL.XXL.XXXL								
PRODUCTION STATUS														
Cutting / Knitting		Print / Embroidery		Sewing / Linking		Washing		Finishing		Packing				
8850 pcs		8673 pcs		8673 pcs				8625 pcs		4286 pcs				
ACCESSORIES		GOOD	NEED IMPRV	BAD	SEWING/LINKING		GOOD	NEED IMPRV	BAD	FINISHING/PACKING		GOOD	NEED IMPRV	BAD
Print			x		Threads			x		Washing / Hand feel			x	
Embroidery					Seam / Linking			x		Cleaning		x		
Colour Combo		x			Stitching			x		Pressing				
Trims					Shape / Symmetrical			x		Folding		x		
CUTTING/KNITTING		GOOD	NEED IMPRV	BAD	Button / Hole					Hangtag		x		
Fabric Check		x			Label / Position		x			Polybag		x		
Lot Check					Bartacking					Carton Quality		x		
Shading		x			Hemming					Carton Size		x		
Stripe Match					Lining					Marking		x		
Checks Match					Pocketing			x		Packing		x		
Panel Check					Zipper			x		Color		x		
Yarn Check			x		Garment Weight		x			Size		x		
BEFORE WASH		X		AFTER WASH						MAJOR		MINOR		
INSPECTION COMMENT					ACTION TAKEN									
QC 325 Measurement Deviation At Body, Length & Chest Part (-)2cm, -2.5cm, -3cm					pls take care on check quality					3		1		
QC 416 Part Shade At Front To Back Part & Cuff & Body Shade Un-Match					pls take care on check quality.					2		2		
QC 276 Main Label Joint Center Out					pls take care on check quality.					1		1		
QC 203 Uncut Thread at Garments					pls take care on check quality.					2		3		
QC 407 Oil Spot & Dirty Mark At Body					pls take care on check quality.					2		1		
QC 407 Iron Problem At Body					pls take care on check quality.					3		6		
QC 520 Poor Armhole Shape					pls take care on check quality.					2		2		
FACTORY MUST TAKE CARE ALL THE BALANCE QTY AND PLEASE DO NOT PACK ANY DEFECTIVE GARMENTS INTO THE POLY BAG														
Measurements		Within Tolerance			X		Exceed Tolerance							
Total Cartons and Numbers checked :								Total Defects		15		16		
								Total Pieces Checked		200 PCS				
Estimated Short Shipment due to:								AQL USE 1.5 /2.5		7		11		
QA / QC SIGNATURE				SUPPLIER SIGNATURE				INSPECTION RESULT						
MD: HASAN SIBBIR				UTPAL KUMAR CHANDA.				Accept		Pending		Reject		
Remarks														
These findings do not constitute proof that goods are in accordance with contract and do not release the suppliers from their contractual responsibilities														

Fig: Statement of the ultimate examination.

-7 Purchaser Title: KONTOOR Order number:10E7685BH Model size:2725 Pcs

Last Modified Date: Jan 18, 2022

NGC- Final Inspection Report (Visual and Measurement)

ENVOY FASHION LTD KONTOOR NA 2-Oct-23				Maker : OLIO APPARELS LTD Inspector : SHAFIQ AL MAMUN KB GA Inspection Date : 01-Oct-23			
Alphabet	PO / Cut (PO NO.)	Color # / Name	Season	Style	Order Quantity / pcs	Shipped Quantity / pcs	CTN
A	480087000300100	B.KHAKI	FA-23	10E7685BH	2,725	2,734	116
					2725	2734	116

☐ Shipment ☒ Audit ☐ Pre-shipment ☐ Others

Please Click the Proper for the following choice : ☐ # of inspection 1st / 2nd / 3rd /

☒ AQL 2.5 L1 Normal (N/A EU)

☐ AQL 2.5 L1 Tightened (AP)

MEASUREMENT - Based on audit sampling plan
 PACKING ACCURACY - Based on audit sampling plan

VISUAL & MEASUREMENTS DEFECT DETAILS

Sample Size :	50	Details on							
Enter [Units] Inspected :	50	Major				Minor			
Units Rejected: (Number of Garment With Major Visual Defects)	3	Defect Code	Location	# of Defects	Alphabet	Defect Code	Location	# of Defects	Alphabet
Units Rejected: (Number of Garment With Major Visual Defects)	3	FT019	FT023	1	MMT +1 1/2" AT WAIST				
Units with Defects: (Numbers of Garment with Major)	11	FT019	FT017	1	MMT +1 1/2" AT SEAT				
		FT018	FT021	1	MMT +1 1/4" AT THIGH				
		CN005	DL006	2	BROKEN STITCH AT BODY				
		FB028	DL006	1	FABRIC FAULT AT BODY				
		CN006	DL006	2	BROKEN STITCH AT EYELET HOLE				
		SL004	DL006	1	DIRTY SPOT AT BODY				
		CN032	DL118	1	OVER STITCH AT HIP PKT JOINT				
		CN002	DL104	1	MISSING BASTACK AT CROTCH POINT				
Reject After :	3/4	Total Defects: 11				Total Defects: 11			

Garment Test Result: ☒ Pass ☐ Reject ☐ Marginal accepted

 Shipment Disposition: ☐ Pass ☒ Reject ☐ Failed but released

**** SHIPMENT CAN BE RELEASED AFTER THE GARMENT TEST RESULT IS "PASS" ****

Please notice that the comments should not exceed 300 characters long.

 Comments : AS PER L-1, 2.5 AQL FINAL AUDIT HAS BEEN FAIL. FACTORY WILL BE CHARGE \$500 USD FOR EACH FAIL.

 Duration - Start: End:



Fig- 3.1.9 Statement of the ultimate examination.

Last Modified Date: Jan 18, 2023

Final Inspection Report (Visual and Measurement)

ENVOY FASHION LTD	
KONTOOR NA	
20-Sep-23	

Maker :	OLIO APPARELS LTD
Inspector :	SHAFIQ AL MAMUN KB QA
Inspection Date :	19-Sep-23

Sheet	PO / Cut (PO NO.)	Color # / Name	Season	Style	Order Quantity / pcs	Shipped Quantity / pcs	CTN
A	450069340800100	EXPEDITION	SP-24	112317863	3,000	2,873	92
					3000	2,873	92

Shipment: ☒ In ☐ Out ☐ New ☐ Shipment

Please Click the Proper for the following choice : ☐ # of inspection 1st / 2nd / 3rd / _____

☒ AQL 2.5 L1 Normal (NA& EU)
☐ AQL 2.5 L1 Tightened (AP)

MEASUREMENT - Based on audit sampling plan
 PACKING ACCURACY - Based on audit sampling plan

VISUAL & MEASUREMENTS DEFECT DETAILS :

Sample Size :	50
Enter (Units) Inspected :	50
Units Rejected: (Number of Garment With Major Visual Defects)	6
Units Rejected: (Number of Garment With Major F&B Defects)	7
Units with Defects: (Numbers of Garment with Major)	12

Details on				
Major			Minor	
Defect Code	Location	# of Defects	Alphabet	
FT006	FT017	1	MEASUREMENT - 1 1/2" AT SEAT	
FT010	FT017	2	MEASUREMENT - 2 1/2" AT SEAT	
FT012	FT023	1	MEASUREMENT-3" AT WAIST	
FT004	FT021	1	MEASUREMENT - 1" AT THIGH	
FT006	FT021	1	MEASUREMENT - 1 1/2" AT THIGH	
FT004	FT026	1	MEASUREMENT - 1 AT THIGH	
FB027	DL006	2	STREAK MARK AT BODY	
FB052	DL006	1	LYCRA / VOID AT BODY	
CN009	DL064	2	OFF SHAPE AT BODY	
Total Defects:		12		

Reject After: 3/4

Total Defects: 12

Garment Test Result: ☒ Pass ☐ Reject ☐ Marginal accepted

Garment Test Request No.: TR202309026330

Shipment Disposition: ☐ Pass ☒ Reject ☐ Failed but released
**** SHIPMENT CAN BE RELEASED AFTER THE GARMENT TEST RESULT IS "PASS"**

Please notice that the comments should not exceed 300 characters long.

Comments: **FINAL AUDIT CONDUCTED BY KB QA. FACTORY WILL BE CHARGE \$500 USD FOR EACH FAIL.**

Duration - Start

End

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Last Modified Date : Jan 18, 2022 Final Inspection Report (Visual and Measurement)									
ENVOY FASHION LTD KONTOOR NA 21-Jun-23					Maker : OLO APPARELS LTD Inspector : SHAFIQ AL MAMUN KB QA Inspection Date : 20-Jun-23				
PO / Cut { PO NO. }	Color # / Name	Season	Style	Order Quantity / pcs	Shipped Quantity / pcs	CTN			
460078658400100	FLAX	FA-23	104855278	2,200	1,554	74			
				2200					
					1,554	74			
Shipment: ☒ By Air ☐ By Sea ☐ Other _____									
Please Click the Proper for the following choice : ☐ ☒ AQL 2.5 L1 Normal [NAE EU] ☐ AQL 2.5 L1 Tightened [AP]									
MEASUREMENT - Based on audit sampling plan									
PACKING ACCURACY - Based on audit sampling plan									
VISUAL & MEASUREMENTS DEFECT DETAILS :									
Sample Size : 50		Details on							
Enter [Units] Inspected : 50		Major				Minor			
Units Rejected: (Number of Garment With Major Visual Defects) 6		Defect Code	Location	# of Defects	Alphabet	Defect Code	Location	# of Defects	Alphabet
Units Rejected: (Number of Garment With Major Fit Defects) 4		FT006	FT017	1	MEASUREMENT (-) 1/2" AT SEAT				
		FT008	FT017	1	MEASUREMENT (-) 2" AT SEAT				
		FT030	FT021	1	MEASUREMENT (-) 7/8" AT THIGH				
Units with Defects: (Numbers of Garment with Major) 10		FT004	FT021	1	MEASUREMENT (-) 1" AT THIGH				
		SL004	DL006	2	SPOT AT BODY				
		FN008	DL006	1	SHINING MARK AT BODY				
		CN050	DL037	1	SKIP STITCH AT INSEAM				
		CN017	DL121	1	RAWEDGE OUT AT FRONT PKT				
		CN006	DL005	1	BROKEN STITCH AT BELT LOOP				
Reject After : 10		Total Defects:				10			
Garment Test Result: ☒ Pass ☐ Reject ☐ Marginal accepted		Garment Test Request No.: TR202302004474							
Shipment Disposition: ☐ Pass ☒ Reject ☐ Failed but released									
** SHIPMENT CAN BE RELEASED AFTER THE GARMENT TEST RESULT IS "PASS"									
Comments:		FINAL AUDIT CONDUCTED BY KB QA. FACTORY WILL BE CHARGE \$600 USD FOR EACH FAIL.							
Duration - Start		End							

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Report -10: Purchaser Title: KONTOOR Order number: 463321 Model size: 5272 Pcs

Last Modified Date: Jan 18, 2022

NGC- Final Inspection Report (Visual and Measurement)

ENVOY FASHION LTD KONTOOR NA 22-Feb-23		Maker : OLIO APPARELS LTD Inspector : MD MIRHAZUL ISLAM KB GA Inspection Date : 20-Feb-23	
--	--	--	--

Alphabet	PO / Cut (PO NO.)	Color # / Name	Season	Style	Order Quantity / pcs	Shipped Quantity / pcs	CTN
A	450072104700100	CARBON RINSE	SP-23	4633214	1,939	1,939	61
B	450072104700200	CARBON RINSE	SP-23	4633214	3,333	3,220	125
					↓	↓	↓
					5272	5,159	206

Shipment: ☒ H ☐ M ☐ Other: _____

Please Click the Proper for the following choice : ☐ # of inspection 1st / 2nd / 3rd / _____
☒ AQL 2.5 L1 Normal [NA& EU]
☐ AQL 2.5 L1 Tightened [AP]

MEASUREMENT - Based on audit sampling plan.
 PACKING ACCURACY - Based on audit sampling plan

VISUAL & MEASUREMENTS DEFECT DETAILS :

Sample Size : Enter [Units] Inspected : Units Rejected: (Number of Garment With Major Visual Defects) Units Rejected: (Number of Garment With Major Fit Defects) Units with Defects: (Numbers of Garment with Major)	80 61 13 1 14	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">Major</th> <th colspan="4">Minor</th> </tr> <tr> <th>Defect Code</th> <th>Location</th> <th># of Defects</th> <th>Alphabet</th> <th>Defect Code</th> <th>Location</th> <th># of Defects</th> <th>Alphabet</th> </tr> </thead> <tbody> <tr> <td>CN032</td> <td>DL078</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CN005</td> <td>DL054</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CN032</td> <td>DL009</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CN050</td> <td>DL064</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CL005</td> <td>DL005</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CN050</td> <td>DL009</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CN050</td> <td>DL054</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FB010</td> <td>DL028</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FN006</td> <td>DL006</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FT008</td> <td>FT011</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Total Defects:</td> <td>14</td> <td></td> <td colspan="2">Total Defects:</td> <td></td> <td></td> </tr> </tbody> </table>	Major				Minor				Defect Code	Location	# of Defects	Alphabet	Defect Code	Location	# of Defects	Alphabet	CN032	DL078	1						CN005	DL054	2						CN032	DL009	2						CN050	DL064	1						CL005	DL005	1						CN050	DL009	2						CN050	DL054	1						FB010	DL028	1						FN006	DL006	2						FT008	FT011	1						Total Defects:		14		Total Defects:			
Major				Minor																																																																																																						
Defect Code	Location	# of Defects	Alphabet	Defect Code	Location	# of Defects	Alphabet																																																																																																			
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CN050	DL064	1																																																																																																								
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CN050	DL054	1																																																																																																								
FB010	DL028	1																																																																																																								
FN006	DL006	2																																																																																																								
FT008	FT011	1																																																																																																								
Total Defects:		14		Total Defects:																																																																																																						

Garment Test Result: ☒ Pass ☐ Reject ☐ Marginal accepted
 Shipment Disposition: ☐ Pass ☒ Reject ☐ Failed but released
 ** SHIPMENT CAN BE RELEASED AFTER THE GARMENT TEST RESULT IS "PASS"

Please notice that the comments should not exceed 300 characters long
 Comments :
 FACTORY WILL BE CHARGE \$300 USD FOR EACH FAIL.
 Duration - Start: _____ End: _____



Fig- Statement of the ultimate examination.

[illegible]

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-12: Purchaser Title: KONTOOR Order number: 10E685BH Model size:
8485Pcs

Last Modified Date: Jan 18, 2023

Final Inspection Report (Visual and Measurement)

ENVOY FASHION LTD KONTOOR NA 13-Nov-23				Maker : OLIO APPARELS LTD Inspector : PRONOB DAS Inspection Date : 12-Nov-23		
---	--	--	--	---	--	--

PO / Cut (PO NO.)	Color # / Name	Season	Style	Order Quantity / pcs	Shipped Quantity / pcs	CTN
450092023800100	B.KHAKI	SP-24	10E7685BH	3,450	3,439	146
450092023900100	TIMBER	SP-24	10E7685TM	5,035	5,010	210
				↓	↓	↓
				8485	8,449	356

Shipment ☒ At ☐ In ☐ Other _____ Shipment

Please Click the Proper for the following choice : ☐ # of inspection 1st / 2nd / 3rd / _____

☒ AQL 2.5 L1 Normal (NA& EU)
☐ AQL 2.5 L1 Tightened (API)

MEASUREMENT - Based on audit sampling plan
 PACKING ACCURACY - Based on audit sampling plan

VISUAL & MEASUREMENTS DEFECT DETAILS :

Sample Size :	Enter [Units] Inspected :	Units Rejected: (Number of Garment With Major Visual Defects)	Units with Defects: (Numbers of Garment with Major)	Details on							
				Major				Minor			
				Defect Code	Location	# of Defects	Alphabet	Defect Code	Location	# of Defects	Alphabet
50	80	12	4	FT003	FT011	3		MEASUREMENT -3/4" AT INSEAM			
				FT004	FT011	1		MEASUREMENT -1" AT INSEAM			
				CN069	DL071	1		POOR REPAIR AT BACK YOKE			
				CN069	DL003	1		POOR REPAIR AT BACK RISE			
				SL004	DL053	1		NUMBER VISIBLE AT POCKET			
				FB028	DL006	1		FABRIC FAULT AT BODY			
				CN020	DL009	1		HI-KING AT BOTTOM HEM			
				CN006	DL029	1		BROKEN STITCH AT FRONT RISE			
				CN006	DL003	1		BROKEN STITCH AT BACK RISE			
				SL004	DL006	1		DIRTY SPOT AT BODY			
				CN050	DL003	2		SKIP STITCH AT BACK RISE			
				CN056	DL006	1		UNCUT THREAD AT BODY			
				FB010	DL006	1		DAMAGE AT BODY			
Total Defects:						16					

Reject After : 5/6

Garment Test Request No. : TR202309027386

Garment Test Result: ☒ Pass ☐ Reject ☐ Marginal accepted

Shipment Disposition: ☐ Pass ☒ Reject ☐ Failed but released

** SHIPMENT CAN BE RELEASED AFTER THE GARMENT TEST RESULT IS "PASS"

Please notice that the comments should not exceed 300 characters long

Comments : AS PER L-1, 2.5 AQL FINAL AUDIT HAS BEEN FAIL. FACTORY WILL BE CHARGE \$500 USD FOR EACH FAIL.

Duration - Start: _____ End: _____

OLIO APPARELS LTD
PRONOB DAS
12-Nov-23

Fig: Statement of the ultimate examination.

-14: Purchaser Title: KONTOOR Order number: 112317863 Model size: 7200Pcs

Last Modified Date: Jan 18, 2022

GC- Final Inspection Report (Visual and Measurement)

ENVOY FASHION LTD KONTOOR NA 29-Nov-23				Maker : OLIO APPARELS LTD Inspector : PRONOB DAS Inspection Date : 28-Nov-23			
--	--	--	--	--	--	--	--

Alphabet	PO / Cut (PO NO.)	Color # / Name	Season	Style	Order Quantity / pcs	Shipped Quantity / pcs	CTN
A	450094407900100	EXPEDITION	SP-24	112317863	7,200	7,208	207
					7200	7,208	207

Shipment: ☐ 1st ☒ 2nd ☐ 3rd ☐ Shipment

Please Click the Proper for the following choice : ☐ # of inspection 1st / 2nd / 3rd /

☒ AQL 2.5 L1 Normal [NA& EU]
☐ AQL 2.5 L1 Tightened [AP]

MEASUREMENT - Based on audit sampling plan
 PACKING ACCURACY - Based on audit sampling plan

VISUAL & MEASUREMENTS DEFECT DETAILS :

Sample Size :		Details on							
Enter [Units] Inspected :		Major				Minor			
Units Rejected:	Units with Defects:	Defect Code	Location	# of Defects	Alphabet	Defect Code	Location	# of Defects	Alphabet
14	14	CN035	DL078	5	PLEAT AT WAIST BAND				
0	0	CN009	DL064	2	POOR SHAPE AT SIDE SEAM				
		CN019	DL116	1	HI-LOW AT HIP PKT				
		FB027	DL006	1	STREAK MARK AT BODY				
		CN009	DL078	1	POOR SHAPE AT WAIST BAND				
		FB028	DL006	1	POOR WASHING EFFECT AT BODY				
		FB010	DL075	1	DAMAGE AT WAIST BAND				
		CN069	DL064	1	POOR REPAIR AT SIDE SEAM				
		CN009	DL009	1	POOR SHAPE AT BOTTOM HEM				
Reject After : 5/6		Total Defects: 14				Total Defects: 14			

Garment Test Result: ☒ Pass ☐ Reject ☐ Marginal accepted

Shipment Disposition: ☐ Pass ☒ Reject ☐ Failed but released

** SHIPMENT CAN BE RELEASED AFTER THE GARMENT TEST RESULT IS "PASS"

Please notice that the comments should not exceed 300 characters long

Comments : AS PER L-1, 2.5 AQL FINAL RE-AUDIT HAS BEEN FAIL. FACTORY WILL BE CHARGE \$500 USD FOR EACH FAIL.

Duration - Start: End:

OLIO APPARELS LTD.
Dhaka-1230
13 CHANDON, DAKSHIN KAPAN

Fig: Statement of the ultimate examination.

-15: Purchaser Title: KONTOOR Order number: 104855101 Model size: 3506Pcs

Last Modified Date: Jan 18, 2021

Shipment	☒ 1st	☐ 2nd	☐ Other _____ Shipment
----------	---	------------------------------	---

of inspection 1st / 2nd / 3rd /

- MEASUREMENT - Based on audit sampling plan
PACKING ACCURACY - Based on audit sampling plan

VISUAL & MEASUREMENTS DEFECT DETAILS		Details on								
Sample Size :	80	Major					Minor			
Enter { Units } Inspected :	80	Defect Code	Location	# of Defects	Alphabet		Defect Code	Location	# of Defects	Alphabet
Units Rejected: (Number of Garment With Major Visual Defects)	08	FB021	DL078	1	PULLING YARN AT WAIST BAND					
Units Rejected: (Number of Garment With Major Fit Defects)	03	CN032	DL078	1	OPEN SEAM AT WAIST BAND					
Units with Defects: (Numbers of Garment with Major)	11	SL004	DL006	1	FUSING MARK AT BODY					
		CN019	DL118	1	HI-LOW AT HIP PKT					
		FB021	DL103	2	PULLING YARN AT BACK PANEL					
		CL005	DL078	1	SHADING AT WAIST BAND					
		FN006	DL006	1	POOR PRESSING AT BODY					
		FT007	FT023	1	MEASUREMENT -1 3/4" AT WASIT					
		FT005	FT021	1	MEASUREMENT -1 1/4" AT THIGH					
		FT019	FT011	1	MEASUREMENT +1 1/2" AT INSEAM					
		Total Defects:	11				Total Defects:			

Reject After :	5/6
----------------	-----

Garment Test Result: ☒ Pass ☐ Reject ☐ Marginal accepted

Garment Test Request No. : TR202212041987

Shipment Disposition : ☒ Pass ☒ Reject ☐ Failed but released

**** SHIPMENT CAN BE RELEASED AFTER THE GARMENT TEST RESULT IS "PASS"**

Please notice that the comments should not exceed 300 characters long

Comments :

FINAL AUDIT CONDUCTED BY FACTORY ASSIGN QA & KB QA. FACTORY WILL BE CHARGE \$300 USD FOR EACH FAIL.

Duration - Start	End
------------------	-----



-16: Order Number: 104633215; Purchaser Title: KONTOR; Model Size: 4350

Pcs

#

3. Information Inspection

Type of the problem	Principal problem	Minor problem	Sum of both problems	Sectors problem percentage	overall, %
Textile flaw					
Shrinking	$13 \times 4 = 52$	$8 \times 1 = 8$	$52 + 8 = 60$	43.52%	24.11%
Yarn Contamination	$7 \times 3 = 21$	$6 \times 1 = 6$	$21 + 6 = 27$	25%	
Hole	$8 \times 3 = 24$	$0 \times 1 = 0$	$24 + 0 = 24$	22.22%	
Others	$2 \times 3 = 6$	$4 \times 1 = 4$	$6 + 4 = 10$	9.26%	
Total			108	100%	

Sewing defect					48.88%
1. Non-sewing					
Shape poor	14×3=42	14×1=14	42+14=56	25.57%	
Side seam shape	3×3=9	2×1=2	9+2=11	5.02%	
Pocket shape	2×3=6	3×1=3	6+3=9	4.11%	
Collar shape	4×3=12	2×1=2	12+2=14	6.39%	
Neck rib looseness	3×3=9	3×1=3	9+3=12	5.48%	
2. Sewing					
Arm hole shape	0×3=0	2×1=2	0+2=2	0.91%	
Shoulder up-down	1×3=3	3×1=3	3+3=6	2.74%	
Uneven stitch	3×3=9	1×1=1	9+1=10	4.57%	
Losse thread	3×3=9	6×1=6	9+6=15	6.85%	
Puckering	2×3=6	3×1=3	6+3=9	4.11%	
Broken Thread	2×3=6	0×1=0	6+0=6	2.74%	
Broken stitch	2×3=6	0×1=0	6+0=6	2.74%	
Uncut thread	8×3=24	8×1=8	24+8=32	14.61%	
Slanted placket	8×3=24	5×1=5	24+5=29	13.25%	
Uneven stitch	0×3=0	2×1=2	0+2=2	0.91%	
Total			219	100%	

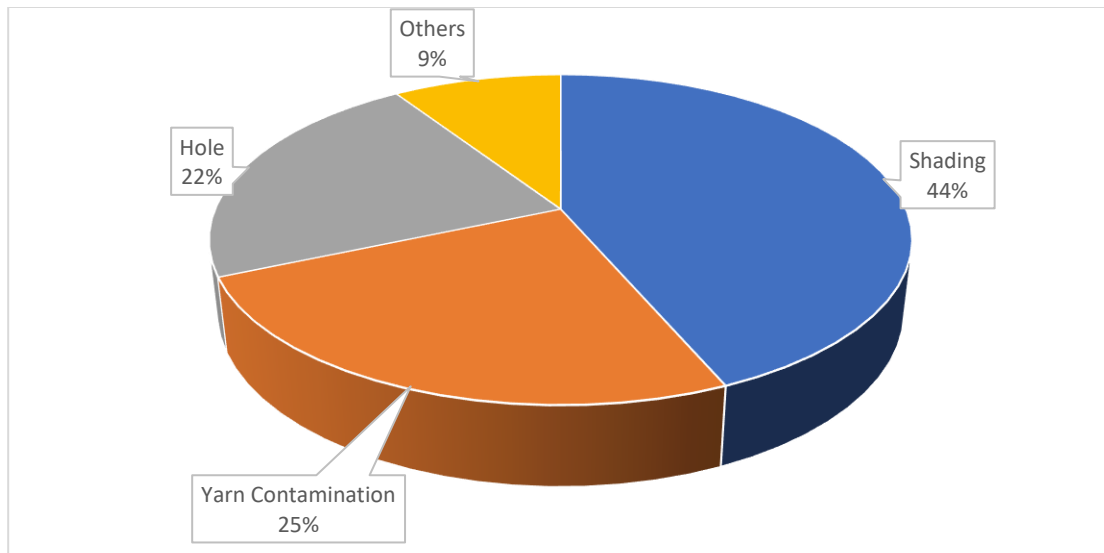
Finishing defect					
Dirty spot	$6 \times 3 = 18$	$3 \times 1 = 3$	$18 + 3 = 21$	39.62%	11.83%
Others	$5 \times 3 = 15$	$2 \times 1 = 2$	$15 + 2 = 17$	32.08%	
Oil spot	$3 \times 3 = 9$	$0 \times 1 = 0$	$9 + 0 = 9$	16.98%	
Shiny marks from iron	$0 \times 3 = 0$	$6 \times 1 = 6$	$6 + 0 = 6$	11.32%	
Total			53	100%	

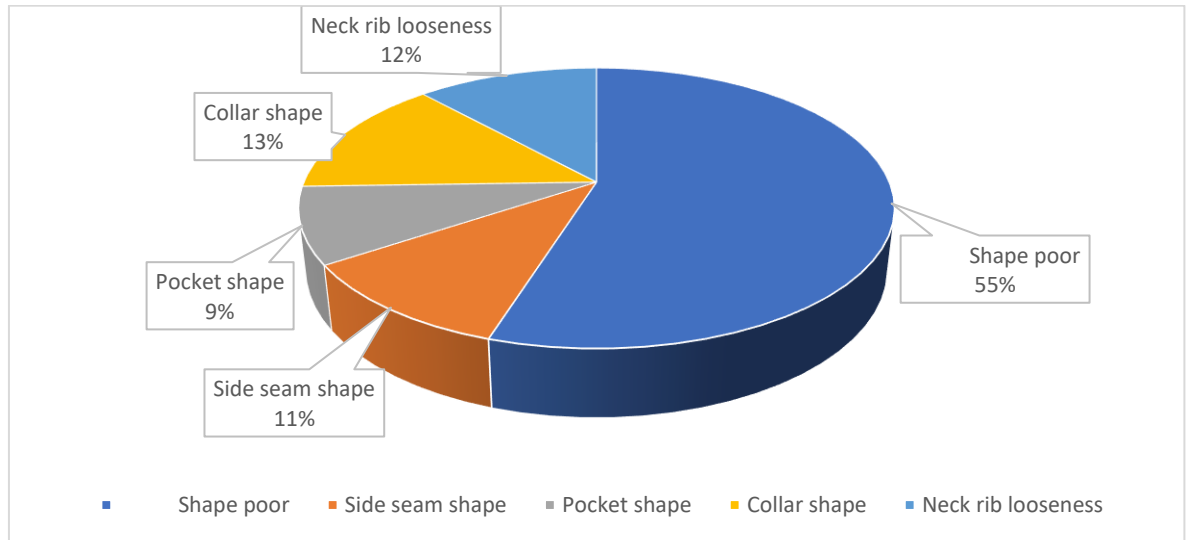
Miscellaneous defect					
Print defect	$6 \times 3 = 18$	$4 \times 1 = 4$	$18 + 4 = 22$	32.35%	15.18%
Size mistake	$2 \times 3 = 6$	$0 \times 1 = 0$	$6 + 0 = 6$	8.82%	
label mistake	$10 \times 3 = 30$	$7 \times 1 = 7$	$30 + 7 = 37$	54.41%	
Decoration label slanted	$0 \times 3 = 0$	$3 \times 1 = 3$	$0 + 3 = 3$	4.42%	
Total			68	100%	

Overall	448	100%
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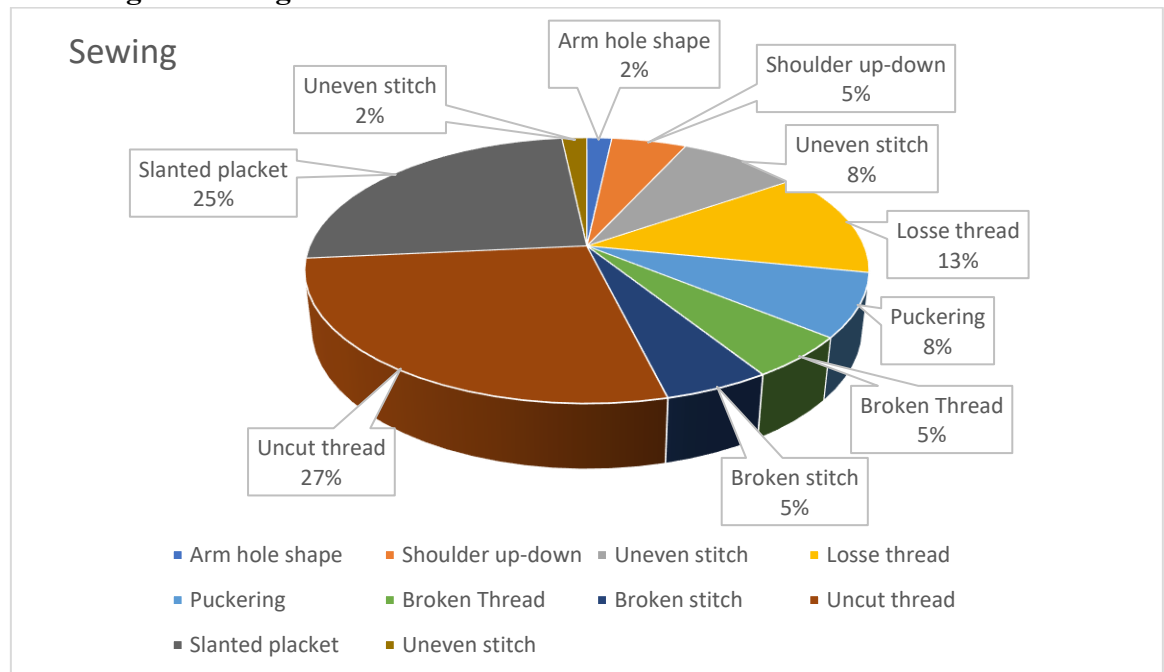
3.3 Defective rate

3.3.1 The proportion of fiber flaws

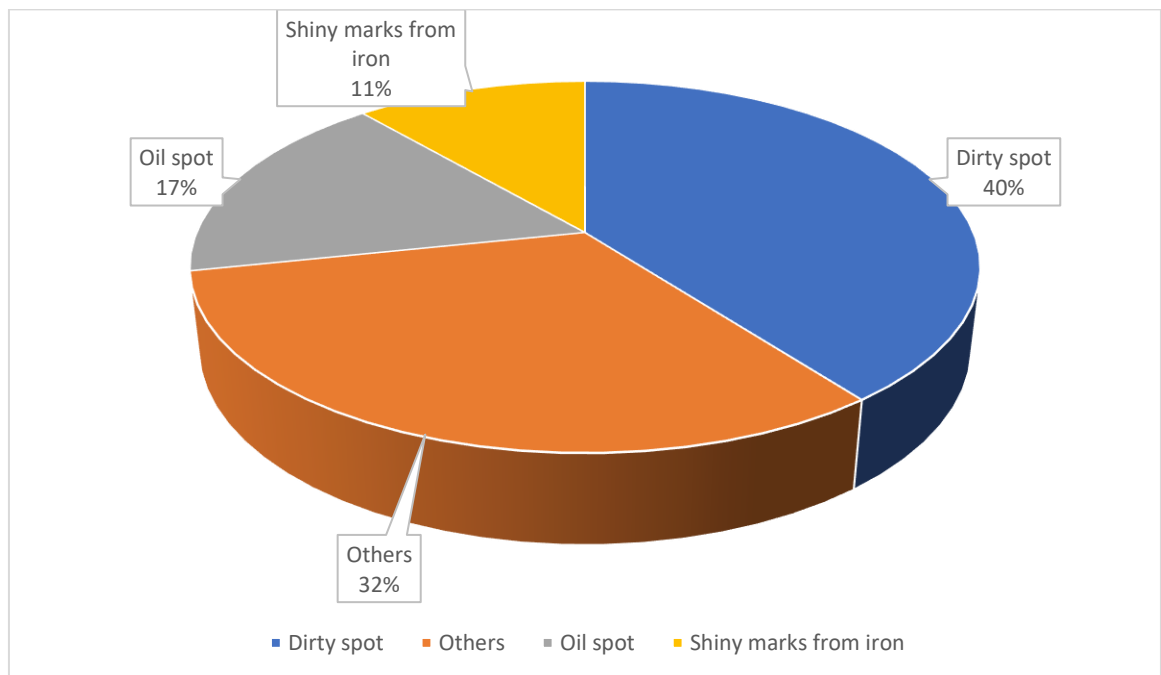




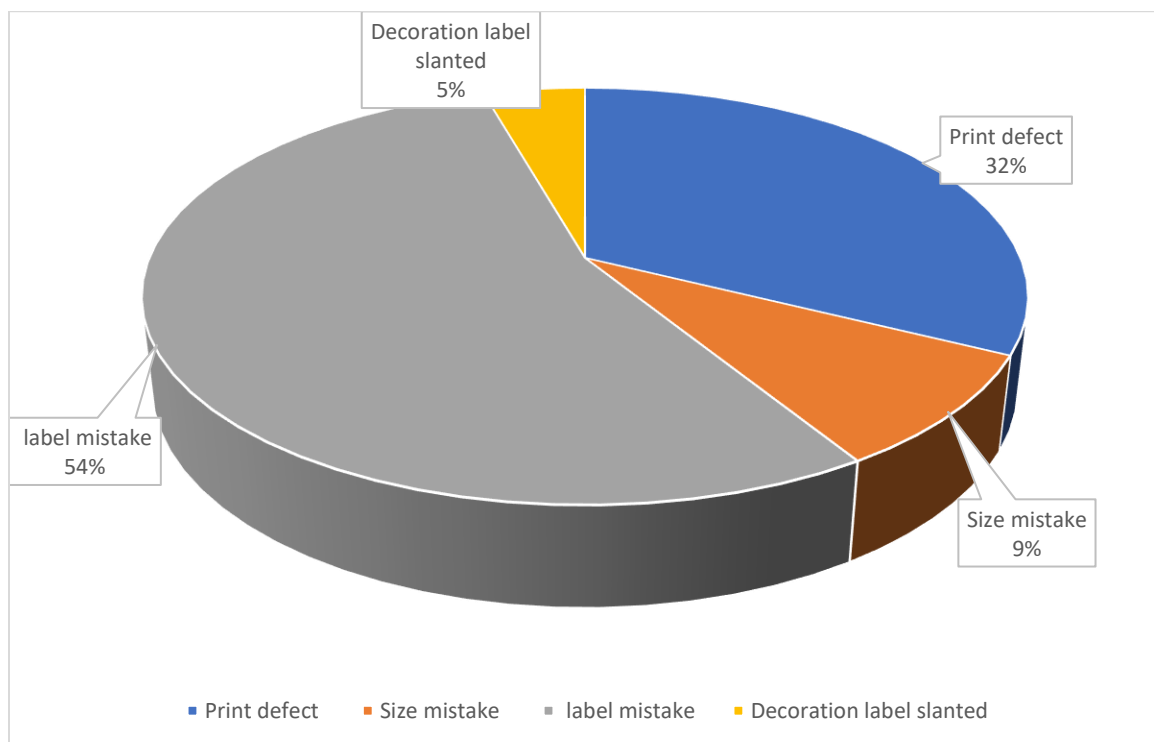
1.3.1 Percentage of sewing defects



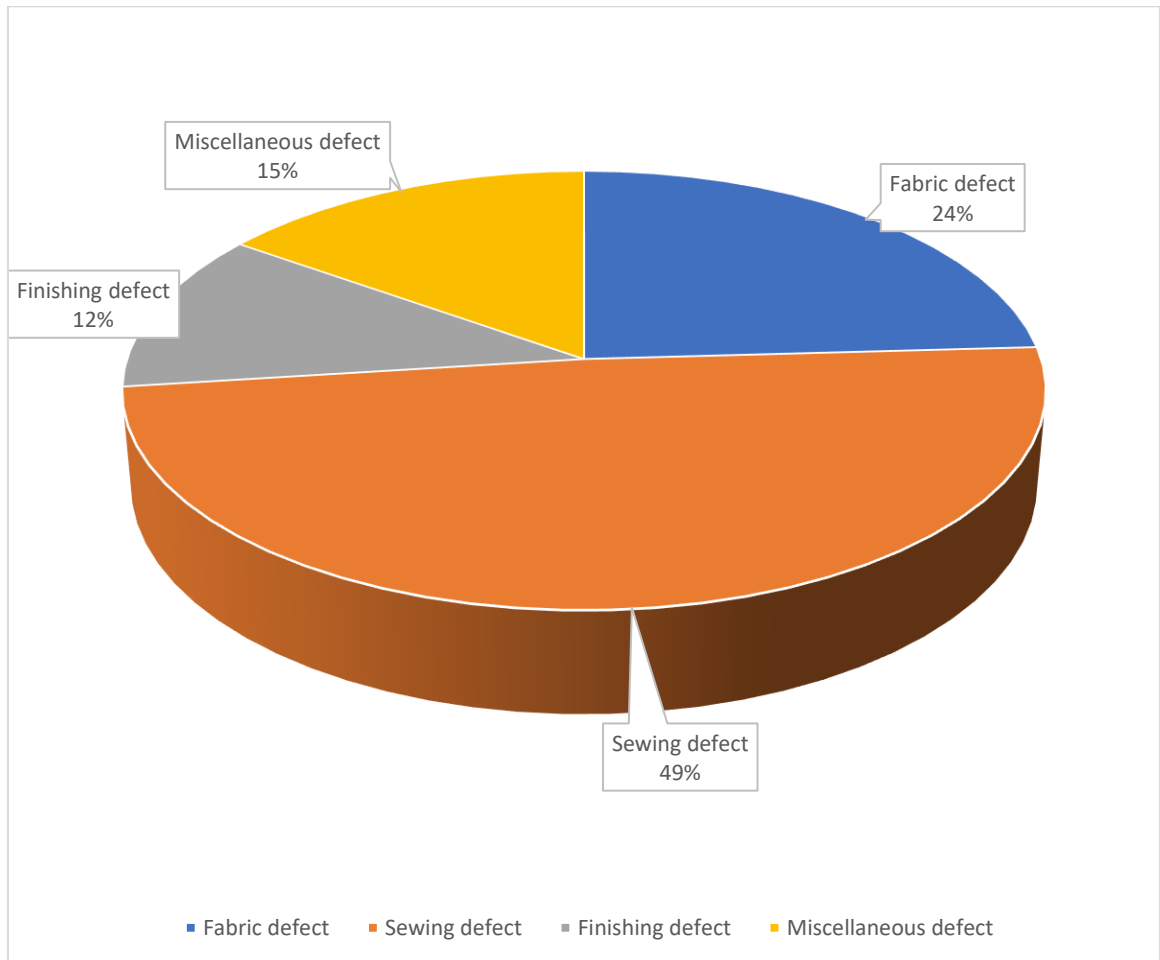
1.3.2 Percentage of finishing defects



3.3.3 Percentage of Miscellaneous defect



3.3.4 Percentage of total defects



CHAPTER-04

Result and Discussion

4.1 Result & Discussion

16 Statement of the ultimate examinations from Metro Knitting & Dying Mills LTD. have been gathered. After that, we looked it over and found a lot of mistakes in several areas. The fabric portion had 24.05% of the flaws, the stitching had 47.41%, the finishing had 12.5%, and the other part had 16.04%. As such, we observe that the percentage of stitching errors is larger here than in other places. We divide sewing faults into two categories: sewing faults and non-sewing faults. Compared to non-sewing errors, sewing errors comprise a higher proportion of errors. Errors in sewing are caused by malfunctioning machines, while non-sewing flaws are caused by worker error or by inexperienced operators. It is a fault in removable finishing. Therefore, we can draw the conclusion that the maximum flaw found in the final random inspection was primarily caused by worker carelessness.

Regardless of gender, a new worker's first assignment in Bangladesh's garment industry is to trim excess sewing thread. They then operate the machine. However, the Garments Industries Administration does not offer worker training. As a result, they are unaware of the reason behind non-sewing problems.

We may make sure that operators and new hires are aware of their responsibilities by setting up a minimum 15-day training session. An incorrectly shaped neck is one type of non-sewing mistake. If a seamstress sews the neck portion and body section from end to end using the neck measurement, when stitching the neck to the body piece, he will never make the same

4.2 Reasons and solutions for the discovered flaw

4.2.1. Reasons and solutions of Fabrics issue

1. Frayed Thread

Reasons:

- For broken needles.
- It happened because the needle couldn't capture the yarn
 - Poor yarn is also to blame for the yarn miss

Remedies:

- Replace the faulty needle as soon as possible.
- High-quality yarn should be used.
- The machine needs to be turned off when the operator notices this issue.

2. Hole

Causes:

- Yarn breaking or cracking is the root cause of holes.
- As the loop is constructed, the yarn breaks close to the needle hook.
- If there is an error in the yarn's density, structure, gauge, or course.
- A yarn feeder with improperly tied splices.

Remedies:

- Yarns must be uniformly robust and able to withstand stretching.
- Use the appropriate number of yarns.
- Properly configured yarn feeder.
- Knot application must be done correctly.

4. Reasons and solutions for sewing-related issues

1. An irregular seam

Reasons:

Sewing which are the source of this issue. The issue arose when the operator attempted to stitch for the first time.

Remedies:

- Stitching needs to be completed continually.
- The operator needs to be conscious of this

1. Twisting**Causes:**

- The knitting part is where this issue happened.
- Yarn is mostly to blame for this issue.
- The high TPI (Twist per Inch)
- Operator issue is the reason behind it.

Remedies:

- Utilizing the appropriate twisted yarn
- A knitwear department operator issues the appropriate commands

3. Broken stitch**Causes:**

- A difficulty with the stitching part
- low machine effectiveness
- Operator inattention
- Feed dog is not smooth.

Remedies:

- Feed dog need to be changed
- More skillful operator needed

2. Skipped stitch**Causes:**

- incorrect threading Not enough force

- It is necessary to replace the needle.
- Incorrect needle size
- The thread weight and needle size are not in line.
- Inappropriate needle type for the substance

Remedies:

- Mostly operator awareness alters the size of the needle
- The throat plate and pressure foot need to be adjusted with
- Verify the construction of the loop with a strobe and reset it to stand.

4. Reasons for and solutions to the completing issue

I. Grease mark

Reasons include:

- Operator hand dust;
- naturally grit;
- grease in machinery;
- outdated components that are unclean;

Solutions:

- Making the right use of lubricating oil
- Hand protection have to be used by a worker through unloading yarn as well as other processes.

4. Reasons for and solutions to the other

1. Printing mistakes

Reasons:

- There should be problems with the screen paper used for printing.
- Problems with temperature;
- Differences in types of fabric;
- Problems with the operator;
- Not exerting enough pressure to print

Remedies:

- The screen paper needs to be made correctly;
- The required pressure needs to be applied.
- The right recipe was used.
- Higher temperatures have no effect on fabric or color

II. Length mismatch

Reasons:

- Operator negligence
- When assembling various body parts, there can be a cutting section issue since the parts are stored on the table. Because of this, the operator should mix sizes in a single bundle.

Remedies:

- Provide a sewing bundle of the right size;
- Accurately number and bundle according to the actual size.

CHAPTER-5

CONCLUSION

This thesis covers the full quality control system used in the knit apparel business. Basically, what we are trying to do is find a way to assist Bangladeshi export apparel manufacturers in raising the caliber of their export apparel and getting rid of any defects that buyers discover during Final Random Inspection. The final check process is the most crucial phase in the garment manufacturing procedure. If the Statement of the ultimate examination. comes back negative, the buyer has the option to request a recheck or cancel the cargo. Shipment will continue if the Statement of the ultimate examination. is positive. As a result, the Statement of the ultimate examination. has a significant impact on both the client's satisfaction and the timely delivery of the items.

A total of sixteen Statement of the ultimate examinations were obtained from Metro Knitting & Dying Mills LTD. Upon closer inspection, we found multiple mistakes throughout. In the fabric section, we found 24.05% faults, 16.04% miscellaneous problems, 12.50% finishing errors, and 47.41% stitching faults. Thus, we observe that the percentage of stitching errors

is larger here than in other places. Sewing errors and non-sewing errors are the two categories into which sewing defects are divided. Compared to non-sewing problems, a higher proportion of errors are caused by sewing faults. Errors caused by workers or inexperienced operators result in non-sewing problems, whereas machine malfunctions cause sewing faults. The finishing imperfection might be detached. As a result, the largest flaw found during the most recent random inspection happened.

This thesis report discusses why specific garment qualities fail and how to correct them, making it mandatory reading for anybody active in the clothing industry or studying textiles. I think that this thesis paper could help everyone working in the clothing industry to find a solution to the problem of having this fault.

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