

Faculty of Engineering

Department of Textile Engineering

Report on

'Analysis of cut panel inspection of a knit composite factory'

Course Title: Project (Thesis)

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Textile Engineering.

Advance in Apparel Manufacturing Technology

December, 2019



Letter of Approval

To
The Head
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Daffodil International University
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Subject: Approval of Project Report of B.Sc. In TE

Dear Sir,

We are simply writing to tell you that this task report titled as "Study on cut panel inspection has been set up by the under study bearing ID 161-23-4550 and 162-23-4776 is finished for definite assessment. The entire report is readied in light of the best possible examination at GMS Composite knitting Industry ltd. and Meghna knit Composite ltd. Furthermore, intrusion through basic examination of observational information with required possessions. The under study were straight forwardly associated with their undertaking exercises.

Therefore, it will highly be appreciated if you kindly accept this project report and consider it for final evaluation.

Yours Sincerely

Mohammad Abdul Baset

Assistant Professor

Department of Textile Engineering

Daffodil International University



Acknowledgement

First of all, We are grateful to Allah. World Health Organization provides sound mind & sound health to accomplish completion of this method with success. We are additionally grateful to our supervisor Engr. Mohammad Abdul Baset, Assistant professor, Department of Textile Engineering, Daffodil International University. His endless patience, bookish steering, valuable recommendation, reading several inferior drafts and correcting in any respect these stages have created it potential to finish this project. We would wish to specific our heartiest feeling professor. Dr. Mahbubul Haque Head, Dept. of textile engineering. For his kind suggestion and additionally the faculty members and therefore the stuff of TE department of Daffodil International University. We may wish to offer special due to the supervisors, technicians, operators and every one alternative workers of GMS Composite Knitting Ind. Ltd. & Meghna knit Composite Itd. Finally, We may wish to specific a way of feeling to our beloved folks and friends for his or her mental support, strength and help throughout to finish this project.



Abstract

Cutting is that the most want arranges parturient escalated instant clothes undertakings. Quality Faults happening amid this procedure antagonistically influence the item quality and item effectiveness, and moreover increment the creation value, the purpose of this examination is to analysis whether or not the wear creation method is in check in an exceedingly knitwear generation venture and to spot the procedures with most noteworthy rates of cutting problems in stitching workplace in conclusion to create recommendations for enhancing the standard control. We tend to do this work by collection enough information and data from an industrial plant. Then we tend to analyze it depends on the info. We tend to attempt to conclude the proportion of various fault and build a chart of the fault percentage. We tend to build an inventory of faults from higher to lower fault. Here, we tend to additionally confirm the potency of cutting. As a result, we found 2.92% materials are faulty wherever cloth hole(%), spot(%) coloring fault (%) slub(%),knot(%) yarn fault(%). It's a touch quantity of fault from the full amount which might take into account for succeeding method, additionally, this study is facilitate USA to understand all concerning the cutting fault and the way we will cut back the fault, daily production and cutting management.



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1. Introduction

1.1 Background of the Project

The business of prepared created clothes in People's Republic of Bangladesh started within the late 70s with simply non-formal effort. The terribly 1st consignment of wear export was generated in 1973, whereas the first cargo of wear was created in 1977. In one981-82 the contribution of attire or RMG to total exports was concerning 1.10% whereas the agriculture-based economy received plenty of foreign earnings from Jute. Jute known as because the Golden Fiber. However, by passing the time from agricultural to manufacturing transformation People's Republic of Bangladesh developed considerably in areas of status alleviation, employment, girls management, industrial growth and economic variegation – special feeling to labor intensive RMG sector. although master's degree terminate in 2004, the growth of People's Republic of Bangladesh wear has improved in no time despite its somewhat untidy and shoddy begin with absence of rudimentary plans and biological process industrial mechanism. In fact, from year 2007-08 People's Republic of Bangladesh wear achieving to capture lion's share in national exports (39.93% in FY 2013-14) what was slightly seven.64% inside the twenty years back, thereby diagonal the economy towards knit clothes.

1.2 Objectives of the Project

Every company tries to precise their worth to their customers with their highest quality merchandise. So, internal control is that the best thanks to turn out the high normal quality product. Internal control is that the most absolute approach to make the elevated expectation quality item for client or emptor. The most aspiration of internal control is that the satisfaction of client needs and needs to stay the item in style and eco-friendly.

The major objectives of this study were as follows:

- 1. To spot differing kinds of cutting faults.
- 2. to spot major issues in cutting.



- 3. To spot the causes and remedies of the issues in cutting.
- 4. To investigate cut panel examination. Share of defect and total ok quality distinctive.

1.3 Limitations of the Project

The main limitations of the project are as follows:

☐ Thanks to time deficiency we tend to couldn't get valuable info of the standard controller
operation. We tend to couldn't get enough knowledge as a result of quality controller continually
busy together with his work.
□We tend to couldn't collect comfortable records and up to date applied math knowledge from the QC. So, this limitation restricted the extent of the real analysis.
☐ There's no research-oriented area.



Chapter-II Literature Review



2.1. Introduction

Quality denotes Associate in nursing excellence in merchandise and services, particularly to the degree they adjust to needs and satisfy customers.

Quality control of clothes cutting section plays a very important role in garments as a result of right measured cutting is required to urge the proper type of garments product. Cutting is that the primary in operation department of clothes production. Before creating a artefact, you have got to chop of individual parts as per approved pattern, whereas correct measurement ought to be ensured therefore all cutting parts should be 100% correct.

2.2 Parts of Quality Control in Garments

Quality control of cutting section principally divided into four elements. Those are:

Marker review
 Spreading management
 Cutting internal control
 Merchandise review.
 2.2.1 In Marker Inspection following things are inspected:

 Marker breadth
 Lay amount
 Style/Lot

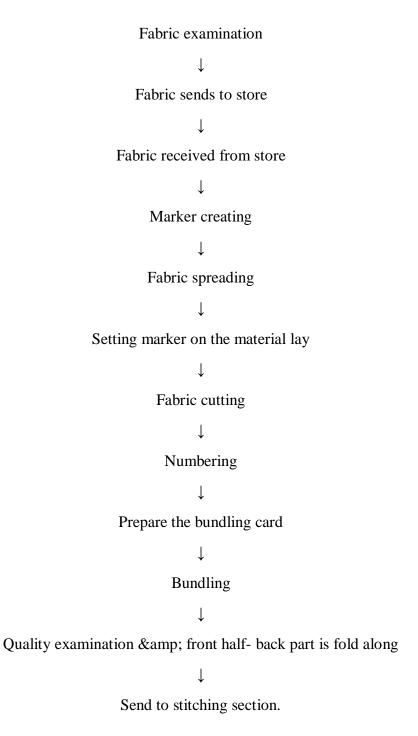
☐ live of all individual components marked in marker



☐ Marker Length
2.2.2 Following work in spreading Quality control: ☐ Cut numbers
□ Ends
□ Leaning
□ Tension
□ slim product
☐ Remnants
□ Counts
☐ Ply Height
☐ Material Fault.
2.2.3 Piece Goods Inspection:
☐ Yarn Fault
□ Hole
□ Slab
☐ Spot coloring fault
□ Knot
☐ Crease Mark.
2.3Cutting Quality Control & Flow sequence:
☐ Range of elements
☐ Miss cut
☐ Ragged cutting
□ Notches
☐ Matching plies.



Flow Sequences of Cutting:





2.3.1 QA checkpoint during fabric layering: –

- 1. Before coming up with material layer on cutting table for cutting a selected vogue, QA individual ought to check material piece of cloth card, shading shade band deliberately what's a lot of, gather distinctive example to visualize all piece of article of clothing's issue in marker paper.
- 2. Ought to be checked cut amount/estimate group/nation sharp request separate. QA can't affirm any fragmented cutting quantity.
- 3. Exactly registration quantity, texture issue, shading name, price ticket range so forth on the table to stay any idea. imperfectness purpose should check on move paper-not to be utilize if any vital issue that's wrinkle stamp, overlap check, finish roll notably lined texture.
- 4. on the off probability that any exceptional guideline for an analogous vogue notably sizes proportion, should check the marker with arduous example. to boot, check two-way and one-route marker before begin layering.
- 5. To affirm shading shade, shading, and thing name, issue face-back, shrinkage rate, move width, marker dimension, and elegance category before begin layering. Higher than stop has to take when 100 percent for guaranteeing sleek generation.

2.3.2 Layer examination:

While layer spreading quality reviewer has to examine texture physically then distinction and thoroughbred shading card and to boot QC shade card gave by Material management workplace QC. On the off likelihood that found any error between supported texture piece of material with mass generation texture move while not a moment's delay hold and illuminate concern's individuals, as an example, Cutting boss, QC and Production. when physical checking by all worry parties and considering all connected QC report/archives at that time allow cutting.

2.3.3 Fabric layer review:

Reviewer ought to check cloth price tag knowledge deliberately before layer spreading. Amid spreading, reviewer got to investigate by four point framework and build a report at that time continue petitioning for record.



Face/Back;

During spreading material, they must guarantee amend confront aspect distinction and endorsement cutting shading card and to boot QC shade card. Within the event that any inequality found or baffled has to advise concern's individual and take into account till illumination by a senior dependable

Cut Panel Inspection: –

Individual after cut board list cutting individual can offer all slice board to QC. At that time QC controller can check every cut board exactly. In sight of layer report or past deformity rate, manager will value more highly to issue floor by irregular examination or 100% physical assessment to find state factor. Amid cut board examination, on the off probability that they found any state, got to write in slice board log book to urge substitution texture from the supplier by submitting deformity cut board investigation report proportion.

Cut board review:

Each operating day they have to form slice board review answer to dispatch involved space, and one ace duplicate got to be unbroken for record.

Cut Panel Accuracy:

During cut board investigation, controller got to check haphazardly those cut board accuracy distinction and CAD Pattern/Cutting Pattern from the Top-Middle and finish of every package as assessed.

To limit texture wastage, guarantee issue, completed article of clothing's dismissal and to make generation capability, process plants selflessness so forth these depends upon the adequacy of production lines cutting QC cluster. On the off likelihood that you simply land up glad by poring over this post; you'll be able to demonstrate your respects by spreading it in internet primarily



based life, as an example, Facebook, Twitter, and Google+ or provide it in unearth by touch like catch. Keep tuned with United States for a lot of updates.

2.3.4Quality controlling areas are as follows:

1. Quality control in store area:

Store space is brought along in apparel business and every one the feel leads to these gift circumstances unit 1st from the supplier and inspected here and unbroken till the purpose once it's disseminated to different phase. Following dominant are checked here.

- Inventory
- Fabrics
- Material
- Piece of cloth board creating
- Cleanliness
- Reportage

2. Quality control in test segment:

Tests should be checked by internal control employees before causation it to the emptor.

Vital focuses to be checked in take a look at segment: despite whether or not the examples are in step with purchaser's details or not, for instance, vogue portrayal, draw, estimation sheet, icon so forth and acquirement should be checked with reference take a look at or connected archives gave by the emptor. Answer to be submitted to the bourgeois and to the rife.



3. Quality control in cutting segment:

Quality control of items of consumer goods cutting phase assumes an elementary half in articles of clothing since right calculable slicing is needed to induce the right state of articles of clothing. Aside from cutting is that the main operating division of items of consumer goods generation. Thus its quality should be checked with deliberately.

A. Patter/Marker:

Example and marker should be checked by the standard management workforce check focuses are as per the following:

- measuring
- Gradation
- Allowances
- Pattern components missing
- Mixed components
- Pattern form
- Direction of example within the marker
- Pattern arrangement as for the grain line
- Poor line checking
- Marker too wide than texture breadth
- Notches and Drill marks discarded
- Couple checks and strips
- Overlapping
- Too thick line or twofold line stamping
- Invisible line stamping
- Marker inaccurately settled on the lay.



B. Spreading:

During cloth spreading the incidental to focuses got to be checked:

Fabric unwinding

- Incorrect pressure of handles
- Wrong bearing of handles
- Unacceptable harms found
- Mismatching of checks and strips
- Slim texture.

Shaded Fabric

• Misalignment of handles

C. Cutting:

- Throughout cutting the related to focuses got to be checked:
- Inaccurate cutting.
- Notches-lost, too profound, calculated, excluded or wrong compose.
- Drill marks-wrong bores, excluded, calculated.
- Knife cut-article of wear components injured via reckless utilization of blade.
- Worn edges, burned or melded edges caused by an imperfect blade.
- Slits opened incorrectly of unnoticed.

D. Others:

- Bundling with package card
- List
- Cut board checking
- Wrong live within the package



- United elements checking
- Cleanliness
- Correct golf stroke away
- Correct is suing
- Like check cutting at that time mass cutting
- News.

2.3.5 Dimensions of Quality

By Chris Akins of Trident-Consulting LLC

8 Dimensions of Quality: The means important is frequently a fierily subject. Whereas it would seem to be natural, after we get directly right down to it, "quality" could be a hard plan to characterize with any accuracy. The foremost essential which means of a top quality item is one that meets the wishes for the consumer. In any case, even this definition is simply too abnormal state to be viewed as satisfactory. With a selected finish goal to create up a lot of total which means important, we should always admit some of the key measurements of a top quality item or administration.

> Performance

Does the merchandise or service do what it's alleged to do, among its outlined tolerances? Performance is often a provider of competition between customers and suppliers, considerably once deliverables aren't adequately outlined at intervals specifications. The performance of a product typically influences gain or name of the end-user. As such, many contracts or specifications embody damages associated with inadequate performance.

Conformance:

Nature of conformity is that the level of the character of item very created and sent through the generation or administration procedure of the association in step with the main points or set up. At



the purpose once the character of Associate in Nursing item fully fits in with the detail (plan), the character of conformity is regarded well.

> Specification

While this mensuration could seem manifestly evident, execution determinations once AN exceedingly in a very} whereas characterize the highlights needed in an item. on these lines, it's imperative that suppliers coming up with item or administrations from execution particulars realize its expected uses and sustain cozy associations with the end-clients.

> Reliability

The item or service might have comfortable or perhaps current measurements valuable, however at identical time succumb to negative shopper or open recognitions. For example, a good item might get the infamy for being caliber visible of poor administration by institution or field consultants. Within the event that the item isn't introduced or taken care of licitly, and bombs therefore, the frustration is often connected with the item's quality rather than the character of the administration it gets.

☐ Sturdiness

Durability is firmly known with guarantee. Requirements for item solidness are often enclosed within getting contracts and details. For instance, someone aero plane obtained to figure from plane carrying warships incorporate define criteria projected to boost their strength within the requesting maritime condition.

☐ Features

Features are sometimes the secondary aspects of performance, the "bells and whistles" of merchandise and services, those characteristics that supplement their basic functioning. The road separating primary performance characteristics from secondary options is usually tough to draw.



What's crucial is that options involve objective and measurable attributes; objective individual wants, not prejudices, have an effect on their translation into quality variations.

☐ Usefulness

Serviceability is that the speed, courtesy, competence, and easy repair. shoppers are involved not solely a few product breaking down however additionally concerning the time before service is reconditioned, the timeliness with that service appointments are unbroken, the character of dealings with service personnel, and therefore the frequency with that service calls or repairs fail to correct outstanding issues. In those cases wherever issues don't seem to be straight off resolved and complaints are filed, a company's complaints handling procedures also are seemingly to have an effect on customers' final analysis of product and repair quality.

> Aesthetics

Aesthetics may be a subjective dimension of quality. However a product appearance, feels, sounds, tastes, or smells may be a matter of private judgment and a mirrored image of individual preference. On this dimension of quality, it's going to be troublesome to please everybody.

☐ Perceived Quality

Consumers don't invariably have complete info a couple of product or service's attributes; indirect measures is also their solely basis for comparison brands. A product's sturdiness as an example will rarely be determined directly; it should sometimes be inferred from numerous tangible and intangible aspects of the merchandise. In such circumstances, images, advertising, and whole names - inferences regarding quality instead of the fact itself - are often vital.

2.4 Factors Affecting Quality

The quality is affected by-

1. Money



- 2. Materials
- 3. Management
- 4. People
- 5. Market
- 6. Machines and ways

1. Money:

Most important issue touching the standard of a product is that the cash concerned within the production itself. Within the gift day of robust and cut-throat competition, firms are forced to take a position tons in maintaining the standard of product.

2. Materials:

To turn out a high-quality product, the raw materials concerned in production method should be of prime quality.

3. Management:

Quality control and maintenance programs ought to have the support from prime management. If the management is quality acutely aware instead of simply amount conscious, organization will maintain adequate quality of product.

4. People:

People used in production, in coming up with the product should have knowledge and skill in their various areas.

5. Market:

Market for the merchandise should exist before management emphasizes quality of the product. It's useless to speak regarding the standard once the marketplace for the merchandise is lacking. As an example, there's no demand for woolen clothes within the hot climates (e.g., Southern a part of India).

6. Machines and Methods:



To maintain high standards of quality, firms are investment in new machines and following new procedures and strategies recently.

2.5 Quality Control

Quality control is outlined as "Those planned and systematic actions that provides a mean to manage and live the characteristics of a product, method or a service to established needs."

QUALITY CONTROL AS PER ISO:

"The operational techniques and activities that are wont to satisfy quality needs."

The quality system verifies associated maintains desired level of quality in an existing product or service by careful coming up with, use of correct equipment's and continued review and corrective action PRN.

Quality Control suggests that the checking, confirmation and management of the degree or review of brilliance of a characteristic or property of the materials. It's upset regarding the assessment of take a look at data and its application to manage of the fabric procedure, crude materials, moderate item with greatest economy and client loyalty. The operational systems and exercises are utilized to satisfy necessity valuable. To manage the standard skilled labor, applicable instrument or machine and impeccable crude materials ought to utilize. Internal control guarantees that every one piece of wear things meets generation models and match the primary example.

2.5.1 Objective of internal control



It is a long-standing convention of any association to supply the purchaser's initial quality stock. The rationale for this management program is to assist manufacturers in meeting their exclusive needs. The best objective valuable management is that the satisfaction of consumers or purchasers want to stay the item wanted. The others goals valuable management are

- Unmarred item
- Style is indicated and progressing.
- Correct making ready for Affirmed execution
- Explore the patrons need
- Increase the marketability
- Use of explicit crude materials
- Increasing the creation
- Maintaining exclusive demand of welfare, welfare and condition
- rising the productivity
- Reducing the price
- Use of appropriate crude materials
- Study on Quality

2.5.2 What is QC Inspection

The ISO commonplace characterizes investigation as "movement of estimating, looking at, testing a minimum of one qualities of Associate in Nursing item or administration and different the outcomes and indicated stipulations with a selected finish goal to line up whether or not similarity is accomplished for each trademark."



QC and Inspection:

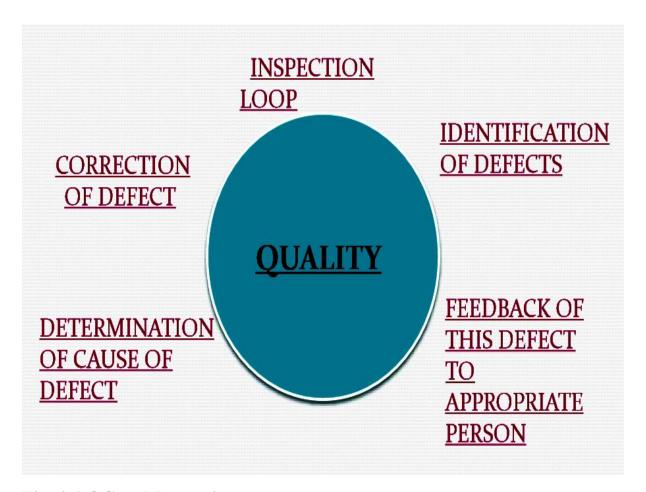


Fig: 2.1 QC and Inspection



QC Throughout Production system:

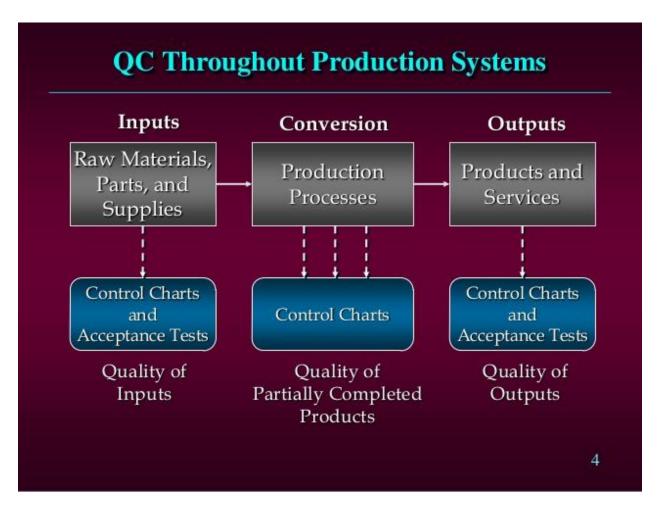


Fig: 2.2, QC throughout Production system

Pre- Production QC Inspection

The security and adequacy of the finished measurements form is to a good extent dependent on the spotlessness and nature of the mass dynamic medication substance.



- Physical tests, for instance, molecule estimate for crude materials stream properties so forth are basic tests to ensure steady task of the creation and management framework and to guarantee quality and adequacy
- To diminish quality hazard, the info sources may be assessed preceding creation.
- Samples are randomly taken and checked.
- AN accomplished auditor inspects the example/model to confirm that
- The crude materials meet the predefined gauges
- Whether or not advancement cluster has clearly sent the conditions to the aggregation group.
- Whether or not provides for big scale producing is like that for creating models

IN method examination:

- The most things that at large the road are examined for similarity.
- If problems are raised at this stage, the commercial facility will quickly take activities and be from delays. In-process things are once in a very whereas checked because it takes specialist to reliably distinguish mistakes on incomplete items.

IN method QC examination

- examine the check comes regarding thanks to in-process tests performed for conformity with engineered up examining and testing conventions, instructive techniques, and particulars.
- For example, assess the tests for weight selection, hardness, and bearableness. All testing should conform to c GMP.
- The review should affirm that the in-process tests were done, as delineated within the arrangement, and verify that the outcomes are within details.
- 2.5.3 Arrangement of in method examination
- 1. Preliminary run examination: Tools and machines are checked before task.



- 2. Leading examination: the items created within the main generation run are investigated and analyzed as for details.
- 3. Review while not anyone else's input control: Done by directors, dominant tasks at numerous levels of creation method.
- 4. decentralized investigation: Semi completed merchandise are examined either on machines or within the generation line.
- 5. Incorporated investigation:

2.5.4 QC EXAMINATION IN PRODUCTION:

- 1) Part predominant: Incoming material should be checked for needed particulars.
- 2) Set-up predominant: AN activity once set at level, stays at that level for long. Consequently things delivered initially if discovered free from deformities and yielding with determinations, at that time the task may be cleared for unremitting activity.
- 3) Machine predominant: Operation float aloof from starting set-up level as task continues. Afterward wants intermittent review for rectifying discovered.
- 4. Administrator prevailing: a selected phase of employment is altogether wedged by administrator's power.
- 5. Information predominant: All the info as well as the SOP's, plan of occupation is given to involved individual.
- 6. Record overwhelming: The composed records and documentation of every procedure and check directed have to be compelled to be maintained.

2.5.5 QC EXAMINATION IN ANALYTICAL:

- Once all is claimed in done, these investigations include:
- The actual philosophy which is able to be utilized to check another medication item
- A whole analysis of analysis centers conformity with GMP'S
- A specific a part of Centre tasks
- Laboratory records and logs speak to a elementary wellspring of information that allows a whole review of the specialized capability of the employees and of general internal control methodology.



- Specifications and scientific methodology have to be compelled to be acceptable and, as relevant, in conformity with application duties and compendia requirements.
- Documents distinctive with the particularization of the item, uniting of the mass medication substance, item determinations, examination of the item, et al are inspected amid the audit procedure in headquarter
- Inspections are meant to make your mind up whether or not the knowledge submitted in AN application are valid and precise and if the systems recorded within the application were very wont to produce the information contained in the application.
- Supported cluster examination approach.
- Extremely specialized and focused testing styles of gear, methods, and data controls additionally logical Centre tasks are assessed.

2.5.6 Food and Drug Administration examination:

FDA INSPECTION-4M's

1. MACHINE:

- Examination have to be compelled to affirm that preventive repairs, cleaning, alteration so forth are performed Machine utilization, support, alignment logs, repair records have to be compelled to be inspected.
- Verify that the kinds of drugs were in nice operating request at the time the bunches were examined.

2. Technique/Process:

- Knowledge with relevancy approval of methods have to be compelled to be exactly assessed
- All procedures which will create deviation a gadget's detail and every one approved procedure should be checked and controlled
- On the off likelihood that the procedure is programming controlled, affirm that the merchandise was approved.
- Review the merchandise records, programming approval exercises, programming modification controls and programming approval results to affirm that product can address consumer issue.



3. MATERIALS:

- Crude material testing is of most extreme significance because it foursquare influences the character of definite item
- Therefore assessment have to be compelled to examine the investigation of materials as well as virtue check, quality, outlines so on
- Review if the methods for breaking down the spotlessness were approved
- The maker should have end data of aggregation method and also the potential contaminations which will show up in materials.

4. MAN:

- Make certain employees are match the bill to execute approved procedures or fitly ready to actualize forms that yield comes this may be fully confirmed.
- Affirm that the representatives have end learning of the gadgets, forms.
- Affirm that employees understand the contrivance surrenders which will happen thanks to disgraceful exhibitions make sure that the representatives leading QC tests know about the deformities and blunders which may be old whereas enjoying out their duties.

2.5.8 LAST examination

- It's in addition well-known pre-shipment review.
- This can be the foremost standard form of QC review for merchants.
- It happens once all of the things are done and ready for cargo.
- It's a way for dominant nature of item utilizing an appointment of measurable devices
- It includes 2 components:
- Measurable method control: This outlines accumulation of data, makes utilization of management diagrams.
- Acknowledgment examining

CONTROL CHARTS:



- Main role of management outlines is to indicate once generation procedures could have modified adequately to influence item quality.
- Within the event that the sign is that item quality has disintegrated, restorative is taken.
- Examine traits (No. of defectives in a very sample) or factors (attributes which will be calculable on a unremitting scale (weight, length, and so on.) of the instance thereupon of the quality.

2.5.9 SAMPLING OR SAMPLING INSPECTION

- It's the approach toward assessing section of the item material in an exceedingly significant live to just accept or dismissing the half as either adjusting or not yielding with quality determinations.
- The acknowledgment style acknowledges the:
- Size of tests,
- Reasonably tests
- Alternative rule, c, won't to either acknowledge or dismiss the half
- Tests may well be either single, twofold, or serial.

QUALITY AUDIT

- ISO characterizes review as economical and free examination to determine if quality exercises and connected outcomes conform to organized game plans and whether or not these are dead adequately and are cheap to accomplish targets.
- It checks if quality framework and techniques are Free from intrinsic imperfections
- Are equipped for accomplishing and maintaining models useful picked by business sector or customers
- being clung to and ordered with, in everyday work.



QUALITY AUDIT AND FOLLOW UP

- Before composing examining report, examiner discloses the perceptions to audited □
 Corrective moves to be created are planned.
- Audit report are composed in customary configuration, that contain territory examined, dates of review, folks reached, worthy highlights and proposals.
- The report should contain standing of usage of unfinished restorative measures in keeping with past review.

QC EXAMINATION IN DISTRIBUTION AND STORAGE GMP

- summarizes following standards as for dissemination:
- Solely approved things are disseminated
- Premises are cheap for his or her expected utilize and unbroken on nice clean condition.
- All things are gotten, place away and restrained fastidiously
- All tasks are performed by composed strategy, administered and recorded adequate arrangement exist to cope with grievances, reviews and come back product
- Storage: Warehouse have to be compelled to be good, blocked off for unapproved folks, temperature and damp management, satisfactory painful, free from bugs and vermin.
- Special reposting zones for controlled medications and alternative doctor prescribed medications
- Appropriate and secure room for controlled medications and toxins.

2.6 Types of Quality Control

Quality control are two types:-



2.6.1 Product control:-

The management that is used to diminish deficient things within varied tons of delivered Great is understood as item management. It's connected once item method.

2.6.2 Process control:-

Controlling of method succession or ventures to deliver wished quality item is named process management. Method management is 2 composes.

2.6.3 Online quality control:-

This kind valuable management is performed in method organize i.e. while not ceasing the creation method. Checking and change of selection or blame in making ready stage is thought as on-line internal control.

2.6.4 Offline Quality Control:-

This sort useful management includes of center tests that are finished by halting the Generation method. In article of vesture fabricating generally quality school are selected in Each space to ensure quality yield at finish of each procedure. Underneath each workplace Quality heads space QAs are delegated. Within the related to graph, associate association diagram Of a medium size shirt manufacturing organization has been appeared.

2.7 Quality Control in Cutting Section:-

The Cutting section is running consistent with the subsequent processes:



- 1) Finished material from coloring & tinishing
- 2) Material scrutiny
- 3) Relaxation
- 4) Check of GSM, Diameter, shed, shrinkage, twisting, fastness etc.
- 5) Check cutting
- 6) Approval
- 7) Marker creating
- 8) Material spreading
- 9) Cutting
- 10) Sorting (Sticker, Numbering)
- 11) Bundling
- 12) Cut panel checking
- 13) Input section
- 14) Send to stitching section.

2.8 Cutting Process:-

Cutting procedure in article of clothing industry can be precarious and numerous individuals are puzzled on how this mysterious accomplishment of coordinating each check/stripe is accomplished by the industrial facilities. Here is the well-ordered, brief clarification on Cutting procedure in piece of clothing industry and the Cutting Process Flowchart toward the finish of the article.

2.8.1. Spreading or laying:-

To cut varied articles of article of clothing at an equivalent time, texture is unfold in layers one over the on a protracted table. This procedure in known as spreading or egg laying.



Plies – material is unfold in layers one over the opposite and every layer is thought as a handle. variety of employs which will be arranged is chosen in light-weight of the tallness of the blade, thickness of texture and sort of cutting technique being taken when.

Lay—outcome of spreading/laying may be a lay that is simply wished variety of employs arranged.

Spreading ought to be attainable by manual and to boot processed spreaders.

Note: whereas spreading checks and stripes, every line of A utilize won't cowl exactly finished one another consequently if articles of article of clothing are cut foursquare line coordinative won't be accomplished. Stick Table is utilized as a solution for this issue.



2.8.2. Block cutting:-



Block cutting is improved the case articles of covering which needs coordinating like checks, stripes and a couple of prints. during this procedure as critical cutting squarely on the examples a sq. is cut with cushions round the example, that takes under consideration coordinating the lines where needed.

Relaying:-

Once a sq. is cut individual cut squares are handed-off superimposing the checks/stripes one over the on top of. The technique for handing-off will modification in sight of the coordinating needed. Squares will be handed-off with protruding or while not sticking. Goal of transferring is to lay checks/stripes exactly finished one another for every utilize. This can be done physically.

2.8.3. Ready cutting:-

Cutting the feel in step with the state of the instance is termed ready cutting. End result of ready cutting are the finished product elements which can be utilized for stitching. Ready cutting is finished by numerous blades in step with reasonableness, kind of blades is Straight blade, Band cut and spherical.

2.8.4. Number fixing:-

Cut elements are snickered or inked with numbers to acknowledge each bit and to confirm that every article of consumer goods is created in same shade and same shrinkage.

2.8.5. Panel Inspection:

Cut components are assessed by weaving surrenders. Within the event that imperfections are discovered the board is supplanted by reciting a board of same shade and same shrinkage.

2.8.6. Fusing:



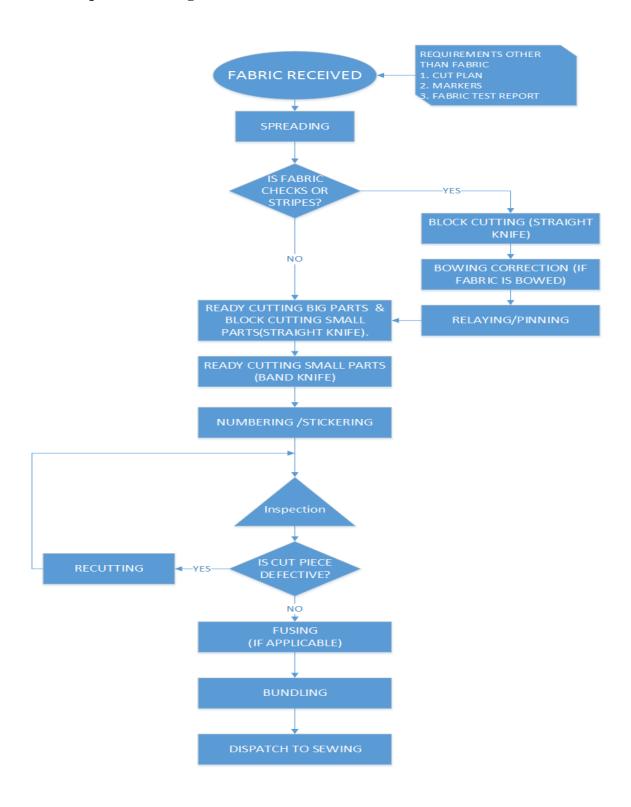
In the event that the piece of consumer goods contains melted interlining the cut boards with fusible interlining are suffered combining machine that is set to a characterized temperature to convey the yield as tangled board.

2.8.7. Packaging:-

After the items are cut, singular items are prepackaged along to be sent for stitching. During this procedure numbers are coordinated and packages are created to be sent for stitching.



2.8.8 Dispatch to sewing:-





Chapter III Methodology



Data Collection:

After observant the different types of sections We personally collect data on the cutting, sewing, dyeing, knitting issue from the cutting, sewing, and dyeing section. There are ten sewing and cutting floors in GMS Composite Knitting industry Ltd and there are three sewing and cutting floors in Meghna Knit Composite Ltd. In every floor twenty lines measure organized. From those line We take information from totally different line and gather some cut panel inspection report, buyer name, style no. of items of wear and different types of faults. All this data collect given that We found in sewing, cutting, knitting, dyeing floor of GMS Composite Knitting industry Ltd. And Meghna Knit Composite Ltd.

Data Analysis:

In this part We attached information of sewing, cutting, knitting, dyeing inspection fault of GMS Composite Knitting industry Ltd. We show below the some important data like that yarn fault, hole ,slub, Spot, Dyeing Fault ,Knot , Crease mark etc. We try our best to collect cut panel inspection data.

3.1 Working Procedure:-

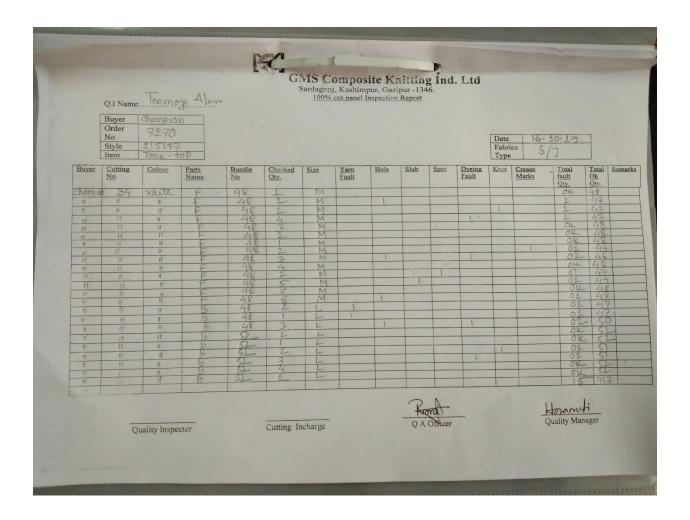
- 1. Firstly, we've got visited the cutting section and collect fifteenth recent information of 100% cut panel examination from cutting manager.
- 2. Then we have a tendency to establish the fault from the info like yarn fault, material hole, slub, knot, crease mark etc. so counts the whole variety of fault.
- 3. After that, we have a tendency to build the whole variety of defects that we get from the info. And acquire the whole variety of defects is 430.



- 4. We have a tendency to try and mention the customer name, order no and date precisely.
- 5. We have a tendency to analyze the defect on material and check out to gather the defect fabric sample. Then we build total defect proportion from the whole okay amount and that we will perceive the fault percentage that is higher and which is lower.

3.2 Inspection Data

Fig 3.1: Cut Panel Inspection Report on 16-10-2019





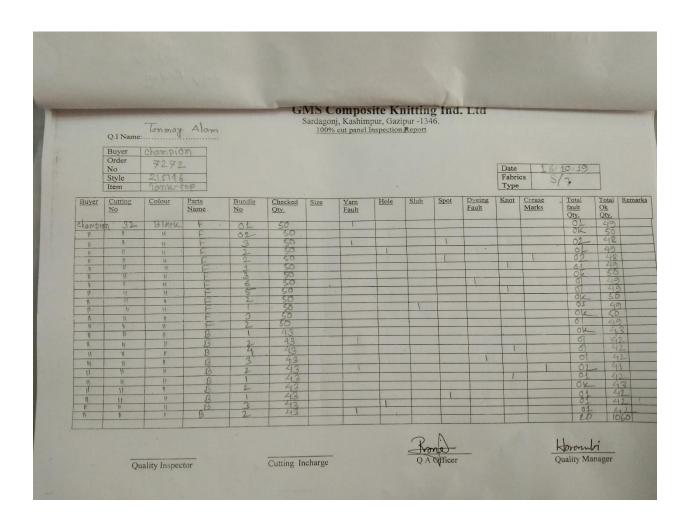
Buyer	Colour	Bundl										Total	Total
		<u>e</u>	Checked	Size	Yarn	Hole	Slub	Spot	Dyeing	Knot	Crease	fault	Ok
		<u>No</u>	Qty.		Fault				Fault		Marks	Qty.	Qty.
											Warks		
Champion	White	48	1	M								Ok	48
Champion	White	-	2	M		1						1	47
Champion	White	-	1	M						1		1	47
Champion	White	-	4	M					1			1	47
Champion	White	-	3	M								Ok	48
Champion	White	-	2	M								Ok	48
Champion	White	-	1	M								Ok	48
Champion	White	-	2	M							1	1	47
Champion	White	-	3	M		1			1			2	46
Champion	White	-	4	M								Ok	48
Champion	White	-	2	M				1				1	47
Champion	White	-	5	M			1					1	47
Champion	White	-	7	M								Ok	48
Champion	White	-	8	M		1						1	47
Champion	White	-	2	L	1							1	47
Champion	White	-	1	L	1							1	47
Champion	White	-	3	L		1			1			2	50
Champion	White	52	2	L								Ok	52
Champion	White	-	1	L								Ok	52
Champion	White	-	2	L						1		1	51
Champion	White	-	3	L					1			1	51
Champion	White	-	4	L								Ok	52
Champion	White	-	2	L								Ok	52
					2	4	1	1	4	2	1	15	1117

Here the observation data is 16-10-2019. In this production buyer was Champion. There are total ok production are 1117 & total fault quality 15.

- **&** Buyer- Champion.
- Colour- white
- ❖ Yarn fault -2
- ❖ Hole-4
- ❖ Slub -1
- **❖** Spot -1
- ❖ Dyeing fault -4
- **❖** Knot -2
- ❖ Crease marks -1



Fig: 02, Cut panel Inspection Report on 16-10-2019





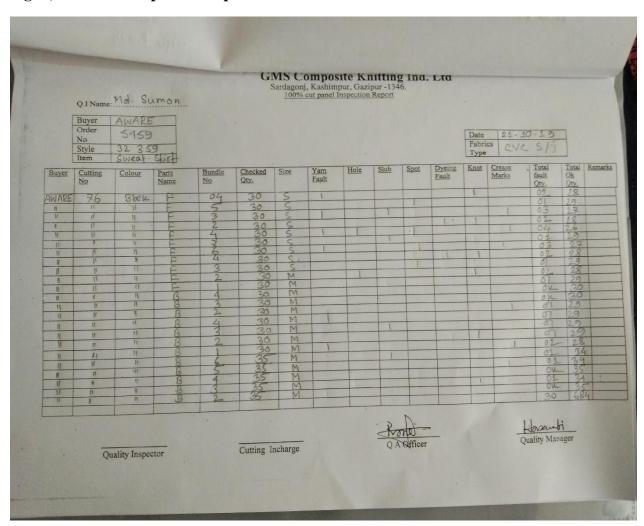
Buyer	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Marks	Total fault Qty.	Total Ok Qty.
											Warks		
Champion	Black	1	50	S	1							1	49
-	-	2	50	S								Ok	50
-	-	3	50	S	1			<u>1</u>				2	48
-	-	2	50	S		<u>1</u>						1	49
-	-	2	50	S				<u>1</u>			<u>1</u>	2	48
-	-	1	50	S						1		1	49
-	-	3	50	S								Ok	50
-	-	6	50	S					1			1	49
-	-	5	50	S						1		1	49
-	-	2	50	S								Ok	49
-	-	1	50	S			<u>1</u>					1	50
-	_	3	50	S								Ok	49
-	-	2	50	S					1			1	50
-	-	1	43	M								Ok	49
-	-	2	43	M	1							1	43
-	-	4	43	M						<u>1</u>		1	42
-	-	3	43	M					1			1	42
-	_	2	43	M	1						1	2	41
-	-	1	43	M						<u>1</u>		1	42
-	-	2	43	M								Ok	43
-	-	1	43	M				1				1	42
-	-	3	43	M		<u>1</u>						1	42
-	-	2	43	M	1							1	42
					5	2	1	3	3	4	2	20	1060

Here the observation data is 16-10-2019. In this production buyer was Champion. There are total ok production are 1016 & total fault quality 20.

- **&** Buyer- Champion.
- **❖** Colour- Black
- ❖ Yarn fault -5
- **❖** Hole-2
- **❖** Slub -1
- **\$** Spot -3
- ❖ Dyeing fault -3
- **❖** Knot -4
- ❖ Crease marks -2



Fig: 3, Cut Panel Inspection Report for 21-10-2019





Buyer	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease	Total fault Qty.	Total Ok Qty.
											Marks		
AWARE	Black	4	30	S	1					1		2	28
-	-	5	30	S				1				1	29
-	-	3	30	S	1		1				1	3	27
	-	2	30	S					1	1		2	28
-	-	4	30	S	1	1		1			1	4	26
-	-	7	30	S			1					1	29
-	-	6	30	S	1			1			1	3	27
-	-	4	30	S					1	1		2	28
-	-	3	30	S				1				1	29
-	-	2	30	S		1				1		2	28
-	-	1	30	M								1	29
-	_	4	30	M								Ok	30
-	-	3	30	M								Ok	30
-	-	2	30	M							1	1	29
-	-	4	30	M	1							1	29
-	-	3	30	M			1					1	29
-	-	2	30	M						1		1	29
	-	1	30	M	1						1	2	28
-	-	6	35	M			1					1	34
-	-	5	35	M							1	1	34
-	-	4	35	M								Ok	35
-	-	3	35	M						1		1	34
-	-	2	35	M								Ok	35
					6	2	4	4	2	6	6	30	684

Here the observation data is 21-10-2019. In this production buyer was AWARE. There are total ok production are 684 & total fault quality 30.

- **❖** Buyer- AWARE
- **❖** Colour- Black
- ❖ Yarn fault -6
- **❖** Hole-2
- **❖** Slub -4
- **❖** Spot -4
- ❖ Dyeing fault -2
- **❖** Knot -6
- ❖ Crease marks -6



Fig: 4, Cut panel Inspection for 21-10-2019

	Q.I Nam	e Md	Sumon.		G	MS Co Sardagonj 100%	Kashin cut panel	site Kr npur, Gazi Inspection	pur -1346 Report	Ind.	Ltd				
	Buyer Order No Style Item	5464 32.35 SWEAT	59									Date Fabric Type	es eve	2 5/5	Total
Buyer		Colour	Parts Name	Bundle No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	<u>Crease</u> <u>Marks</u>	Total fault Oty.	Ok Oty.
-		-	-	02	60	12								ON	60
AWAR	7.7	White		07	60	1				-				- 0	159
111	111	W	F	O	60	1	1	-					1	51	59
11	17	11	F	02	60	<u>_</u>			1			1		62	50 50 50 50
11	1 11	11	E	93	60									OK	50
11	t)	17	-	05	60	L							+ 1	102	58
11	1	11		6	60	L.	1							OK	59
11	19	11 .	Torra .	7	60	1		-		1				01	59
11	V	11		8	- 60	1								07	59
1 11	11	L1	-	-	20					-	-			1 3	59
1/	11	11	a	4	607		-		1	-		1		02	- 58
11	- (1	R	B	3	60	XL	-	-	1					01	39
11	11	11	B	2	60	71								OK	- 7
11	11	11	B		72	XL								G	7
11	1	7	B	1 4	72	XL				1				07	
11	-	11	B	5	72	XL								OK	
11	11	19	15	13	77	XL				-		-		01	
11	11	b 1	8	8	72	XL				-	1			0:	1 =
11	1)	34	B	09	72	X					1			0	K =
11	y	2	B	02	92	XL									
ii		lity Inspecto	or	02	Cutting Is				Q	Aonto	er			Hasen Quality M	



<u>Buyer</u>	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Marks	Total fault Qty.	Total Ok Qty.
											Marks		
AWARE	White	2	60	L								Ok	60
-	-	1	60	L	1							1	59
-	-	1	60	L		1						1	59
-	-	2	60	L							1	1	59
-	-	3	60	L			1			1		2	58
-	-	4	60	L								Ok	50
	-	5	60	L					1			1	59
	-	6	60	L	1						1	2	58
-	-	7	60	L								Ok	60
-	-	8	60	L				1				1	59
-	-	1	60	L			1					1	59
1	-	5	60	L					1			1	59
1	-	4	60	L				1				1	59
-	-	3	60	XL	1		1					2	58
-	-	2	60	XL							1	1	59
1	-	1	72	XL								Ok	72
-	-	4	72	XL					1			1	71
-	-	5	72	XL				1				1	71
-	-	6	72	XL		1						Ok	72
-	-	7	72	XL							1	1	71
-	-	8	72	XL				1		1		2	70
	-	9	72	XL					1		_	1	71
1	-	2	72	XL								Ok	72
					3	2	3	3	4	2	4	21	1395

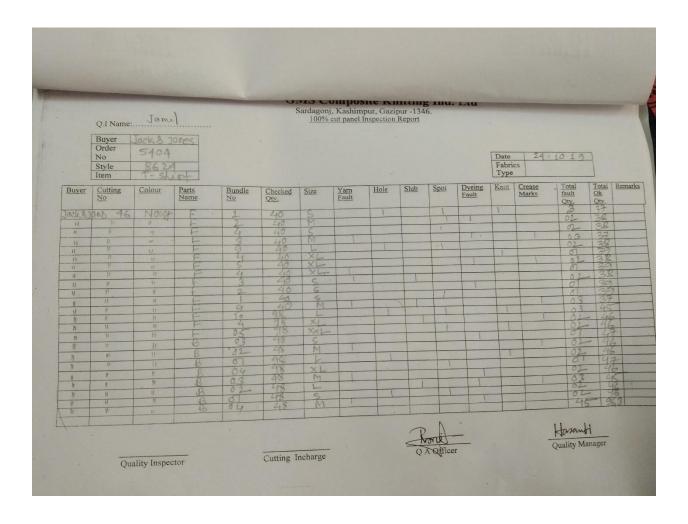
Here the observation data is 21-10-2019. In this production buyer was AWARE. There are total ok production are 1395 & total fault quality 21.

- **❖** Buyer- AWARE
- ❖ Colour- white
- ❖ Yarn fault -3
- **❖** Hole-2
- **❖** Slub -3
- **❖** Spot -3
- ❖ Dyeing fault -4



- **❖** Knot -2
- ❖ Crease marks -4

Fig: 5, Cut Panel Inspection for 24-10-2019





Buyer	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Marks	Total fault Qty.	Total Ok Qty.
Jack &Jones	Navy	1	40	S				1		1		3	37
-	-	2	40	M		1		1	1			2	38
-	-	4	40	S				1				2	38
-	-	3	40	M	1				1		1	3	37
-	-	9	40	L				1				2	38
-	-	4	40	XL		1				1		1	39
-	-	5	40	XL					1		1	2	38
-	-	4	40	XL	1							1	39
-	-	3	40	S	1		1					2	38
-	-	2	40	S					1			1	39
-	-	1	40	S				1				1	39
	-	9	40	M	1		1				1	3	37
-	-	10	48	L				1		1		3	45
-	-	4	48	XL		1	1				1	2	46
=	-	5	48	XL				1		1		2	46
-	-	3	48	S	1				1			1	47
-	-	2	48	M							1	2	46
-	-	1	48	L						1		2	46
-	-	4	48	XL	1	1		1				1	47
-	-	3	48	M					1			2	46
-	-	2	48	L					1		1	3	45
-	-	1	48	S		1		1				2	46
-	-	4	48	M	1				1			2	46
					7	5	3	9	8	5	6	45	963

Here the observation data is 24-10-2019. In this production buyer was Jack & jones . There are total ok production are 963 & total fault quality 45.

- ❖ Buyer- Jack & jones
- Colour- Navy
- ❖ Yarn fault -7
- ❖ Hole- 5
- **❖** Slub -3
- **❖** Spot -9
- ❖ Dyeing fault -8
- **❖** Knot -5
- ❖ Crease marks -6



Fig: 6, Cut panel Inspection for 24-10-2019

24.10.19 100/ coffon ase Total Total R Toty Ox Ox Ox Ox Ox
ase Total Total R fault Ok Oty.
ase Total Total R fault Ok Oty.
ase Total Total Rights fault Ok Oty. Oty.
ase Total Total Rights fault Ok Oty. Oty.
02 600
03 47
1 8 48
0 49
02 48
07 49
1 62 48
1 02 48
52 43
07 44
02 43
03 42
03 41
02 43
1 02 42
01 44
01 44
02 43
02 43
45 1040



<u>Buyer</u>	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Marks	Total fault Qty.	Total Ok Qty.
Jack & Jones	Grey	2	50	X	1					1		2	48
-	-	3	50	L			1					1	49
-	-	4	50	M		1		1			1	3	47
-	-	7	50	XL			1				1	2	48
-	-	9	50	L				1				1	49
-	-	2	50	M	1							2	48
-	-	3	50	S			1		1			1	49
-	-	4	50	M	1		1			1		3	47
-	-	6	50	XL							1	2	48
-	-	8	50	XL			1		1		1	2	48
	-	7	45	XL	1			1				2	43
-	-	2	45	M		1						1	44
-	-	3	45	M	1					1		2	43
-	-	4	45	M				1	1			2	43
	-	2	45	S	1				1	1		3	42
-	-	3	45	S		1				1	1	3	42
-	-	5	45	S			1		1			2	43
-	-	6	45	L	1						1	2	43
-	-	4	45	L					1			1	44
-	-	7	45	L				1				1	44
-	-	8	45	M		1					1	2	43
-	-	3	45	M			1			1		2	43
-	-	4	45	M	1			1			1	3	42
					8	4	7	6	6	6	8	45	1040

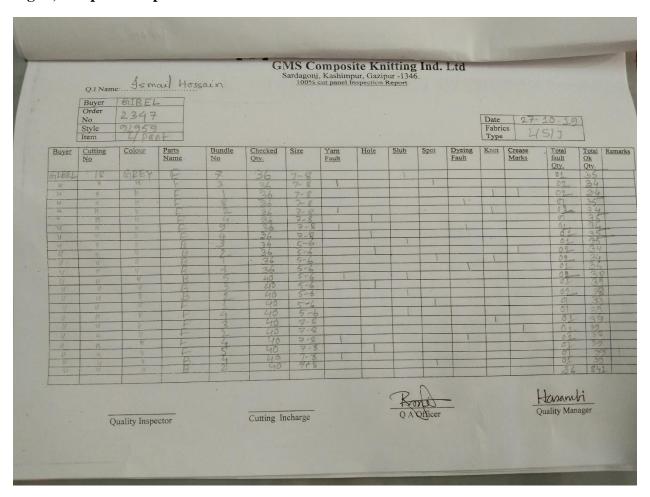
Here the observation data is 24-10-2019. In this production buyer was jack & jones. There are total ok production are 1040 & total fault quality 45.

❖ Buyer- Jack & jones



- Colour- Grey
- ❖ Yarn fault -8
- **❖** Hole-4
- ❖ Slub -7
- **❖** Spot -6
- ❖ Dyeing fault -6
- **❖** Knot -6
- ❖ Crease marks -8

Fig: 7, Cut panel Inspection for 27-10-2019





Buyer	Colour	Bundl e	Checked	Size	Yarn	Hole	Slub	Spot	Dyeing	Knot	Crease	Total fault	Total Ok
		No	Qty.		Fault				Fault			Qty.	Qty.
											Marks		
GIBEL	GREY	7	36	7-8			1					1	35
-	-	3	36	7-8	1		_	1				2	34
_	_	1	36	7-8						1	1	2	34
_	-	8	36	7-8					1	-	-	1	35
_	_	2	36	7-8	1				_	1		2	34
_		4	36	7-8		1						1	35
_	-	9	36	7-8	1				1			2	34
-	-	4	36	7-8		1						1	35
-	-	3	36	5-6								1	35
-	-	2	36	5-6		1					1	2	34
-	-	1	36	5-6				1		1		2	34
-	-	4	36	5-6					1			1	35
-	-	5	40	5-6	1							2	38
-	-	3	40	5-6		1						1	39
-	-	2	40	5-6								1	39
-	-	1	40	5-6				1				1	39
-	-	4	40	5-6								1	39
-	-	3	40	7-8						1		1	39
-	-	2	40	7-8							1	1	39
-	-	4	40	7-8	1				1			2	38
-	-	5	40	7-8		1						1	39
-	-	4	40	7-8	1							1	39
	-	2	40	7-8				1				1	39
					6	5	1	4	4	4	3	31	841

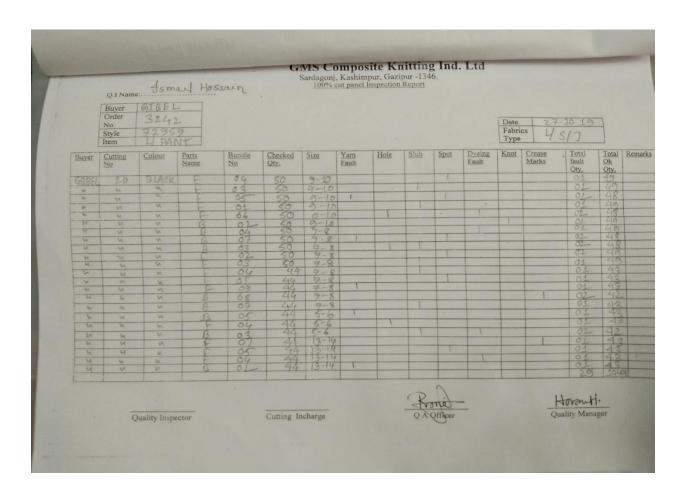
Here the observation data is 27-10-2019. In this production buyer was GIBEL. There are total ok production are 841& total fault quality 31.

- ❖ Buyer- GIBEL.
- Colour- Grey
- ❖ Yarn fault -6
- **❖** Hole-5
- Slub -1
- **❖** Spot -4



- ❖ Dyeing fault -4
- **❖** Knot -4
- ❖ Crease marks -3

Fig: 8, Cut panel Inspection for 27-10-2019





Buyer	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease	Total fault Qty.	Total Ok Qty.
											Marks		
GIBEL	Black	4	50	7-8				1				1	49
-	-	3	50	7-8			1					1	49
-	-	5	50	7-8	1			1				2	48
-	-	1	50	7-8			1					1	49
-	-	6	50	7-8		1			1			2	48
-	-	2	50	7-8						1		1	49
-	-	4	50	7-8					1			1	49
-	-	7	50	7-8	1			1				2	48
-	-	3	50	7-8		1	1					2	48
-	-	2	50	7-8				1				1	49
-		3	50	7-8			1					1	49
-	-	4	44	5-6			1					1	43
-	-	1	44	5-6				1				1	43
-	-	9	44	5-6	1							1	43
-	-	8	44	5-6							1	2	42
-	-	7	44	5-6			1					1	43
-	-	5	44	5-6	1							1	43
-	-	4	44	5-6		1						1	43
-	-	3	44	5-6			1		1			2	42
-	-	7	44	5-6						1	1	1	43
-	-	5	44	5-6				1				1	43
-	-	4	44	5-6					1			1	43
-	-	2	44	5-6	1							1	43
					5	3	7	6	4	2	2	29	1049

Here the observation data is 27-10-2019. In this production buyer was GIBEL. There are total ok production are 1049& total fault quality 29.

- ❖ Buyer- GIBEL.
- ❖ Colour- Black
- ❖ Yarn fault -5
- **♦** Hole-3
- **❖** Slub -7
- **❖** Spot -6
- ❖ Dyeing fault -4
- **❖** Knot -2



❖ Crease marks -2

Fig: 9, Cut panel Inspection for 29-10-2019

	Q.I Nam	e: Akbo	or Ali			Sardagon	i, Kashin	site Ki npur, Gazi Inspection	ipur -134		. Ltd					
	Buyer Order No Style Item	428 2995 Polo-S	5									Date Fabri Type	ics to	10.19	}	
Buyer	Cutting No	Colour	Parts Name	Bundle No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Marks	Total fault Oty.	Total Ok Oty.	Remark
DISEL	94	White	B .	1	49	5								02	40	
11	11	1	F	2	45	M	1							03		
11	11	. 11	B	129	412_	5			1 1			1		13	39	
111	14	1		3	42	M						1		01	41	
11	11	11	B	6	42	3	1	I		. 1				04	38	
1/	11	10	1 -	5	42	M							1	02	40	The same
11	11	1 11	B	2	42	5								03	39	
11	11	7	F	. 7	42	M,						1		02	40	
11	11	11	B	3	42	5 .							-	02	39	-
- 1/	N.	1	1 +	5	42	M			1			-	1	03		
11-	11	31	B	6	1. 212	5			1			-	-	02	40	-
I.	14	11	I F	1	42	M	-						1	04	38	-
11	И	17	1 13	8	422	1 M	1	-			-		1	03	39	
11	u	11	F	1 5	42	101	-			1				02	1.40	1
11	11	1	1 15	1	42	M				-		1		01-	40	
	11	11	1 -	1	1000	-	-				-	-		02	40	
11	11	li.	13	3	42	M	-						-	102	40	
11	11	//	1	4	42	- 101							-	01	41	1
11	LI	0	В	6	42	5				-		1	1	02	40	
11	11	112	F	12	42	M		1				1		02	190	
h	1	b/	B	13	42	5		-	-			1		04	41	1
	11	V	F		42	M	-		-	1		-		0)	41	1
1)	11	N	1 18	3	42	7				-				50	1916	



Buyer	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease	Total fault Qty.	Total Ok Qty.
											Marks		
DISEL	White	<u>1</u>	42	<u>S</u>			1		1			<u>2</u>	40
-	-	2	42	M	1			1			1	3	39
-	-	4	42	S		1	1			1		3	39
-	-	3	42	M				1				1	41
-	-	6	42	S	1	1		1			1	4	38
-	-	5	42	M	1		1					2	40
-	-	2	42	S	1		1		1			3	39
-	-	7	42	M	1	1						2	40
-	-	3	42	S			1	1				2	40
-	-	5	42	M					1	1	1	3	39
-	-	6	42	S	1		1					3	40
-	-	4	42	M		1					1	2	40
-	-	8	42	S	1	1			1		1	2	38
-	-	9	42	M			1		1			4	40
-	-	2	42	S			1	1		1		2	39
-	-	1	42	M	1						1	3	40
-	-	3	42	S					1			2	41
-	-	4	42	M	1						1	1	40
-	-	6	42	S				1				2	41
-	-	2	42	M		1					1	21	40
1	-	5	42	S		1				1		2	40
-	-	1	42	M			1					1	41
-	-	3	42	S				1				1	41
					9	7	9	7	6	4	8	50	916

Here the observation data is 29-10-2019. In this production buyer was DISEL. There are total ok production are 916 & total fault quality 50.

- ❖ Buyer- DISEL.
- ❖ Colour- white



- ❖ Yarn fault -9
- ❖ Hole-7
- **❖** Slub -9
- **❖** Spot -7
- ❖ Dyeing fault -6
- **❖** Knot -4
- ❖ Crease marks -8

Fig.10: Cut panel Inspection for 29-10-2019



	Q.I Nan	ne: Akb	08 Ali		G	MS Co Sardagonj 100%	Ompos i, Kashimp cut panel I	ite Kr our, Gazi nspection	pur -134 Report	Ind.	Ltd					
	Buyer Order	DISEL 429														
	No Style Item	2993 Polo-	0.									Date Fabri Type	cs	10-19	F	
Buyer	Cutting No	Colour	Parts Name	Bundle No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Marks	Total fault	Total Ok	Remar
DISE	-54	Black	F .	0	30	15	1			-	-			Qty.	Qty.	
111	11	1/	1	3	20	S				1	-	-	1	62	28 29 28	
U	1. 0	N.	0	-	30	5	1						-	02	29	
1	1 11	ti.		Å	20	15	1				11.			- 03	27	
11	- 11	U	10	3	30	13.	1.1		1	1				02	28	-
11	111	21	16	2	30	M		-	1		1			10/	129	-
11	H	12	E	A	30	M								02	28	1
1 01	11	11	E	3	30	M.	1						-	03	97	
11	1 1/	1	TE	1 2	30	M·								02	28	
11	1	u ·	F	A	20	M		-						OL	29	
11.	M	(1	E	3	1. 30	M								01	203	
11	11	U	P	2	30	XL							Y	02	28	
11	12	11	F	4	35	XL				-				02	33	
11	11	Fr	1	3	35	XL								6)	-34	
11	11	11	B	8	35	XL						1		01	34	
Tr.	11	U	B	7	35	XL								01	34	
11	- II	0	B	4	35	XL	1	3		1			1	01	34	
17	- 11	- 51	0	3	35	L							-	02	. 33	
(1	- 11	11	3	2	35 35 35 35 35	1								01	34	
11	111	11%	B	11	35	1		1						0)	34	
11	1	11	1 2	14	35	-						1		02	133	1
1	1 11	1 1	1 2	3	35	-					A Company	1		8	39	1 1
11	11	11	13	2.	35	V								36	34	
-					The state of the s		4-11-							26	7.09	



<u>Buyer</u>	Colour	Bundl e No	Checked Qty.	Size	Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Marks	Total fault Qty.	Total Ok Qty.
DISEL	Black	8	30	S	1						1	2	28
-	-	7	30	S				1				1	29
-	-	5	30	S	1						1	2	28
-	-	4	30	S		1			1		1	3	27
-	-	3	30	S	1		1					2	28
-	-	2	30	M				1				1	29
-	-	4	30	M					1		1	2	28
-	-	3	30	M	1			1		1		3	27
-	-	2	30	M		1			1			2	28
	-	4	30	M				1				1	29
-	-	3	30	M			1					1	29
-	_	2	30	XL	1						1	2	28
-	-	4	35	XL	1			1				2	33
-	-	3	35	XL					1			1	34
	-	8	35	XL								1	34
-	-	7	35	XL			1					1	34
-	-	4	35	XL				1				1	34
-	-	3	35	L	1				1			2	33
-	-	2	35	L							1	1	34
-	-	1	35	L					1			1	34
-	-	4	35	L	1						1	2	33
-	-	3	35	L						1		1	34
-	-	2	35	L	1							1	34
					9	2	4	6	6	2	7	36	709

Here the observation data is 29-10-2019. In this production buyer was DISEL. There are total ok production are 709 & total fault quality 36.

- ❖ Buyer- DISEL.
- ❖ Colour- Black
- ❖ Yarn fault -9
- **❖** Hole-2
- **❖** Slub -4
- **❖** Spot -6
- ❖ Dyeing fault -6
- **❖** Knot -2
- ❖ Crease marks -7



3.2.1 Summary Data:

Date	Buyer	Order No.	Defects								
			Yarn Fault	Hole	Slub	Spot	Dyeing Fault	Knot	Crease Mark	Fault	Total Ok Qty.
05-12-18	Champion	7270	2	4	1	1	4	2	1	15	1117
06-12-18	Champion	7272	5	2	1	3	3	4	2	20	1060
13-01-19	AWARE	5459	6	2	4	4	2	6	6	30	684
15-01-19	AWARE	5464	3	2	3	4	4	2	4	22	1395
19-03-19	Jack & jones	5404	7	5	4	9	8	5	6	44	963
20-03-19	Jack & jones	5414	8	4	7	6	6	6	8	45	1040
27-05-19	GIBEL	2347	6	5	5	4	4	4	3	30	841
27-05-19	GIBEL	3242	5	3	7	6	4	1	2	28	1049
23-09-19	DISEL	4285	9	7	9	7	6	4	8	50	916
24-09-19	DISEL	4290	9	2	3	6	6	2	7	35	709
Total Number of Defects		59	36	44	50	47	36	47	319	9774	
Total Percentage of Defects			18.49%	11.28%	13.80%	15.67%	14.73%	11.29%	14.73%	3.26%	

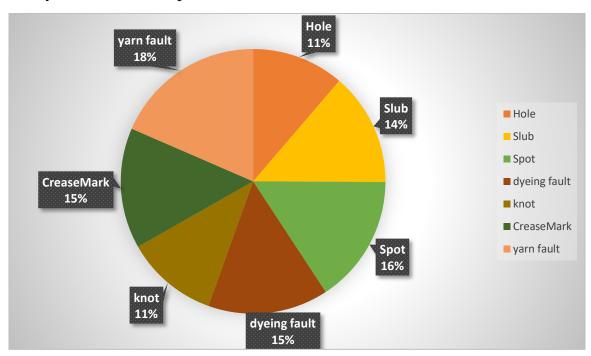


Chapter IV Result and Discussion



4.1 Pie Chart:-

Analysis of different operation from all data .





4.2 Description:

For the evaluation of these massive statistics, nearly 10093 no of facts became inspected. Among them, round no. Of 319 times were out of mark due to reducing issue. And those have been placed while the inspection of reduce panel had been being finished. Meanwhile, no. Of 9774 cases had been k to artwork, which suggests the percentage of fault 3.26%.

There are discuss below now:

- 1. In fabric hole the maximum fault was discovered 36 from 9774. So, the whole fault percent found 11.29%.
- 2. There are head fault from fabric hole problem that's almost 36 out of 9774 no, oaf causes and that was 11.23%.
- 3. 3. Differing types of fault (such as colouring spot, ironing spot, bleaching spot etc.) found 50 items from 9774 and total fault proportion 15.67 %.
- 4. 4. From the colouring downside found 50 cases among 9774and in proportion it had been 15.67 %.
- 5. For knot we have a tendency to found 44 items from 9774 Fault proportion is 13.80 %.
- 6. Slub issue causes 13.80% of the Cut panel rejection.
- 7. From the 9774 pieces we are found 36 faults for knot and the crease mark. Total fault are 11.29%.
- 8. Crease mark issue of the 11.62 % of rejection cut panel.
- 9. The lower fault we found for hole fault 36 from 9774 pieces. Total fault percentage are 10%.
- 10. Finally the lower fault is from hole which implies the 10%.



4.2.1 Analysis of different operation from data 3.1



Chart: 4.2.1 Cut panel inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 2, Hole 4, Slub 1, Spot 1, Dyeing fault 4,Knot 2 and Crease mark 1.



4.2.2 Analysis of different operation from data 3.2

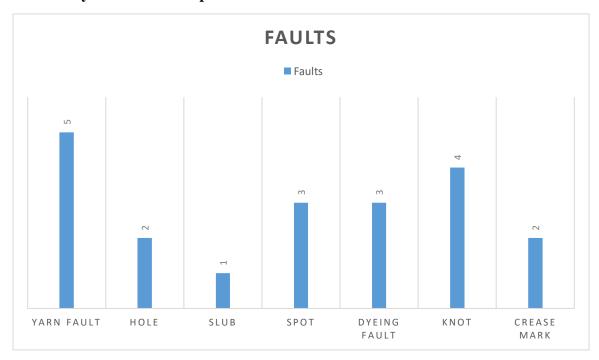


Chart: 4:2:2: Cut panel inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 5, Hole 2, Slub 1, Spot 3,Dyeing fault 3,Knot 4 and Crease mark 2.



4.2.3 Analysis of different operation from data 3.3

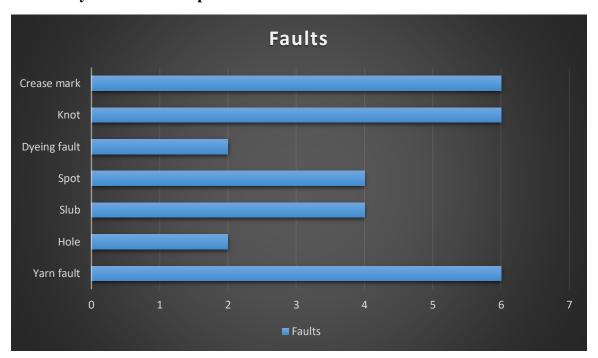


Chart: 4.2.3 Cut panel inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 6, Hole 2, Slub 4, Spot 4, Dyeing fault 2,Knot 6 and Crease mark 6.



4.2.4 Analysis of different operation from data 3.4

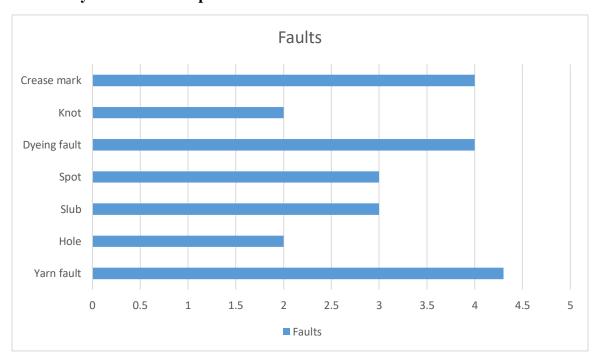


Chart: 4.2.4 Cut panel inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 3, Hole 2, Slub 3, Spot 3,Dyeing fault 4,Knot 2 and Crease mark 4.



4.2.5 Analysis of different operation from data 3.5

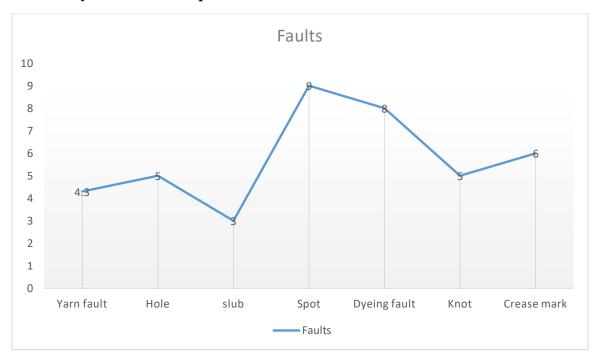


Chart: 4.2.5 Cut panel inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 7, Hole 5, Slub 3, Spot 9, Dyeing fault 8,Knot 5 and Crease mark 6.



4.2.6 Analysis of different operation from data 3.6

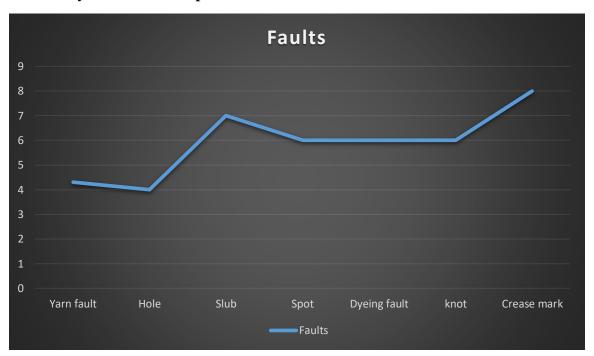


Chart: 4.1.6 Cut panel inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 8, Hole 4, Slub 7, Spot 6, Dyeing fault 6,Knot 6 and Crease mark 8.



4.2.7Analysis of different operation from data 3.7

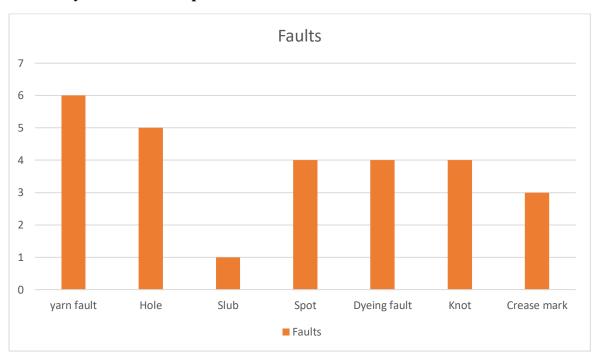


Chart: 4.2.7 Cut Panel Inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 6, Hole 5, Slub 1, Spot 4, Dyeing fault 4,Knot 4 and Crease mark 3.



4.2.8 Analysis of different operation from data 3.8

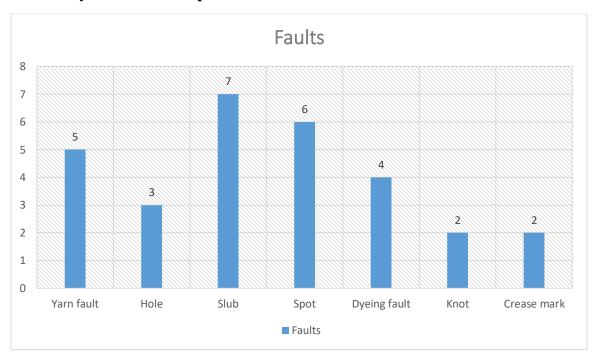


Chart: 4.2.8 Cut panel inspection report.

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 5, Hole 3, Slub7, Spot 6, Dyeing fault 4, Knot 2 and Crease mark 2.



4.2.9 Analysis of different operation from data 3.9

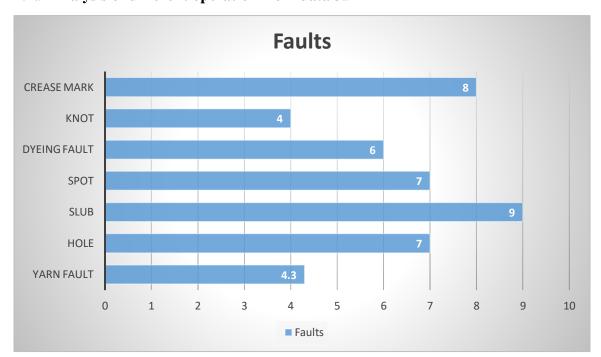


Chart: 4.2.9 Cut panel inspection report

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 9, Hole 7, Slub 9, Spot 7, Dyeing fault 6, Knot 4 and Crease mark 8.



4.2.10 Analysis of different operation from data 3.10

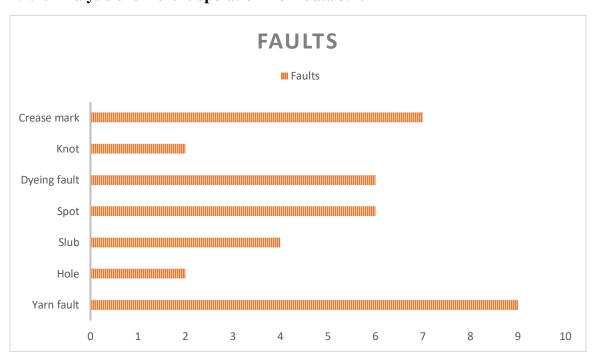


Chart: 4.2.10 Cut panel inspection report

Description: From the chart we can figure out different types of fault with their quantity. Which are found by cut panel inspection, for different types of buyer. Here, No of yarn fault 9, Hole 2, Slub 4, Spot6, Dyeing fault 6,Knot 2 and Crease mark 7.



4.3 Causes and remedies of fault:

Fabric hole:

During review once found any giant or tiny hole within the material is named material hole.



Causes:-

- Holes area unit the results of yarn breakage
- Yarn tension too high
- Presence of knots in yarn
- If the yarn count isn't correct.

Remedies:

- Yarn strength should be sufficient
- Maintain correct tension



- Knots ought to incline properly
- Use correct count of yarn.

Spot:

Improper Ironing, coloring shade, bleaching and coloring spot square measure found in material is named coloring spot.



Causes:

- Operators not properly intermixture and totally dissolving the coloring material, within the correct quantity of water, most frequently cause these.
- Dye tub hardness.
- Not agitation of coloring material.
- Dirt, dirt and different impurities will be the causes of spot.
- Dirt and dirt within the iron surface will be the reason behind spot.

SLUB:

Usually caused by an additional piece of yarn that's plain-woven into cloth. It also can be caused by thick places within the yarn. Typically is caused by fly waste being spun in yarn within the spinning method.



For Knit cloth sometimes caused by a thick or significant place in yarn, or by ling obtaining onto yarn feeds.



CAUSES:

- Accumulation of fly and fluff on the machine elements.
- Poor carding and brushing.
- Defective ring frame drafting and dangerous piecing
- improperly clothed prime roller clearers.

Remedies:

- Machine surfaces to be maintained clean.
- Proper functioning of roller clearers to be ensured.
- Broken teeth wheel to be avoided and correct meshing to be ensured. Clean the material and Iron surface.

Dyeing Fault:

Dyeing fault suggests that operational drawback, like uneven colouring, shade variation, colouring spot etc. we have a tendency to found uneven colouring in our operating space.





Fig. dyeing fault

Causes:-

- Uneven pretreatment.
- Improper colour dosing.
- Using the dyes of high fixation property.
- Uneven heat setting in the case of synthetic fibers.
- Lack of the control on dyeing machine.

Remedies:

- By the ensuring even pre-treatment.
- By ensuring even heat setting in case of the synthetic fibers.
- Proper dosing of the chemical & dyes.
- Proper controlling of the dyeing Machine.



Knots:

Knot is Fastening created by ligature along the ends of yarn is named knots.



Causes:-

When thread breaks during the process of sizing, weaving, winding &warping.

Remedies:-

- Basically, Not mendable.
- Proper tension of thread throughout winding, warping, sizing, or weaving.

Crease Mark:

Crease mark seems wherever creases area unit caused by material folds within the finishing method.





Causes of faults:

- Appropriate motion of the padder
- Appropriate the fabric movement.

Remedies:

- Use anti-creasing agent.
- Ensure smooth running of the fabric.

Yarn fault:

Missing Yarn: Occurs in warp knit. Results from wrong fiber yarn (or wrong size yarn) placed on warp. Material may seem as thick finish or completely different completely different color if fibers have different affinity for dye.





Causes:

Yarn breakage thanks to any reason and not submit to the yarn guide. it should be occur for tension variation.

Remedies:

Yarn guide are must be used.



Chapter V

Conclusion:

Cutting internal control of clothes, cutting section plays a significant role in clothes as a result of right measured cutting is needed toured the correct form of cloths products. Correct review when cutting cloth will offer top quality product in cutting section.

In cutting section, defect share is cloth hole is higher twenty three.41% the main defect is 'fabric hole' and every one defects square measure replaced by re-cutting. This downside is happened for needle and yarn count variation. By reducing yarn, breakage throughout knitting it are often reduced.



Reference:

- 1. https://www.slideshare.net/Mdabdullahalfaruk/production-and-faults-in-cutting-sewing-finishing-in-a-knit-garment-industry.
- 2. http://gmtmerchandisng.blogspot.com/2015/01/fabric-inspection-procedure-and-cutting.html.