



Daffodil
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Faculty of Engineering

Department of Textile Engineering

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“Analysis of Sewing Faults in a knit Garment Industry”

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Advance in Apparel Manufacturing Technology.

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Approval Sheet

This exploration entitled "**Analysis of Sewing Faults in a knit Garment Industry**" at Daffodil International University, august 2019" arranged and put together by **Joyanto Kumar** (ID: 153-23-199), **Sopnil Ahmed** (ID: 153-23-203), the necessity for the level of **BACHELOR OF SCIENCE IN TEXTILE ENGINEERING** has been analyzed and therefore prescribed for endorsement and acknowledgment.

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To

The Head

Department of Textile Engineering

Datta Para, AshuliaSavar, Dhaka.

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

Dear Sir,

I am just writing to let you know that this project report titled as “**Analysis of Sewing Faults in a knit Garment Industry**” has been prepared by the student bearing ID’s 153-23-199 and 153-23-203 are completed for final evaluation. The whole report is prepared based on the proper investigation and interruption through critical analysis of empirical data with required belongings. The student were directly involved in their project activities and the report become vital to spark of many valuable information for the readers.

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

Yours Sincerely

.....

Kazi Rezwan Hossain

Lecturer

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Declaration

We bear witness to that this report is absolutely our very own work, aside from where we have given completely archived references to crafted by others and that the materials contained in this report have not recently been submitted for appraisal in any formal course of study. On the off chance that we do anything, which is going to break the primary revelation, the analyst/administrator has the privilege to drop my report anytime of time.

.....

Name: Joyanto Kumar

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Acknowledgement

Toward the start, we might want to thank the Almighty ALLAH for enabling us to finish this report. At that point we might want to accept the open door to offer us thanks to our respectable chief **Kazi Rezwan Hossain**, Lecturer, Department of Textile, Daffodil International University for giving us rules and proposals to finish this Project. His astute exhortation help coherent course and endeavors have made it conceivable to execute the task reliably.

I would also like to express our sincere gratuity to **Md Shimul Sarkar** Executive (HR) “**Apparels Village Ltd**”. Located at **37 Khagan, Birulia, Savar**.

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At last but not the least, i would like to acknowledge my parents for their approval, support & love and all our friends for their help & support to complete the report.

Dedication

From the outset I need to devote this modern report to all-powerful Allah for allowing me this chance to substantiate myself. Without god-like's assistance nothing would be conceivable. At that point I need to devote my report to my folks. I adore them without question, for finishing my examination they assume an indispensable job to finish. It's an extraordinary delight for me. Without their assistance it is very outlandish for me to finish this connection so I'm thankful to them. My folks were useful to prepare this connection. Furthermore, I likewise need to commit this report to my fair educator and scholastic administrator, **Kazi Rezwan Hossain**, Lecturer, Department of Textile, Daffodil International University, give us a very help and rule to prepared this connection. I commit this report to my adored guardians.

Devoted to the articles of clothing laborer, who works morning to night, contribute running the wheel of nation economy by diligent work. Much thanks to you such a great amount of, go ahead, we are with you.

Abstract

Sewing methodology is one of the most important stages in garments creation. During assembling in sewing system can be make a few blames or deformities that can be causes low nature of the articles of clothing thing. A few issues are recoverable and some can't recoverable. Sewing shortcomings can be reasons for lower pace of items, which now not sensible charming for the articles of clothing ventures. Those flaws additionally causes hamper in shipment, for what the lead time hampers. A definitive impact of causing shortcomings impacts the lead time and shipment. We examined and view one several pieces of clothing ventures couple of days for sewing issues, which are as often as possible occurring all through generation activity process through specialist. In our investigation we discovered some faults like broken stitch 6%, Skip stitch 26%, Open seam 11% and other sewing faults at Apparel Village Ltd. we discovered Join stitch 5%, Un cut threads 14%, Up-even stitch 6%, Fabric Faults 2%, Puckering 1%, Shading 1%, Damage 9%, Size Mistake 15%, Up-down 3%, Raw Edge 1%. The major purpose of this study is to inspect whether the knitwear manufacturing process is below manipulate in a knitwear manufacturing organization and to discover the technique with best possible price of sewing faults in stitching procedure and finally to make recommendation for enhancing the quality control.

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CHAPTER - I

INTRODUCTION

1.1 Introduction:

Materials and dress will consistently be fundamental products for people. Turning and weaving were the fundamental exercises that drove the Industrial Revolution in the eighteenth century. From that point forward the material business has been a main industry in the underlying period of industrialization in numerous nations in various timeframes on the planet. Bangladesh is a significant maker and exporter of weave RMG item. There are around 4500-5000 pieces of clothing production lines running in Bangladesh. Development of pieces of clothing plants began in Bangladesh around 1980. However, presently almost 82% of our outside money is earned from RMG trade. At present Bangladesh is delivering and sending out in excess of 60 things of articles of clothing. Articles of clothing are sent out to USA, Canada, Japan, Australia, Middle East and numerous different nations on the planet. Least expensive work cost is the greatest favorable position for Bangladeshi pieces of clothing makers and exporters.

Promoting is one of the most significant parts for pieces of clothing exchange. Without marketing this exchange never be satisfy. Merchandiser arrangements or handles every one of the things from purchaser to creation. He is the inside for every one of the errands. In the wake of getting a request, merchandiser figure every one of the things, what he have to finish this request and make a decent arrangement by which he can do the shipment in time with purchaser's prerequisite. In manufacturing plant level, merchandiser makes every one of the requests for adornments requirements for a request like; texture need, sewing string, catch, washing if fundamental, container, polybag, shipment course of action and so forth. All things considered merchandiser gain looks overall ground.

Down to earth Knowledge is particularly basic for the instruction of material building and innovation. Viable Knowledge makes us skilled and flawless to apply hypothetical information in viable life. .

We procure learning on weave Garments Merchandising, Garments generation, Quality control, Operation, Marker making, Cutting &Finishing area. We attempted our best to become familiar with this Project will support our future pragmatic life

1.2 History of Bangladesh garments industry:

The RMG business started in Bangladesh in the 70s but it was then merely effort, the first consignment of knitwear export as made in 1973 and the first consignment of woven garments was made in 1977. In 1981-82 the contribution of woven garments in the total export was 1.10%. Afterwards it is a story of sustained success for the Bangladesh RMG sectors. The knitwear sector has grown over the years in geometric progression and become the prime driving force of Bangladesh's export earnings. Within a decade the contribution of woven to the export basket became 42.83% (1990-1991) and the knitwear sector's contribution 41.79% to national export earnings at the end of FY 2008-09(July-April).

The entrepreneurs of the knit sector stepped forward with their expertise in the late 80s .With their earnest efforts they were able to export US\$14.84 million in 1990-90. Out of this, US\$ 2.02 million was exported to US. The trend continued un the knit sector because of the

market access opportunities provided to the LDCs under the generalized systems of preference (GSP) benefit. Export from Bangladesh 1972-73 to 2009-2010

This is the rejuvenated beginning of the epic story of Bangladesh knitwear sector that in true sense has been possible due to massive industrialization in a sustainable way with effect on all probable human development aspects which is the encouraging part of the story. The growth of knitwear sector is increasing at an increasing rate. The cumulative average growth rate of the sector is 20%, and it is continuously grabbing more portions in the export pie of Bangladesh. This is mainly attributed to the facilities provided under the EC GSP and ROO. The knitwear sector is heavily driven by the favorable policies and took the opportunity to develop a strong backward linkage for the sector.

Bangladesh RMG sector has successfully passed some critical tests and is now sailing with masts: knit and woven. The sub-sector is now in healthy competition among them to take the role of leadership within the country.

In FY 2003-04, knitwear for the first time exported with 91.6 million dozens. Knitwear is still leading in terms of quantity exported and is widening the gap day by day. Export quantity of knitwear items increased to 241.59 million dozens which is 163.74% higher than the year 2003-04 to 2007-08. On the month of December of the FY s 2008-2009, total knitwear export was 146.5 million dozens which is 30.58 million dozens higher than the same period of last year. Comparison of Export Quantity.

Bangladesh knitwear is performing a well increase in terms of quantity which is a clear indication of increase of capacity in this sector. In the year 2007-08, the contribution of woven wear to the export earning was 36.17% and in knitwear was 38.97%. In the current year, the performance of both the sector are as follows: □ Knitwear export US\$ 5231.01 million FY 2008-09(July-April) □ Woven export US\$4902.48 million FY 2008-09 (July-April) Therefore the contribution of knitwear in national export increase is 57.82%.

1.3 Background of the study:

The readymade piece of clothing is totally fragmented without sewing process. In any case, some of the time there are various troubles and the final product is sewing surrenders. It is causes in view of absence of appropriate expertise, machine unsettling influence and wrong machine modification. Because of these obscurities shortcoming happened and impacts quality, profitability, cost and furthermore proficiency. So Quality guidelines are a piece of an organization standard working methodology, item improvement and assembling arranging. Guidelines mirror the standard natural brilliant level the organization looks to accomplish. The imperative reason for utilizing quality standard is to supply consistency among items and items line. As a result of keeping up standard or nature of item it is required to see the deficiency and discover the palatable answer for lessen the blunder. Among the system control list, item control outline have been utilized in the examination.

Fast location of a sewing deformity is huge to advancement of the connection between great quality and efficiency. Imperfections found in the wake of sewing adversely impact on expenses of the item. There is distinctive in addition to recognizing a flaw before various

tasks stay away from crease expulsion and re sewing. This discourse is fundamentally founded on the contemporary framework where the administrator fills in as the main line of value control execution. Also, unique sewing stations have no administrator to serve in the primary line quality control position. At that point at last evaluation procedures of deformity was done and discover the agreeable recommendation.

1.4 Objectives of the Study:

This project paper defines frequently occurs the sewing defects and way to prevent breakage thread.

- To find out about appropriate quality administration framework.
- To plan new strategy for quality control.
- To find out about the deformities of articles of clothing.
- Applying specialized answer for evacuate or lessening deformity.
- To know the reasons for string deformities and its cures.
- To actualize specialized arrangement toward string deserts.
- To set up a rule which will helps the specialized individual in the significant field.
- To show how specialized knowledge's-by what means can build creation proficiency.

1.5 Outcome:

Sewing procedure is one of the most significant stages in labor concentrated instant garments ventures. Quality flaws happening during this procedure unfavorably influence the item quality and item productivity, and furthermore increment the creation cost. The point of this examination is to explore whether the knitwear generation procedure is leveled out in a knitwear creation venture and to recognize the procedures with most noteworthy paces of sewing shortcomings in sewing office lastly to make proposals for improving the quality control.

1.6 Important and Scope of the study:

- To break down the sorts of deficiencies in sewing area.
- To assume a perfect job in increment or decline generation ability.
- To compute every hour blames in a line effectively.
- To limit sewing issue during generation.
- It gives learning why sewing flaw increment or decline.
- To keep away from imperfections on articles of clothing and spare time.

1.7 Limitations of the study:

- Limitation of time to research this topic.
- Limitation of primary data sources.
- Limitation of accurate data.
- Input and output problem.
- Respondent unwillingness.
- Changing the style and arrangement.

CHAPTER - II

LITERATURE REVIEW

2.1 Sewing:

Sewing is the craft of fastening or attaching objects using stitches made with a needle and thread. Sewing is one of the oldest of the textile arts, arising in the Paleolithic era. Before the invention of spinning yarn or weaving fabric, archaeologists believe Stone Age people across Europe and Asia sewed fur and skin clothing using bone, antler or ivory needles and "thread" made of various animal body parts including sinew, catgut, and veins.

The straightforward strategy for sewing incorporates affixing of textures, calfskin, hides or comparable distinctive adaptable substances with the assistance of needle and strings. Sewing is typically used to make attire and household decorations. Indeed, sewing is one of the vital strategies in dress making. A large portion of such mechanical sewing is done by modern sewing machines. The cut bits of an article of clothing are generally attached, or incidentally sewed at the fundamental stage. The confused pieces of the machine at that point puncture string through the layers of the fabric and interlock the string.



Figure 1: A Picture of a Sewing time

2.2 Sewing Machine:

A sewing machine is a mechanical or electromechanical machine equipped with a needle (or needles) threaded at the point-end, which puncture the cloth periodically as it moves under the needle. Each stitch is created as the thread loops onto itself (chain stitch) or locks around a 2d strand of thread (lock stitch), sewing the fabric together.

Sewing machines are utilized in both the home and industry, yet are planned contrastingly for each setting. Those for the household will in general be progressively flexible as far as the amount and kinds of fastens they can perform, however they work more gradually than modern machines, and have a shorter life expectancy. Modern machines are heavier, have a

more drawn out life expectancy, are equipped for a large number of fastens per inch, and might be intended for specific assignments.



Figure 2: Sewing Machine

2.3 Sewing Machine History:

Sewing is viewed as a craftsmanship for over 20.000 years, the main needles being created in the XIV century, and later on in 1790 sewing by hand was supplanted by the sewing machines. The sewing machine is a mind boggling gadget which congregations at least two bits of texture together by sewing them and is typically utilized in garments fabricating. English Thomas Saint was the innovator of the idea of a sewing machine, yet it isn't sure in the event that he was likewise the person who planned the principal model of the sewing machine. His work appeared to be only an endeavor of making it, yet never figured out how to do as such.

The principal working sewing machine was made by the French tailor BarthelmeThimonnier, yet the outcome didn't carry acclaim to him in view of a gathering of tailors who torched the plant. Their conviction was that the sewing machine will leave them jobless and they won't have any more requests coming in at their tailor shops. In Sewing is viewed as a craftsmanship for over 20.000 years, the main needles being imagined in the XIV century, and later on in 1790 sewing by hand used to be changed by the sewing machines. The sewing machine is an entangled machine which gatherings at least two bits of fabric together by sewing them and is typically utilized in attire fabricating.

English Thomas Saint was the designer of the possibility of a sewing machine, yet it isn't sure in the event that he was additionally the person who planned the primary model of the sewing machine. His work respected to be only an endeavor of making it, however never figured out how to do as such. The primary working sewing gadget was made by the French tailor BarthelmeThimonnier, yet the final product didn't carry popularity to him in light of a gathering of tailors who torched the plant. Their trust was that the sewing machine will leave them jobless and they won't have any more requests coming in at their tailor shops.

2.4 Classification of Sewing Machine:

There are two types of sewing machines by According to operating system they are available in the garments industry. They are given below:

- A. Electrically operated sewing m/c
- B. Manually operated sewing m/c

There are various types of Industrial sewing machines is:

1. Bar tack sewing m/c (with automatic thread trimmer)
2. Bias tape cutting m/c
3. Blind stitch sewing machine
4. Button attaching machine
5. Button covering stitch belt loop making m/c (Kansai m/c)
6. Button hole m/c (for woven fabric)
7. Button hole sewing m/c (for knit fabric)
8. Chain stitch sewing machine
9. Collar and cuff turning and blocking machine
10. Double chain stitch m/c (double needle with reserve feed)
11. Double chain stitch sewing m/c (4- needle elastic inserting m/c)
12. Double chain stitch sewing machine (4- needle short)
13. Feed of the arm (double chain stitch m/c, 3-needle)
14. Hemstitch machine for pant
15. Interlock m/c (twin needle, 5-thread over lock m/c)
16. Label/elastic inserting machine
17. Lap seaming m/c (for back tape attaching)
18. Linking machine
19. Lock stitch m/c (1-middle with vertical trimmer wiper & reverse feed)
20. Lock stitch m/c (2-needle with spilt needle bar sewing)

21. Lock stitch m/c (single needle sewing m/c)
22. Lock stitch m/c (single needle with automatic thread trimmer)
23. Lock stitch m/c (twin needle feed)
24. Lock stitch or plain stitch sewing machine (single needle with variable top feed with automatic thread trimmer)
25. Over edging machine
26. Over lock m/c (1-needle, 3-thread)
27. Over lock/Over edge sewing m/c (twin needle, 4-thread m/c)
28. Pin tucking machine
29. QQ loop making m/c
30. Shoulder pad-attaching machine
31. Automatic multi-needle shirring machine
32. Top & bottom cover stitch flat lock machine (cylinder bed and flatbed)
33. Top and bottom cover stitch flatbed m/c (3-needle)
34. Zigzag lock stitch sewing machine (1-needle)

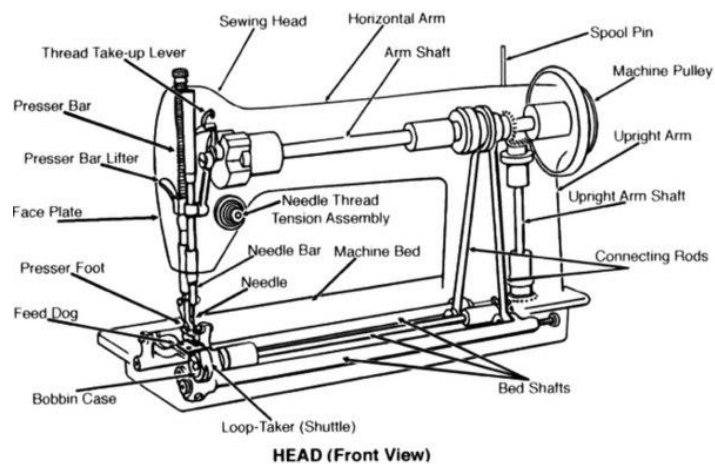
2.5 Different Parts of Sewing Machine:

There are two common major parts of the sewing machine. One is upper part and other is lower parts.

2.5.1 Upper part of sewing machine:

The upper part of sewing machine carrying the parts is pointed bellows according

1. Arm
2. Arm shaft
3. Horizontal Arm
4. Balance Wheel/Hand Wheel
5. Bed
6. Bobbin
7. Bobbin Case
8. Bobbin Cover
9. Bobbin Winder
10. Face Plate
11. Feed Dogs
12. Head
13. Needle

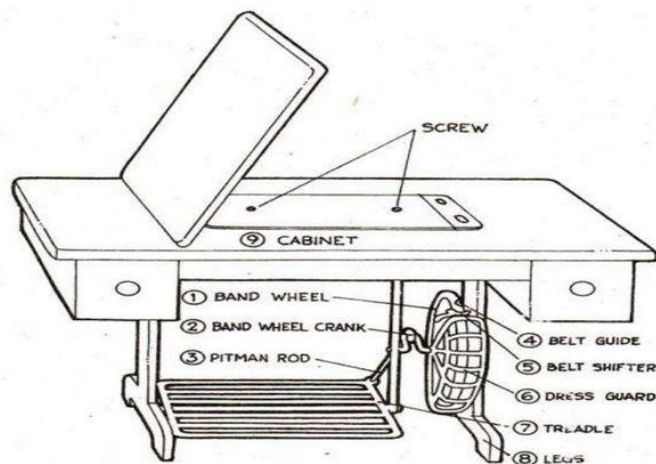


14. Needle bar
15. Needle Clamp
16. Pattern/Stitch selector
17. Presser Foot
18. Presser Foot Lever
19. Reverse Lever
20. Slide Plate
21. Spool Pin
22. Spool pin for bobbin winding
23. Take up Lever
24. Tension Disc
25. Thread Cutter
26. Thread Guide
27. Throat Plate or Needle Plate

2.5.2 Lower part of Sewing Machine:

The lower parts of sewing machine are mention below with alphabetically

1. Band Wheel
2. Band Wheel Crank
3. Pitman Rod
4. Belt Guide
5. Belt Shifter
6. Dress Guard
7. Treadle or Foot Pedal
8. Legs
9. Cabinet
10. Screw



2.6 Main Sewing Parts of Sewing Machine & Their Function:

1. Presser foot
2. Feed dog
3. Throat plate or feed plate
4. Needle



Figure 3: Presser foot, Feed dog And Throat plate

2.6.1 Presser foot:

Presser foot is an attachment used with sewing machines to hold the fabric down under the needle as it is sewn. Besides the basic presser foot for sewing straight stitching lines, we can fit most of the sewing machines with a number of different presser feet that do a lot of other functions.

Presser feet add different functionalities to the sewing machine, so that it can accomplish much more than mere straight stitching. When particularly thick work pieces are to be sewn, such as quilts, a specialized attachment known as a walking foot is often used as an alternative than a presser foot. Presser feet are generally spring-hinged to provide some flexibility as the work piece moves under it.

2.6.2 Feed Dog:

A sewing machine isn't finished without the drop feed part known as "feed Dogs". The feed hound parts are involved crosscut askew teeth produced using dainty metal bars. The feed canine is put on the needle plate of the sewing machine and work in a forward and backward movement. Feed Dogs primary intention is to bolster or draw texture through the machine; the means are done carefully between the stiches. The feed pooches work in exact and estimated increases this making a separation between stiches. Feed mutts make extremely top notch lines. The most important feature of this part is to move sewn material after making individual stitch as predetermined length. To stop the slippage of the cloth the upper part of the feed dog are made toothed.

2.6.3 Throat Plate:

Sewing machine throat plate is one of the fundamental parts found in sewing machines. It is additionally alluded to as sewing plate or needle plate. Throat plate is made of metal set underneath machines needle and presser foot. Throat plate is fixed on the machine utilizing screws. This is made of metal and its surface is extremely smooth. Because of the smooth surface material can be feed effectively. It is otherwise called needle plate. It has at least one opening through which feed pooch can push ahead and in reverse. It has an opening through which needle can climb & down with the string. Size of this opening is never again surpassing more noteworthy than 30% of needle size.

2.6.4 Needle:

From the antiquated length to current day sewing needles are worldwide utilized for sewing. Sewing machine needle truly utilized for sewing purposes pointed toward one side with an eye for string or yarn. A sewing needle is an extensive slim gadget with a pointed tip. In the old time people groups are utilized to bone or timber made sewing needle; current ones are produced from high carbon metal wire, nickel-or 18K gold plated for consumption opposition. The best quality weaving needles are made of platinum. Generally, needles have been put away in needle books or needle cases which have turned into an object of enhancement. Needle measurement is signified by a number on the parcel. The show for measuring is that the size and thickness of a needle will increment as the size number reductions. For instance, a size 1 needle will be thicker and more, while a measurement 10 will be shorter and better.

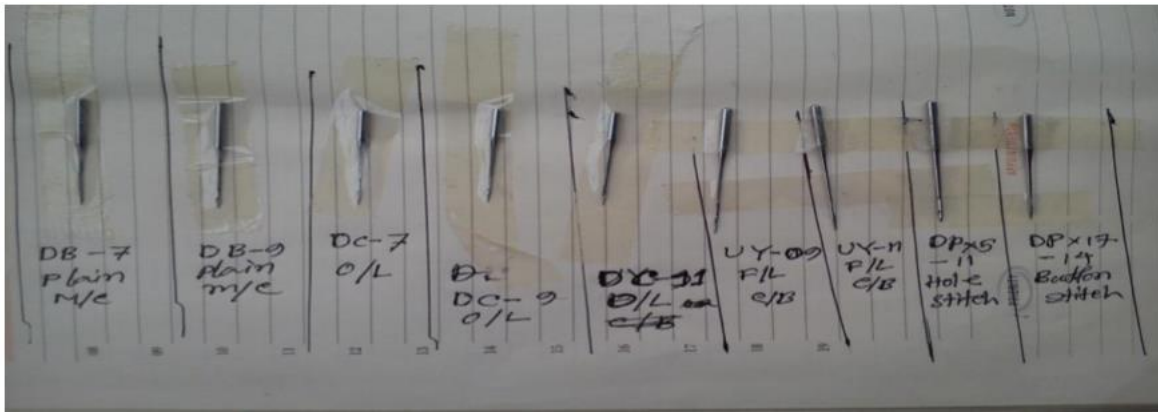


Figure 4: Different size of needle which used in Industry

2.7 The Basic Function of Sewing Needle:

- To make opening in texture without harming texture string.
- To make a needle string circle.
- To pass the needle string circle through the circle of the looper string.

2.7.1 Various Parts of Needle & Their Function:

Butt: Butt are the beginning piece of base edge of needle which can be made by foreordained shape. Butt helps effectively joining of needle with the needle bar or brace of the sewing machine.

Shank: The upper part of the needle which is tied in the needle bar and which can bolsters the needle.

Shoulder: Middle segment of the shank and sharp edge is shoulder. It makes gap on texture and reinforce the needle sharp edge.

Cutting edge: The biggest piece of the needle from the shoulder to needle eye. In this part, grating among texture and needle is most extreme. Cutting edge is continuously decreased to tip. Long section: Long depression is a long and dainty notch in edge from shoulder to needle eye. Sewing string occur in this section during here and there of sewing machine needle through the garments in sewing time, in this way limit the erosion between needle, material and sewing string. There is less plausibility of harming string because of erosion.

Short depression: It is framed on the opposite side of long notch, towards the bus, snare, or looper and it helps with tossing the circle of needle string

Eye: The aperture of the needle is available in the base part of the arrangement. Needle string permitted through this eye is taken to the base territory

Scarf: The notch of the needle over the eye is known as scarf. Its motivation is to empower the closer setting of looper to the needle.

Point:The part from the eye to the tip of the needle is called point. Point ought to be distinctive for various kind of texture.

Tip:The last (extraordinary end) some portion of the needle is called tip. It makes opening in the texture during sewing.

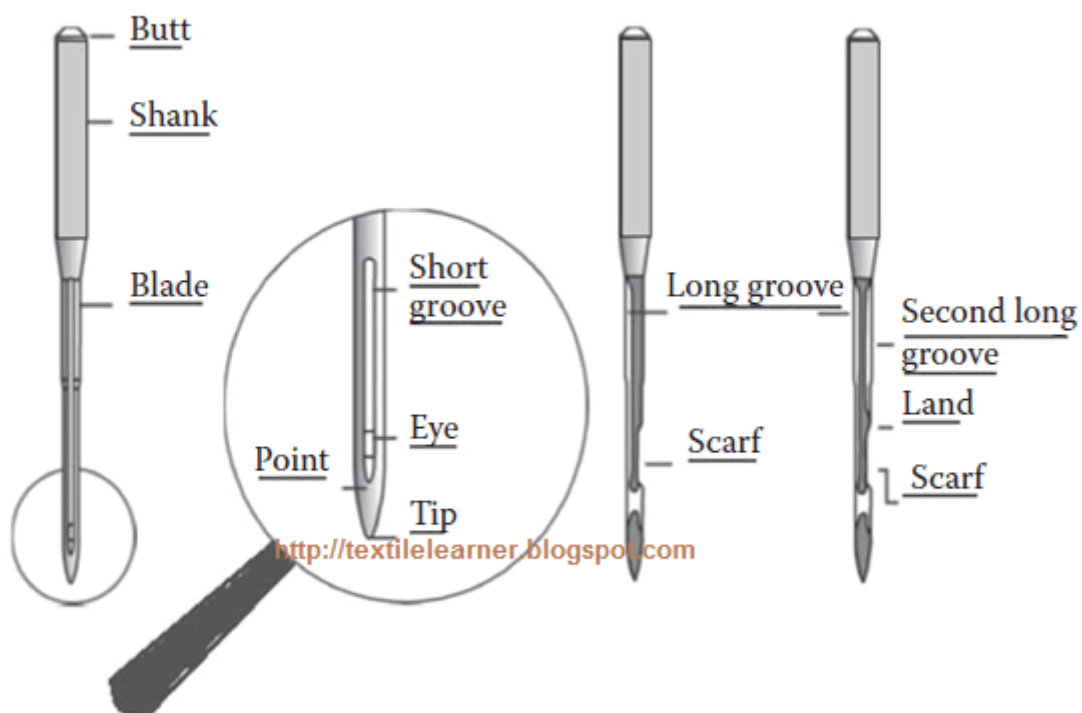


Figure 5: Various Parts of a Sewing Needle

2.7.2 Needle Identification:

A sewing machine needle is identified with three parameters-

- System (m/c)
- Point
- Size with Number

2.7.3 Impact of Wrong Needle Selection:

If the needle is better at that point sewing string:

- The string can't move effectively through the needle eye.
- The string won't take position appropriately at needle long furrow.

If the string is better than needle:

- May created slipped fasten as the needle can't make immaculate size or circle.

If the needle is coarse than required fabric:

- Texture will be bolted odd because of huge gap.
- Crease puckering might be created on woven texture.

If the needle is better than required fabric:

- During sewing needle will be avoid and bend with the activity of throat plate.
- This bend needle will create slip fasten as the looper may not get the circles of needle string.

2.8 Sewing Thread:

Sewing threads are special types of yarns that are manufactured and designed to pass through a sewing machine easily. They form efficient stitches without breakages or becoming distorted during the useful life of the product. The main function of a thread is to deliver aesthetics and performance in stitches and seams.



Figure 6: Sewing threads

2.8.1 Sewing Thread which are used in garments:

Various types of sewing thread which are widely used in garments manufacturing:

- Nylon thread
- Glassed cotton thread
- Viscose thread
- Polyester thread
- Linen thread
- PTFE thread
- Soft cotton thread
- Mercerized cotton thread
- Silk thread
- Aramid thread

2.8.2 Characteristics of Sewing Thread:

There are different key properties of sewing thread which are mentioned in the following:

- Tensile strength
- Tenacity
- Loop strength
- Loop strength ratio
- Minimum loop strength
- Elongation at break
- Stress strain curve
- Elasticity
- Shrinkage
- Abrasion resistance
- Color fastness

2.9 Defects of Garments:

The deformity is the most widely recognized term in the dress business. Article of clothing imperfections are as viewed as reject the thing. Various types of deformities are found in the clothing business. In articles of clothing venture these imperfections are needy upon the characterization of deformities and an auditor's capability to decide. Making a rundown of each deformity that might be experienced during a quality assessment isn't sensible. According to the garments workmanship and appearance of garments defects are divided in the three ways-

1. Critical defects
2. Major defects
3. Minor defects

2.9.1 Non-Sewing Defect:

Deformities may happen in Clothing industry created on mass scale.

The wellsprings of deformities are notice underneath:

- Defects causes because of cutting of textures, lining, interlining by wrong pattern
- Defect happens due flawed crude material
- Defects happens because of wrong stamping, incorrectly spreading of texture etc
- Defects causes because of oil checks in garments
- Defects happen because of wrong pressing, collapsing, pressing, bundling and so on.

2.9.2 Sewing Defect:

Defects may occur in clothing industry produced on mass scale. The sources of defects are mention below:

Defects due to problems of Stitch & Seam formation: These types of faults occur in sewing floor during sewing the fabric. Some faults are responsible for garments rejected, and can possible to remedy.

2.9.3 Common faults are mention bellow with their cause and remedies:

Stitch Skipped:

They happen when the bobbin or circled of the machine can't get the circle in the needle string. Shoe fastens with a lock line machine prompts make a hole in crease and a terrible appearance in top sewing. Thus, in the event that the hole of fasten or miss lines development, at that point the flaw is known as skipped line.



Figure 7: Stitch Skipped

Causes:

- Failure of needle to enter circle at legitimate time
- Deflection of needle or twisted needle
- Thread circle disappointment because of broken needle size for string size
- Improper sewing strain in the needle
- Thread circle disappointment because of wrong setting of string control mechanism
- Flagging of texture because of poor presser foot control

Remedies:

- Check the needles is embedded and adjusted correctly.
- Proper machine freedom and timings
- Replace the needle
- Change the needle size as per string size
- Re altering the string tension
- Reset to standard and check circle development through run mechanism
- Re modifying the presser foot pressure.

Point Up-Down:

On the off chance that all joint of the dress in sewing isn't uniform. For example, abandons in shoulder joint of pieces of clothing, absconds in Neck Rib Joint of articles of clothing, deserts in Sleeve joint and Top line of articles of clothing, Curve at side Seam, surrenders in Collar Joint Top sine and Make of pieces of clothing, deserts in Shoulder to Shoulder Back Tape of articles of clothing and so forth.



Figure 8: Point Up-Down

Causes:

- Lack of understanding or grouping of worker
- Sometime reasons for the machine problem.

Remedies:

- Seam open and sewing again correctly
- If machine estimation issue at that point settle it.

Open Seam:

If seam line is open or lose the seam and missing the stitch after sewing process that called Open seam. It's one of the major sewing defects.



Figure 9: Open Seam

Causes:

- Failure of needle to enter loop.
- Needle diversion during sewing.
- Thread circle disappointment during sewing.
- Incorrect sewing strain in the needle during sewing.
- Flagging of texture because of poor control of presser foot.
- It's basically mechanical problem.

Remedies:

- Check needles is embedded and adjusted effectively supplant the needle.
- Re altering the string pressure before sewing.
- Reset to standard and check circle arrangement through run mechanism
- Re alters presser foot weight before sewing.

Label problem: Do not apply correct label of this garments. This mistake label is known as size mistake.



Figure 10: Level Problem

Causes:

- For the lack of experiences of operators and attach size label very carefully.

Remedies:

- Label is removed and replaced again in correct size number then attach again.

Cut Stitch:

Needle and bobbin or lopper strings break basically causes because of metal surface being chipped or generally harmed and after that happening harm to the string. The watchman over the snare in a plain machine or the needle gap in the throat plate can progress toward becoming chipped because of needle surrender.



Figure 11: Cut Stitch

Causes:

- Thread development not ideal for sewing
- Uniformity of development of sewing thread
- Level of twisting
- Fiber union characteristics
- Thread complete.

Remedies:

- Trying sewing with string from an alternate case or shipment
- Make sure the right string sort and size is being used
- Send cones that are breaking to your string provider for evaluation
- If the texture seems, by all accounts, to appear as something else, check whether texture from an alternate shipment causes the equivalent problem.
- Check the needle and sewing weight, at that point change the needle.

Yarn missing Fabric Fault:

A missing end happens when an additional bit of filling yarn is snapped into the texture by the bus. This happens when a twist yarn is broken or missing during weaving. This kind of defect is produced in woven fabric when operator starts a stopped machine without picking the broken weft from the shade. Its automatically occurs in the first stage where fabric was made by knitting or weaving.



Figure 12: Yarn missing Fabric Fault

Seam Puckering:

Puckering is wrinkle appearance along a crease line in a perfect texture. It is one of the regularly happening imperfections. Puckering shows that as though there is too a ton fabric and not adequate string in the crease and as though the string is attracting the crease. this is the motivation behind why sewing string is regularly accused for causing puckering however there are various factors too for publicizing of puckering. That is notice beneath:

- Structure of fabric
- Seam construction
- Size of needle
- Material bolstering problem
- Wrong sewing string tension
- Unsuitable sewing thread.

Puckering might be viewed when sewing is finished yet some show up later when the article of clothing is pressed or washed. It is typically said that sewing on a material always prompts some measure of puckering or fabric mutilation. Texture from counterfeit strands normally tends to display up puckering. A puckering is the regularly happening sewing truly examined by means of scientists who found 5 reasons of puckering.

Seam puckering refers to the gathering of a seam either just after sewing or after laundering causing an unacceptable seam appearance.



Figure 13: Seam Puckering

Causes:

- Uneven extending on to utilizes of texture during sewing
- Wrong string tension
- Wrong choice of sewing thread
- Dimensional flimsiness of the employs of texture etc.

Remedies:

- Feed canine, eyelets and string aides ought to be checked periodically.
- Machine feed component must be great quality.
- Worker training.
- Tension, SPI and presser foot weight ought not to be tinkered with more.
- Needle, string, texture blend ought to be well judged.
- Properly select the sewing string.

Oil Sport:

When the spot of oil and wax are found on the fabric surface is called oil spot. Its mainly occurs in machine oil which is use in machine.



Figure 14: Oil Sport

Causes:

- During sewing process if oil and wax are store from the machine to the piece of clothing surface at that point oil spot is happened. It's make an awful spot picture on the pieces of clothing surface.

Remedies:

- Oil spot is expelled from the texture by an uncommon kind of splash named 'Spot lifter'. First its shower on the spot and after that dried in air.

Printing mistake:

Printing problems can happen to many reasons, and this is where the Problem is one. It turns out that printing was not done. This is the reason this garments cutting part can't go to the printing house. If it had been in printing then printing would certainly became print whether right or wrong. But in this field it appears that no printing chemical was worn. It was worn out after adding the cutting number.



Figure 15: Printing mistake

Printing Spot:

Printing Stains come from a screen on a chemical fabric during printing.

It has been shown that in the process of printing, the chemical is somehow absorbed. If had been cautious during printing, it would certainly not have been a printing stain. Therefore, you need to be very careful during printing.



Figure 16: Printing Sport

Hole: Broken holes in the fabric where you are able to see through the fabric to the other side.



Figure 17: Hole

Causes:

- Holes can emerge out of texture or it could be brought about by the creation side, either by inappropriate cutting or broken needle puncturing the fabric.
- Very hardened and dry yarn.
- Improper cleaning of sewing machine.

Remedies:

- Proper investigation of texture and cut piece.
- Must be utilize a texture shortcoming detector.
- Air humidification.
- Use of yarn having lower bristliness.

Correct size label: Do not apply correct label of this garments. This mistake label is known as size mistake.



Figure 18: Correct size label mistake

Causes:

- For the lack of experiences of operators and attach size label very carefully.

Remedies:

- Label is removed and replaced again in correct size number then attach again.

Stitch Miss:When any sewing operation goes to miss unconsciously but assembling of garments is already going forward then stitch miss problem occurs.



Figure 19: Stitch Miss

Causes:

- Lack of skill or concentration of operator.
- Show with and after sewing thread.

Remedies:

- Operator must be work very carefully.
- Sewing again this place.

Tension lose loop: Sewing time can't properly go ahead garments part and then occurs lose sewing thread is called tension lose loop.



Figure 20: Tension lose loop

Causes:

- It happens because of inappropriate cutting.
- Seam failure.

Remedies:

- Properly checked the Garments finishing
- Work very carefully.

Single Stitch problem: When we work in kancha m/c then we face this type of faults.

This m/c use 3 or 4 Sewing line at a time. But if run two line at a time, one line miss or fall needle or bobbin thread then one needle can stitch and one needle can't stitch. There one stitch fail its called single stitch problem.



Figure 21: Single Stitch problem

Loose Thread: Loose thread on seam line then this fault is called loose thread. Again sometime thread are not stitch, then become this loose thread problem create.



Figure 22: Loose Thread

Causes:

- It happens because of inappropriate cutting or finishing
- In sewing process additional string allowance.

Remedies:

- Properly checked the Garments finishing
- Sewing string must utilize appropriately.

Pleating:The folded edge occurred during sewing.

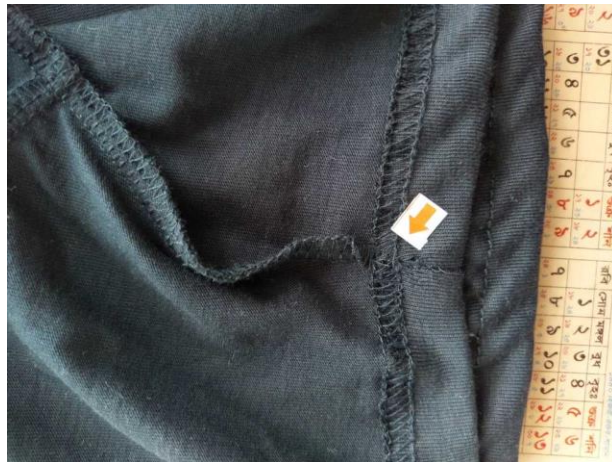


Figure 23: Pleating

Causes:

- Not cautiously work
- Speedy work by workers
- Inaccuracy in cutting parts
- Fabric wrinkle mark in sewing floor or coloring floor.

Remedies:

- Very cautiously work.
- Cutting articles of clothing part accuracy.
- To expel wrinkle from texture edge.

Shoulder/Arm hole joint problem: If all joint of the clothing in sewing is not Uniform. Such as defects in shoulder/arm joint of garments, defects in Neck Rib Joint of garments, defects in Sleeve joint and Top stitch of garments, Curve at side Seam, defects in Collar Joint Top sine & Make of garments, defects in Shoulder to Shoulder Back Tape of garments et.



Figure 24: Arm hole joint problem

Causes:

- Lack of involvement or convergence of worker
- Sometime for the issue in sewing machine.

Remedies:

- Seam is open and sewing again properly
- If machine estimation issue at that point explain it.

Broken Stitch: On the off chance that any lines are broken in the wake of sewing, at that point it called as broken line.

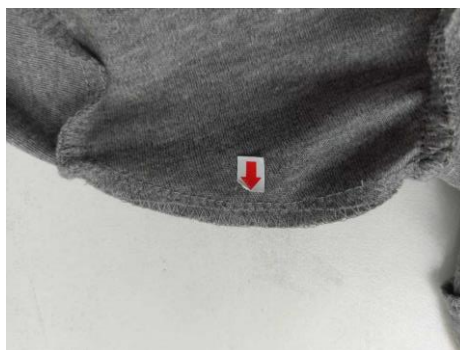


Figure 25: Broken Stitch

Causes:

- This sorts of flaw is happened as a result of lower quality thread
- High string pressure during sewing
- Poor Garments washing process
- Seam failure.
- Uneven Washing process.

Remedies:

- Make sure the nature of sewing thread
- Make sure better sewing Process
- Monitoring the washing procedure, process durations, and temperatures to ensure they are impeccable with the goal that the most ideal article of clothing quality can be achieved.

Thread Breakage: Needle and bobbin or lopper strings break mostly causes Because of metal surface Being chipped or generally harmed and after that happening harm to the string. The watchman over the snare in a plain machine or the needle gap in the throat plate can move toward becoming chipped because of needle abandonment.



Figure 26: Broken Stitch

Causes:

- Thread development not ideal for sewing
- Uniformity of development of sewing thread
- Level of twisting
- Fiber attachment characteristics
- Thread complete

Remedies:

- Trying sewing with string from an alternate case or shipment
- Make sure the right string sort and size is being used
- Send cones that are breaking to your string provider for evaluation
- If the texture seems, by all accounts, to appear as something else, check whether texture from an alternate shipment causes the equivalent problem.
- Check the needle and sewing weight, at that point change the needle

Joint Stitch: At the point when joint two texture or sew line by sewing than have Fasten point that spot sewing is begin and part of the arrangement. At some point this joint point isn't uniform that is known as joint line deserts.



Figure 27: Joint stitch

Causes:

- Lack of involvement or convergence of worker
- Sometime for the issue in sewing machine.

Remedies:

- Seam is open and sewing again properly
- If machine estimation issue at that point explain it.

Needle Mark: Without sewing requirement if give the sewing at garment of fabric then open the sewing but sew up needle hole at the fabric is known as Needle mark.



Figure 28: Needle mark

Causes:

- For uneven fasten or any uneven crease need to uniform at that point open that join or crease after that creation this Needle mark.
- For the absence of focus or experience of operators

Remedies:

- To cures any kinds of sewing faults
- To pressing at great temp. & uniform

Uncut thread: Uncut thread is those threads which are not cut at sewing time.



Figure 29: Uncut Thread

Causes:

- Missing cut it by operator or helper.

Remedies:

- Work very carefully.

Without top Stitch: Missing stitch, cut or finish threads by doing this type of faults.



Figure 30: With Out top stitch

Causes:

- Thread development not ideal for sewing
- Uniformity of development of sewing thread
- Thread incomplete.

Remedies:

- Seam open and sewing again correctly
- If machine estimation issue at that point settle it.

CHAPTER-III

MATERIALS AND METHODS

3.1 Methodology:

The exploration strategy embraced for this examination and insight rating. The contextual analysis performed on garments endeavor named "Apparel Village Ltd" are found Khagan Bazar Birulia, Saver, Preliminary examination was done in sewing floor. It is found that, sewing floor is profoundly experienced deformities and modifies issues. For this motivation behind sewing line is distinguished so as to direct research work. The reason for this work is to discover distinctive sewing deficiencies which are for the most part occurred during activity and decrease the imperfections rates to limit assembling time and cost. Essential information are gathered from sewing line; Secondary information of the sewing area was gathered from the administration of these enterprises. The data used to be gathered for various garments as indicated by our perception and utilizing the end line quality information gave through the administration we perceived some dull imperfections that occur in sewing segment. In the wake of making sense of the basic reasons of the top happening abandons, comparing rules to diminish the recurrence of these deformities were given. The rules have been made dependent on the ability rating

3.2 Data Collection:

Data sheets were collected from quality department of sewing section, some data are collected from quality table end of the line of the garments production floor. A total of 92763 pieces garments checked. accepted pieces is 90832 and 1307 pieces were found defective and 374 pieces rejected.

3.3 Quality Inspection Report: Hourly QC pass Inspection Report in “Apparel Village Ltd”.

APPARELS VILLAGE LTD. (KNIT UNIT)
HOURLY INSPECTION REPORT (SEWING)

SEW IN CHARGE: #0219 BUYER: 023 Q.I. IN CHARGE: FOKOR DATE: 13.08.2019
 LINE: 16 STYLE: 15215H P.O. NO: 15215H COLOR: DK GREY

QUANTITY					RECEIVED ALTER RECTIFICATION					SUMMARY										
HOURS	INS	PASSED	ALTER	REJECT	HOURS	INS	PASSED	ALTER	REJECT	TOTAL CHECKED PCS	TOTAL PASSED PCS	TOTAL ALTERATION	ALTER%	RETURN FOR FINISHING	CS	BUTTON	OTHERS	SUPERVISOR	Q.M.	A.P.M.
1	12	120	0	0	1	12	120	0	0	120	120	0	0	0						
2	12	120	0	0	2	12	120	0	0	240	240	0	0	0						
3	12	120	0	0	3	12	120	0	0	360	360	0	0	0						
4	12	120	0	0	4	12	120	0	0	480	480	0	0	0						
5	12	120	0	0	5	12	120	0	0	600	600	0	0	0						
6	12	120	0	0	6	12	120	0	0	720	720	0	0	0						
7	12	120	0	0	7	12	120	0	0	840	840	0	0	0						
8	12	120	0	0	8	12	120	0	0	960	960	0	0	0						
9	12	120	0	0	9	12	120	0	0	1080	1080	0	0	0						
10	12	120	0	0	10	12	120	0	0	1200	1200	0	0	0						
TOTAL	120	1200	0	0	TOTAL	120	1200	0	0	1200	1200	0	0	0						

TYPE OF DEFECTS	FRONT PLACKET	PKT	ZIPPER	LABELS	WAIST	ARM HOLE	SIDE SEAM	COLLAR JOINT & TOP	CUFF JOINT & TOP	EMB. PRINTING	BUTTON	BUTTON HOLES	HEM	SLV JOIN	TOTAL
BROKEN STITCH															
SANTING															
SKIP STITCH															
DOWN STITCH															
NOSE EXTENSION															
JOINT STITCH															
UN CUT THREAD															
UNEVEN STITCH															
PICKERING															
FABRIC FAULT															
SHADING															
DAMAGE															
SIZE MISTAKE															
OPEN SEAM															
BUTTON															
UP DOWN															
RAW EDGE															
SPOT															
TOTAL															

APPARELS VILLAGE LTD. (KNIT UNIT)
HOURLY INSPECTION REPORT (SEWING)

SEW IN CHARGE: 0219 BUYER: N.K.D Q.I. IN CHARGE: KORON DATE: 13.08.19
 LINE: 15 STYLE: 15215H P.O. NO: 15215H COLOR: DK BLUE

QUANTITY					RECEIVED ALTER RECTIFICATION					SUMMARY										
HOURS	INS	PASSED	ALTER	REJECT	HOURS	INS	PASSED	ALTER	REJECT	TOTAL CHECKED PCS	TOTAL PASSED PCS	TOTAL ALTERATION	ALTER%	RETURN FOR FINISHING	CS	BUTTON	OTHERS	SUPERVISOR	Q.M.	A.P.M.
1	12	120	0	0	1	12	120	0	0	120	120	0	0	0						
2	12	120	0	0	2	12	120	0	0	240	240	0	0	0						
3	12	120	0	0	3	12	120	0	0	360	360	0	0	0						
4	12	120	0	0	4	12	120	0	0	480	480	0	0	0						
5	12	120	0	0	5	12	120	0	0	600	600	0	0	0						
6	12	120	0	0	6	12	120	0	0	720	720	0	0	0						
7	12	120	0	0	7	12	120	0	0	840	840	0	0	0						
8	12	120	0	0	8	12	120	0	0	960	960	0	0	0						
9	12	120	0	0	9	12	120	0	0	1080	1080	0	0	0						
10	12	120	0	0	10	12	120	0	0	1200	1200	0	0	0						
TOTAL	120	1200	0	0	TOTAL	120	1200	0	0	1200	1200	0	0	0						

TYPE OF DEFECTS	FRONT PLACKET	PKT	ZIPPER	LABELS	WAIST	ARM HOLE	SIDE SEAM	COLLAR JOINT & TOP	CUFF JOINT & TOP	EMB. PRINTING	BUTTON	BUTTON HOLES	HEM	SLV JOIN	TOTAL
BROKEN STITCH															
SANTING															
SKIP STITCH															
DOWN STITCH															
NOSE EXTENSION															
JOINT STITCH															
UN CUT THREAD															
UNEVEN STITCH															
PICKERING															
FABRIC FAULT															
SHADING															
DAMAGE															
SIZE MISTAKE															
OPEN SEAM															
BUTTON															
UP DOWN															
RAW EDGE															
SPOT															
TOTAL															

Figure 31: Quality Inspection Report

3.4 Sewing Defects Inspection Table:

Table no 1: Defect Inspection Report for OVS buyer

Buyer Name: OVS			Starting Date: 29.06.19				Finishing Date: 14.07.19						
Color: Dark GREY			Style Types:Pant				Style No: 192LEG016						
Defects Name:	Defects place												
	Front Pocket	PKT	Nick top joint	Labels	Waist belt	Armhole	Side Seam	Cuff Joint and top	Cuff	Button, button hole	Hem	Sleeve Joint	Total
Broken Stitch		7		9	6		8			9	15	8	63
Skip Stitch	8	6	14	8	46	12	34	22	9	13	16	7	208
Joint Stitch	7			3			10	7			11		38
Un cut Threads		8	6	14	25	9	34	19		11	12	9	147
Un even stitch					17	3	9	12	8		9		58
Puckering					5								5
Shading				3									3
Damage				2		9	21	24			5	3	64
Size Mistake				81			6	9		13			109
Open seam			6	4	6	9	35	16			6		82
Up-Down	10					5	8		8				31
Raw Edge											8		8
Total	25	21	26	124	103	47	165	108	25	108	83	27	

Table no 2: Inspection Report for OVS buyer on hourly

Quality	Hours										Total
	8-9	9-10	10-11	11-12	12-1	2-3	3-4	4-5	5-6	6-7	
Total Inspected Quantity	2885	3049	3241	3113	3040	3244	3282	3377	2800	2634	30665
Total Pass goods	2867	2999	3199	3108	2962	3128	3138	3287	2768	2608	30064
Defective Quantity	36	34	43	30	35	38	45	34	28	27	350
Rejects quantity	6	5	6	7	8	5	7	9	8	7	76
(Defective+ Rejects) Quantity	42	45	49	37	45	43	52	43	36	34	426
QC Faults%	1.45%	1.47%	1.52%	1.18%	1.48%	1.32%	1.58%	1.27%	1.28%	1.30%	

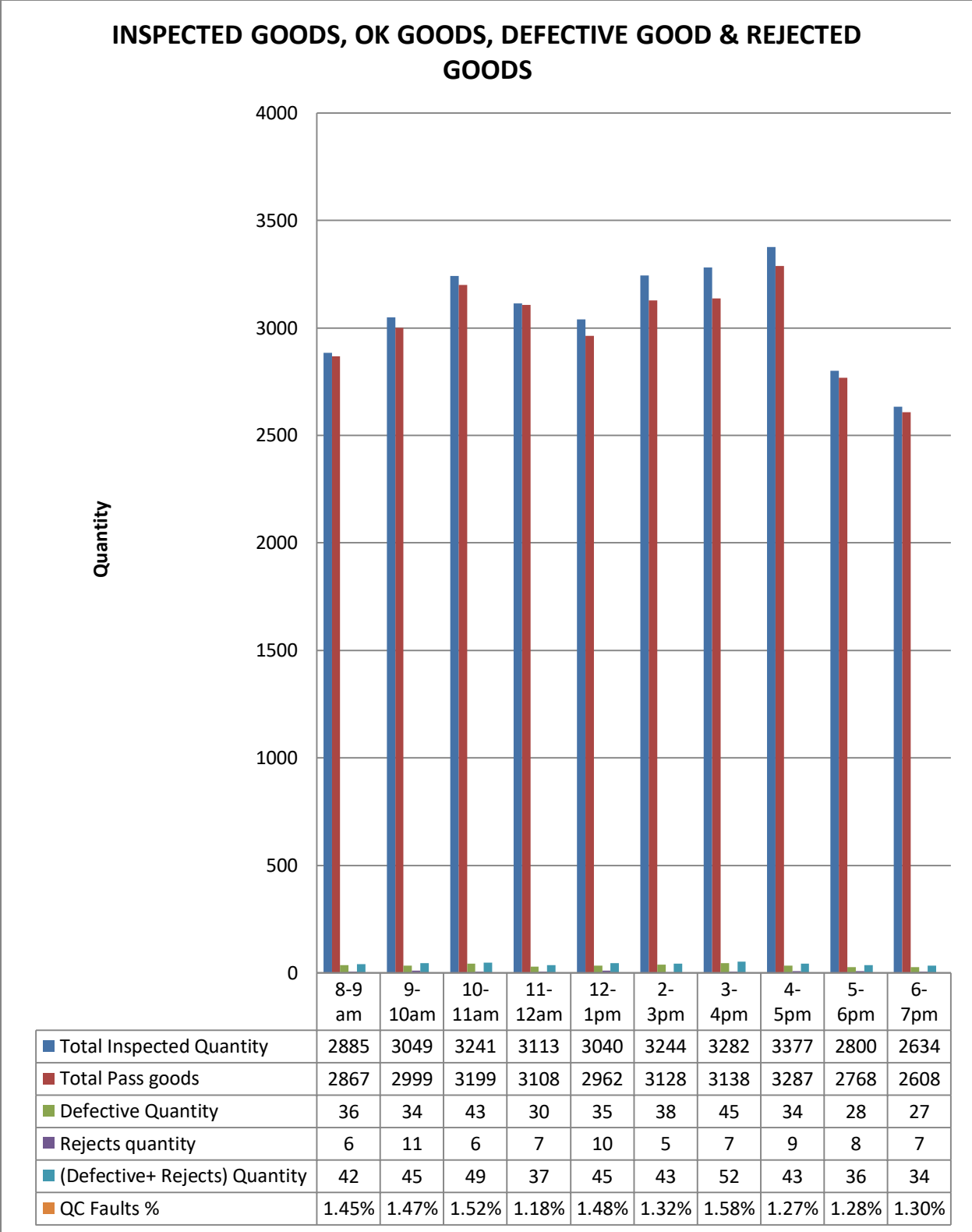


Chart 1: INSPECTED GOODS, OK GOODS, DEFECTIVE GOOD & REJECTED GOODS

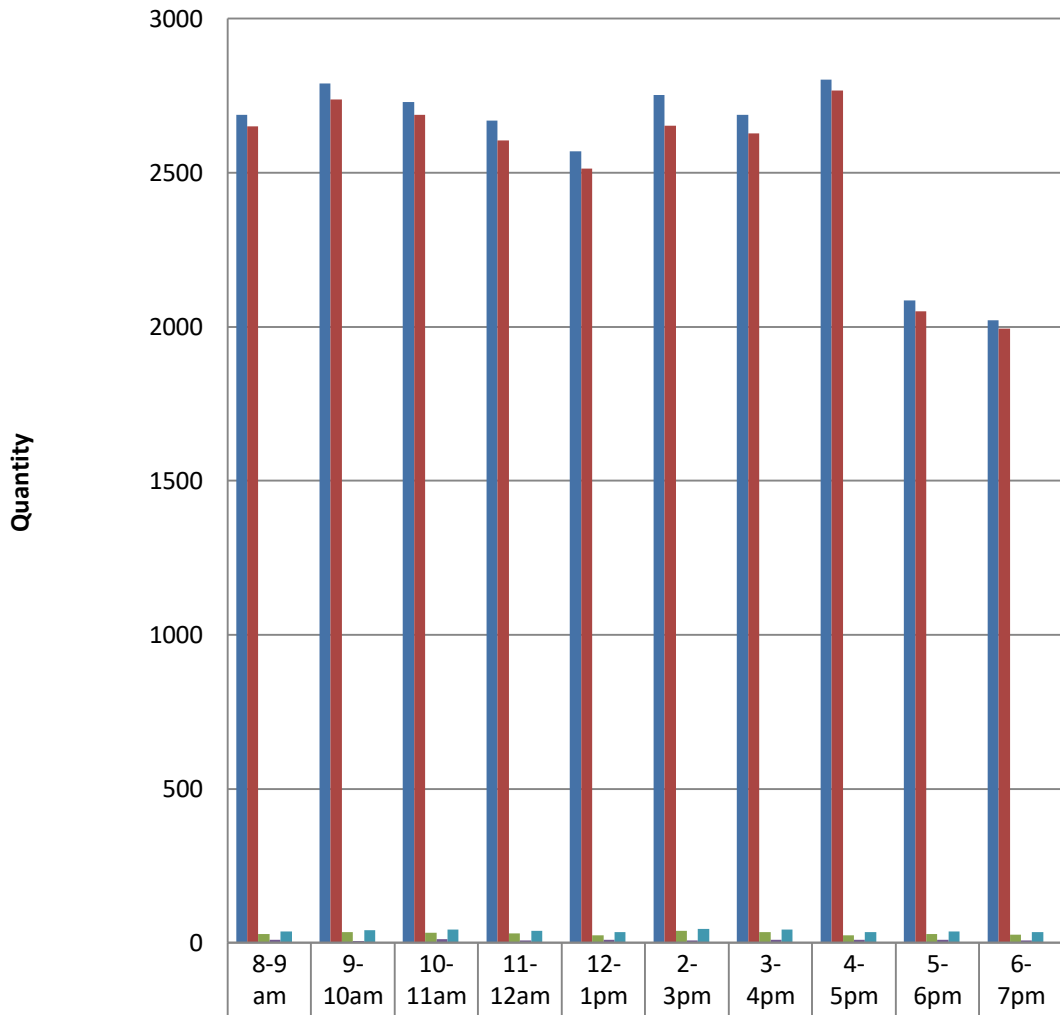
Table no 3: Defect Inspection Report for AS COLOR buyer

Byer Name: AS COLOR			Starting Date: 14.07.19			Finishing Date: 05.08.19			
Color: Navy			Style Types: Basic T-shirt			Style No: 192JOB021			
Defects Name:	Defects place								
	Nick top joint	Labels	Arm hole	Side Seam	Cuff Joint and top	Cuff	Hem	Sleeve Joint	Total
Broken Stitch		9		8			15	9	41
Skip Stitch	16	8	32	22	24	9	38	10	170
Joint Stitch		3		10	7		12		32
Un cut Threads	6	14	9	34	19		16	9	101
Un even stitch			9	7	12	8	11		37
Fabric Faults							7		7
Puckerin g				10					10
Shading		7							7
Damage		2	9	19	24		7	5	76
Size Mistake		71		17					88
Open seam	6	8	9	20	16		10	12	81
Up-Down			5	9		10			24
Raw Edge							8	1	9
Total	28	122	53	166	101	27	97	45	

Table no 4: Inspection Report for AS COLOR buyer on hourly

Quality	Hours										Total
	8-9	9-10	10-11	11-12	12-1	2-3	3-4	4-5	5-6	6-7	Total
Total inspection Quantity	2687	2790	2730	2670	2569	2752	2689	2802	2085	2022	25796
Total Pass goods	2641	2737	2688	2605	2513	2652	2627	2768	2051	1995	25287
Defective Quantity	28	34	32	30	25	38	35	24	18	27	301
Rejects quantity	9	6	11	8	10	8	9	10	9	8	88
(Defective+Rejects) quantity	35	40	43	38	35	46	44	34	37	35	389
QC Faults%	1.38%	1.44%	1.57%	1.42%	1.36%	1.62%	1.67%	1.20%	1.77%	1.73%	

**INSPECTED GOODS, OK GOODS, DEFECTIVE GOOD & REJECTED GOODS
BUYER:**



■ Total inspection Quantity	2687	2790	2730	2670	2569	2752	2689	2802	2085	2022
■ Total Pass goods	2651	2737	2688	2605	2513	2652	2627	2768	2051	1995
■ Defective Quantity	28	34	32	30	25	38	35	24	28	27
■ Rejects quantity	9	6	11	8	10	8	9	10	9	8
■ (Defective+Rejects)quantity	37	40	43	38	35	46	44	34	37	35
■ QC Faults%	1.38%	1.44%	1.57%	1.42%	1.36%	1.62%	1.67%	1.20%	1.77%	1.73%

Chart 2: INSPECTED GOODS, OK GOODS, DEFECTIVE GOOD & REJECTED GOODS

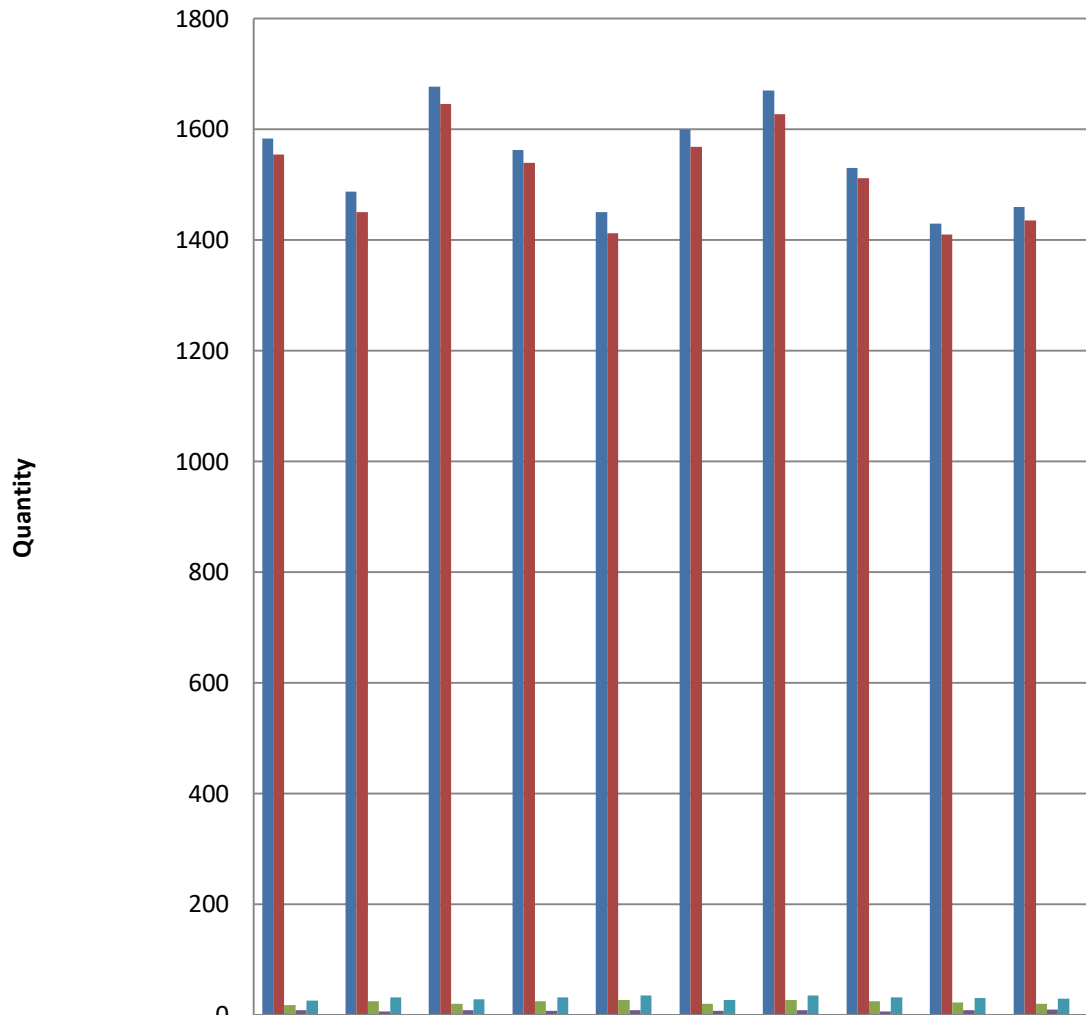
Table no 5: Defect Inspection Report for N.K.D. buyer

Byer Name: N.K.D.		Starting Date:03.08.19			Finishing Date:18.08.19				
Color: Black			Style Types: Basic T-shirt			Style No: 5001			
Defects Name:	Defects place								
	Nick top joint	Labels	Arm hole	Side Seam	Cuff Joint and top	Cuff	Hem	Sleeve Joint	Total
Broken Stitch		9		8			12	7	36
Skip Stitch	13		32	38	17	18	35	10	163
Joint Stitch		4		10	7		12		33
Un cut Threads	5	12	8	28	19		16	9	92
Un even stitch	4		7	7	12	8	11		45
Puckerin g				12					12
Fabric Damage						5			5
Shading		4							4
Damage		4	6	32	28		7	8	85
Size Mistake		61		17	9				85
Open seam	7	8	7	18	17		9	12	78
Up-Down			5	9		10			24
Raw Edge					3		8		11
Total	20	142	45	171	112	32	93	45	

Table no 6: Inspection Report for N.K.D. Buyer on hourly

Quality	Hours										Total
	8-9	9-10	10-11	11-12	12-1	2-3	3-4	4-5	5-6	6-7	
Total inspection Quantity	1583	1488	1677	1653	1450	1600	1670	1530	1430	1460	15460
Total Pass goods	1555	1451	1646	1540	1412	1568	1628	1512	1410	1435	15157
Defective Quantity	18	25	20	24	27	20	27	25	22	20	228
Rejects quantity	8	6	8	7	8	7	8	6	8	9	75
(Defective+Rejects) quantity	25	31	28	30	35	27	35	30	28	29	298
QC Faults %	1.55%	2.08%	1.66%	1.91%	2.41%	1.68%	2.09%	1.96%	1.95%	1.98%	

**INSPECTED GOODS, OK GOODS, DEFECTIVE GOOD & REJECTED GOODS
BUYER:**



	8-9 am	9-10am	10-11am	11-12am	12-1pm	2-3pm	3-4pm	4-5pm	5-6pm	6-7pm
Total inspection Quantity	1583	1488	1677	1563	1450	1600	1670	1530	1430	1460
Total Pass goods	1555	1451	1646	1540	1412	1568	1628	1512	1410	1435
Defective Quantity	18	25	20	24	27	20	27	25	22	20
Rejects quantity	8	6	8	7	8	7	8	6	8	9
(Defective+Rejects)quantity	26	31	28	31	35	27	35	31	30	29
QC Faults%	1.55%	2.08%	1.66%	1.91%	2.41%	1.68%	2.09%	1.96%	1.95%	1.98%

Chart 3: INSPECTED GOODS, OK GOODS, DEFECTIVE GOOD & REJECTED GOODS

Table no 7: Inspection Report for OX BOW buyer on hourly

Byer Name: N.K.D.		Starting Date: 02.08. 19			Finishing Date:22.08.19				
Color: Green			Style Types: Sweater			Style No: 192 SWT 112			
Defects Name:	Defects place								
	Nick top joint	Labels	Arm hole	Side Seam	Cuff Joint and top	Cuff	Hem	Sleeve Joint	Total
Broken Stitch		9		8			12	7	36
Skip Stitch	13		32	38	17	18	35	10	163
Joint Stitch		4		10	7		12		33
Un cut Threads	5	12	8	28	19		16	9	92
Un even stitch	4		7	7	12	8	11		45
Puckering				12					12
Fabric Damage						5			5
Shading		4							4
Damag e		4	6	32	28		7	8	85
Size Mistake		61		17	9				85
Open seam	7	8	7	18	17		9	12	78
Up-Down			5	9		10			24
Raw Edge					3		8		11
Total	20	142	45	171	112	32	93	45	

Table no 8: Inspection Report for OX BOW buyer on hourly

Quality	Hours										Total
	8-9	9-10	10-11	11-12	12-1	2-3	3-4	4-5	5-6	6-7	
Total inspection Quantity	1013	1106	1050	1005	1167	1053	1107	1094	937	920	10452
Total Pass goods	988	1070	1019	980	1130	1032	1070	1067	906	902	10172
Defective Quantity	18	19	20	24	24	20	22	21	22	20	210
Rejects quantity	7	6	5	6	8	7	8	5	6	7	65
(Defective+Rejects) quantity	25	31	28	30	35	27	35	30	28	29	298
QC Faults %	2.46 %	2.81 %	2.66%	2.98%	2.74%	2.26 %	2.71 %	1.91 %	2.99 %	3.18 %	

**INSPECTED GOODS, OK GOODS, DEFECTIVE GOOD & REJECTED GOODS
BUYER:**

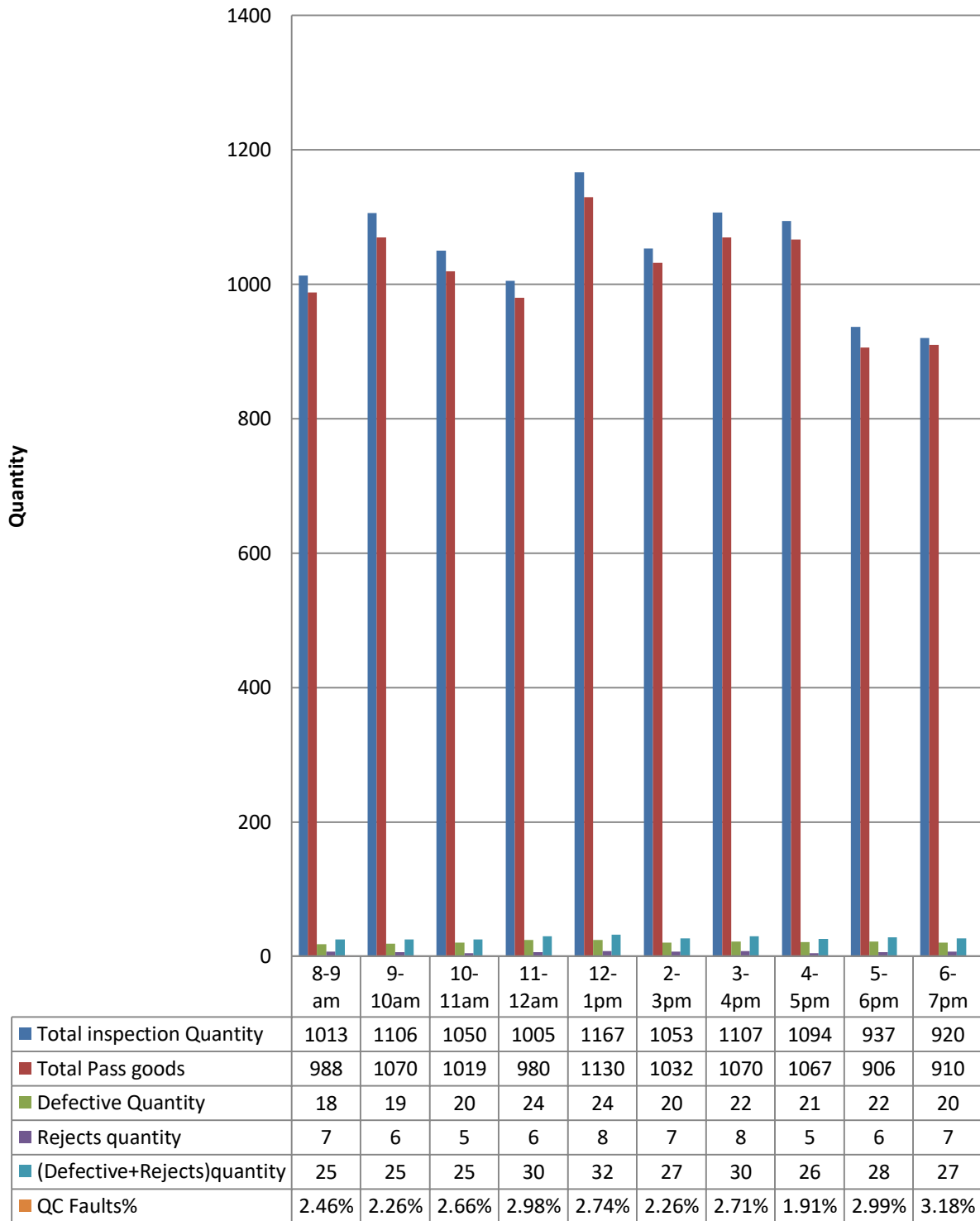
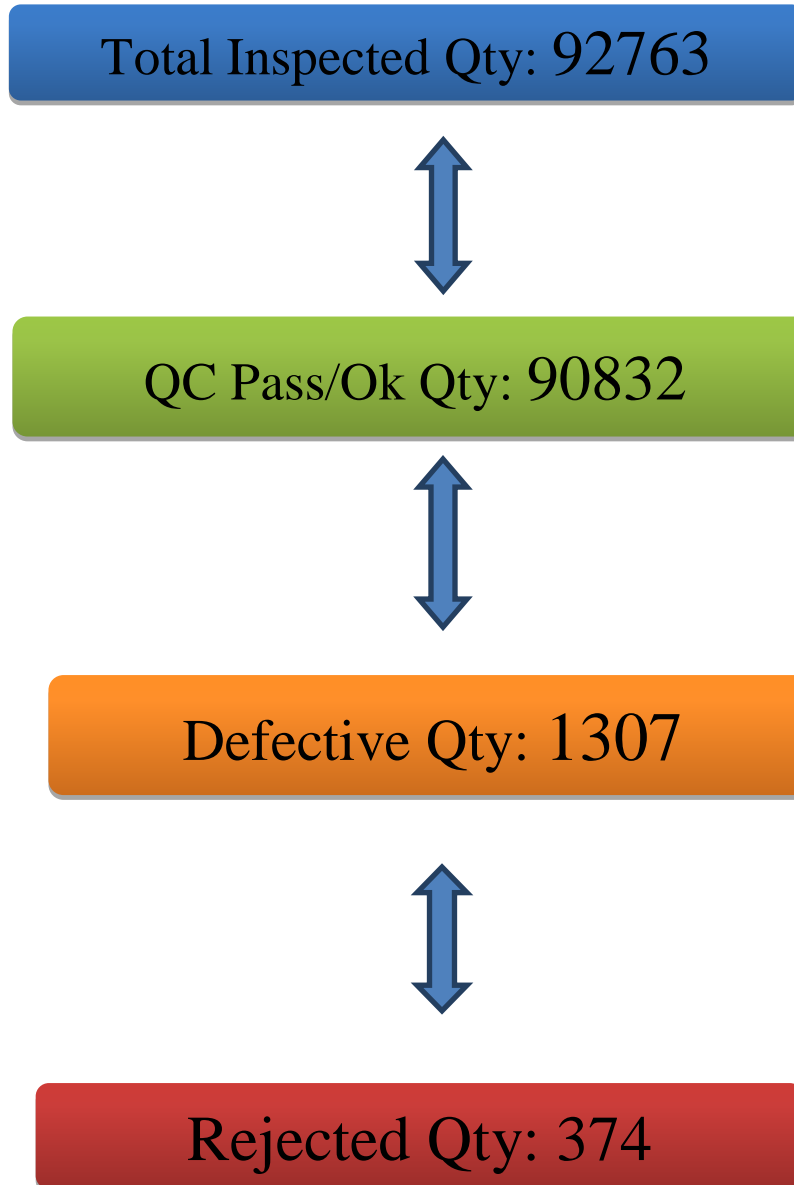


Chart 4: INSPECTED GOODS, OK GOODS, DEFECTIVE GOOD & REJECTED GOODS

CHAPTER- IV

RESULT AND DISCUSSION

4.1 Apparel Village Ltd. Total working result:



4.2 Overall result:

In this industry we totally inspected 92763 pieces garments, 90832 pieces garments are get QC Pass, Defective garments qty. 1307 pieces and only 374 pieces garments are rejected.

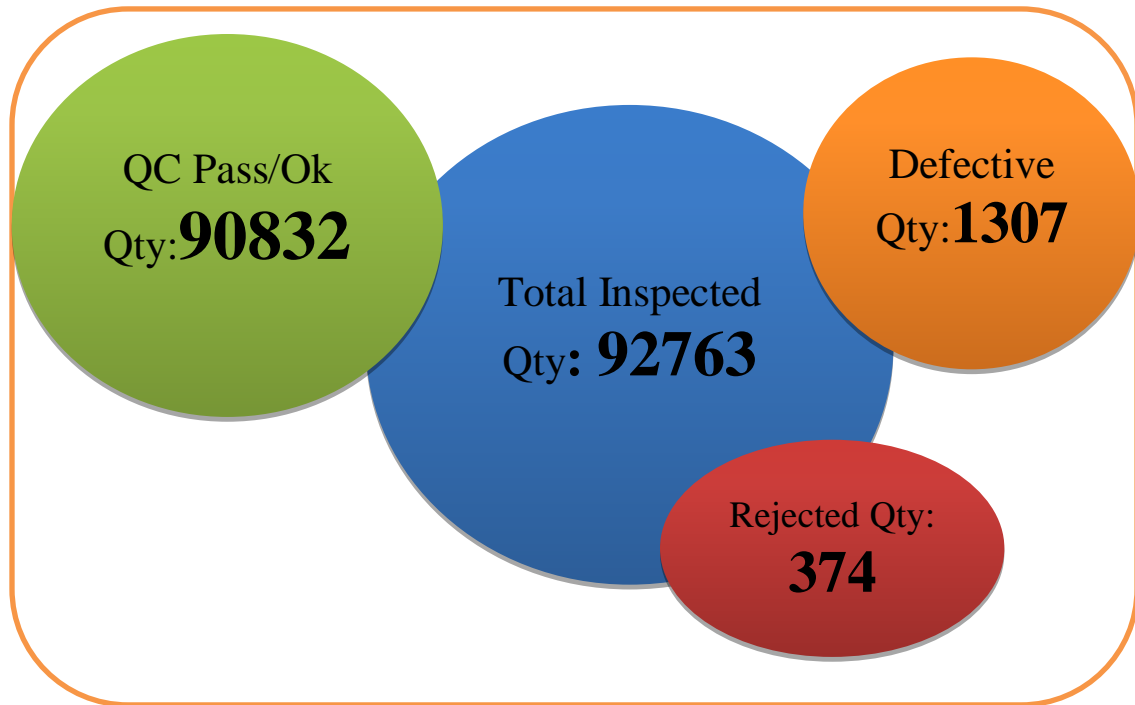


Chart no 5: Overall result

4.3 Sewing Faults Graphs of Different Buyer:

We found different types of sewing faults in different days. Some faults are common, some are different. In here we show different types of sewing fault for “Apparel Village Ltd.” with different graph.

Table no 9: Sewing Faults all buyer

Defects Name:	Defects place					Total
	OVS	AS COLOR	N. K. D	OX BOW	P. O. T	
Broken Stitch	63	41	36	32	30	202
Skip Stitch	208	170	193	182	160	913
Joint Stitch	38	32	33	37	28	168
Un cut Threads	147	101	92	78	83	501
Un even stitch	58	37	45	34	40	214
Fabric Faults	0	7	5	3	10	59
Puckering	5	20	12	14	8	25
Shading	3	20	4	7	8	42
Damage	64	76	85	76	79	380
Size Mistake	115	96	120	98	90	542
Open seam	82	81	78	76	70	387
Up-Down	31	24	24	40	17	116
Raw Edge	8	9	11	10	7	45
Total	822	714	738	667	664	

Sewing Faults Percentage of Different Buyer

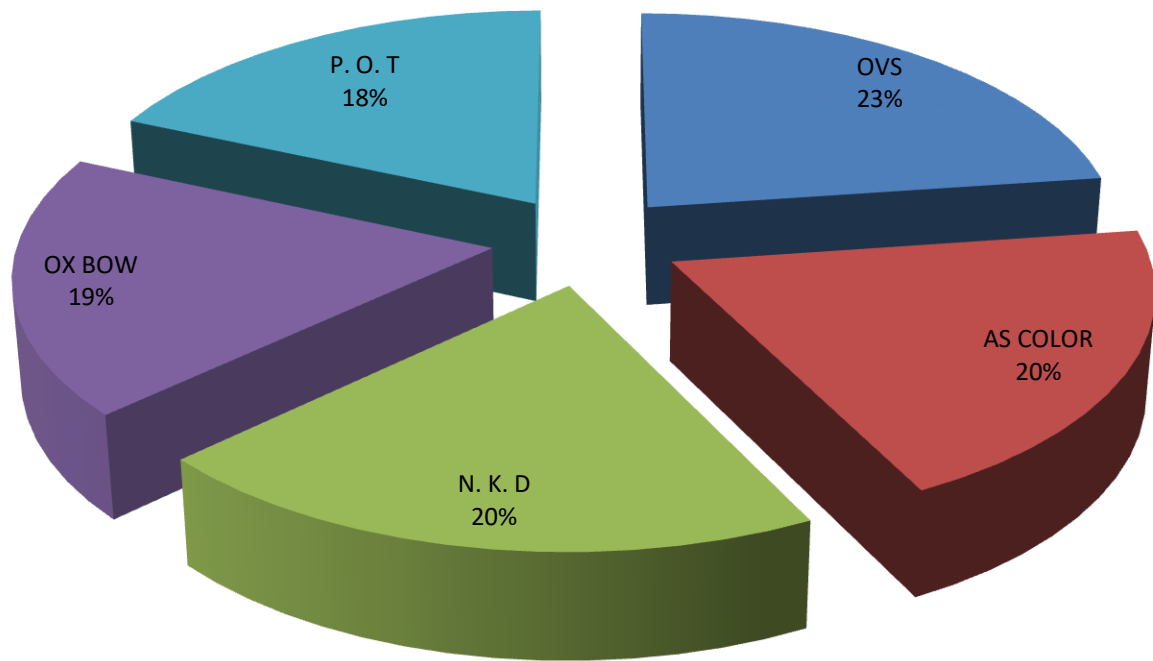


Chart no 6: Sewing Faults Percentages of Different Buyer

Here Data collects from the Table no 9: Sewing Faults all buyer.

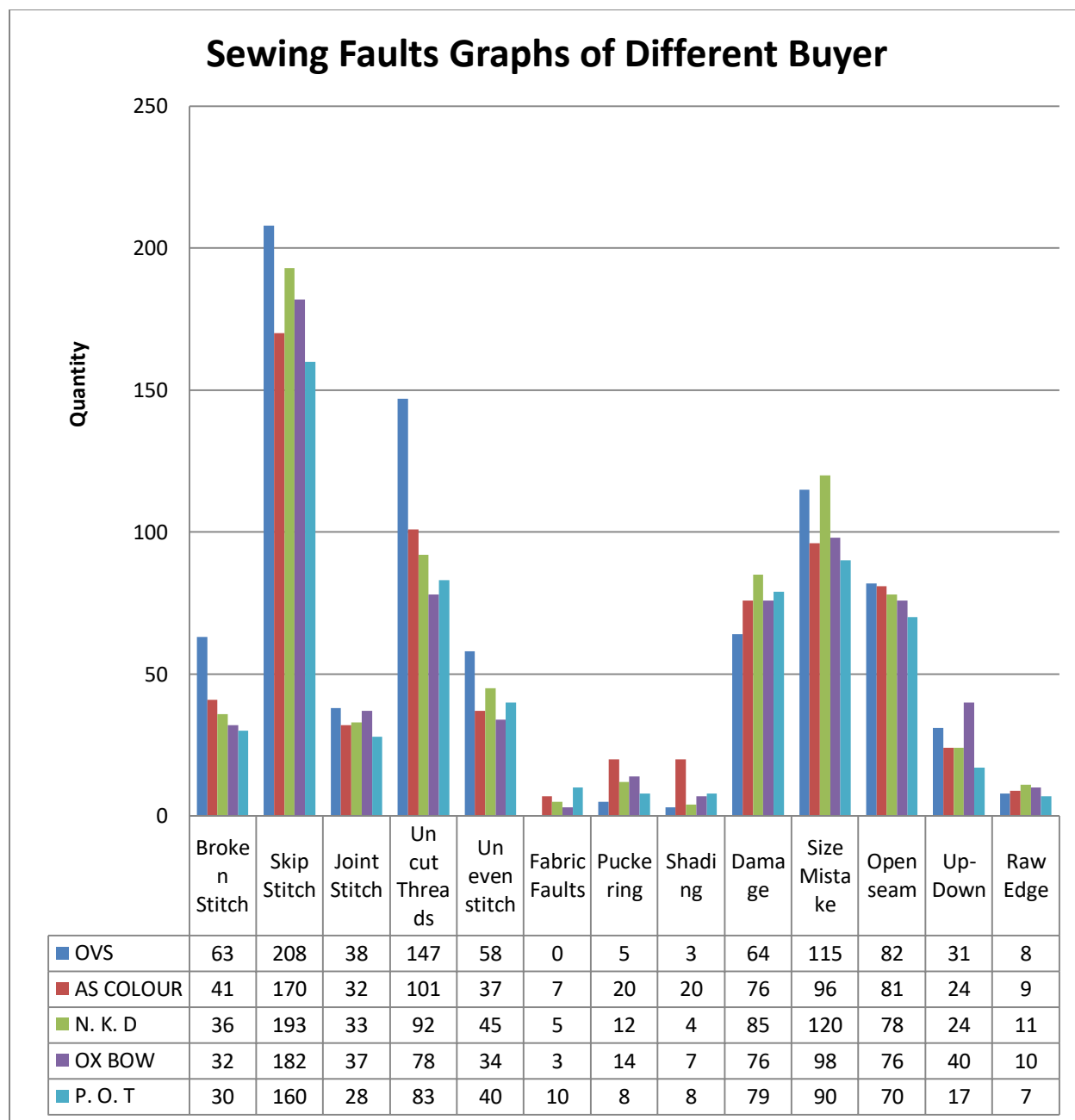


Chart no 7: Sewing Faults of Different Buyer

Here Data collects from the Table no 9: Sewing Faults all buyer.

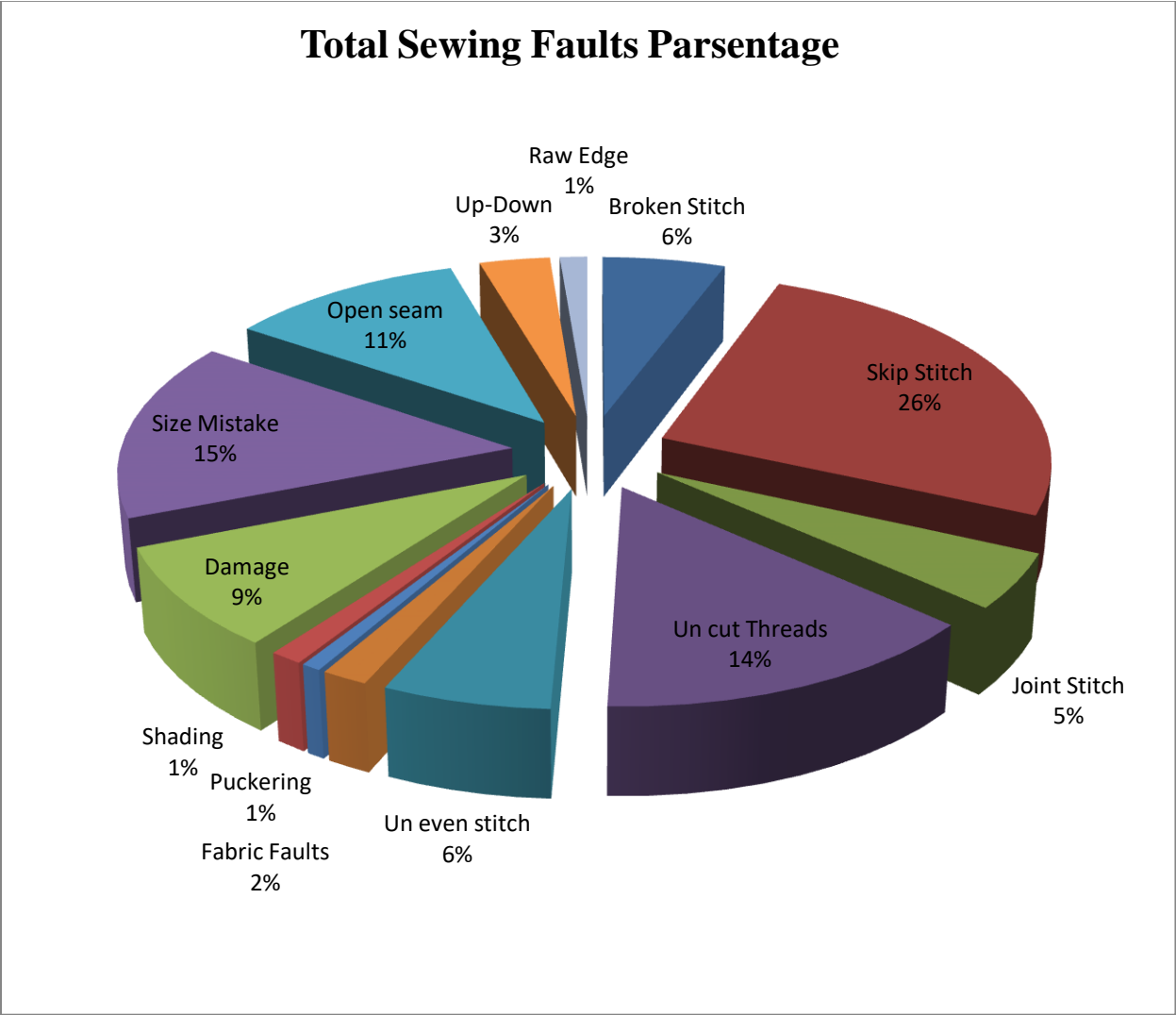


Chart no 8: Total Sewing Faults Percentage

Here Data collects from the Table no 9: Sewing Faults all buyer.

4.4 Overall Result is different buyer:

Table no 10: Total goods for different buyer

	OVS	AS COLOUR	N. K. D	OX BOW	P. O. T	Total
Total inspection Quantity	30665	25796	15460	10452	10390	92763
Total Pass goods	30064	25287	15157	10172	10152	90832
Defective Quantity	350	301	228	210	218	1307
Rejects quantity	76	88	70	75	65	374

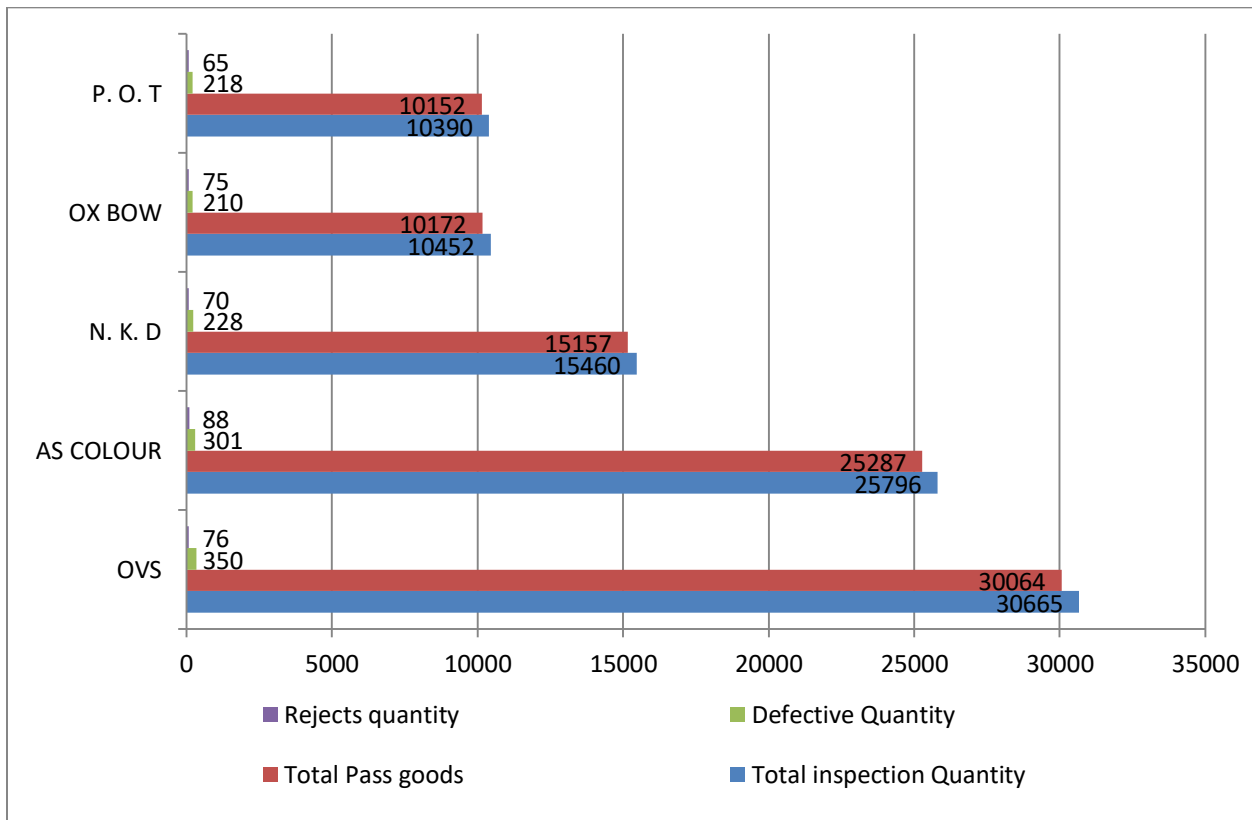


Chart no 9: Total goods for different buyer no chart

4.5 Inspection & Ok Goods Percentages:

In this graph Blue color shows total percentages of “Inspection goods”, other hand Red color shows Ok Goods percentages inside the inspection goods. In these calculation total defective goods 92763, in where 90832 are total Accepted, Inspection goods percentage is 51% and ok goods percentage is 49%.

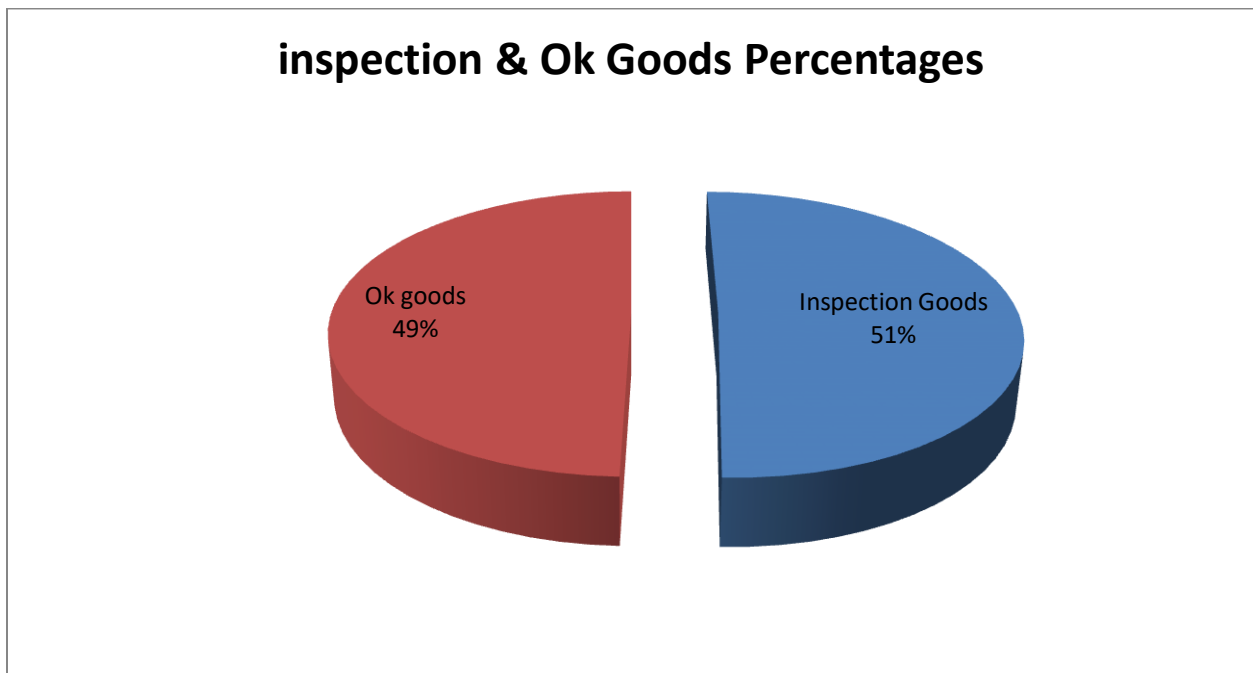


Chart no 10: inspection & Ok Goods Percentages

4.6 Defected & Rejected Goods Percentages:

In this graph Blue color shows total percentages of “Defects goods”, other hand Red color shows Rejected Goods percentages inside the defective goods. In these calculation total Defects goods 1307, in where 374 are totally rejected, and 1307 only defective, it will be recoverable.

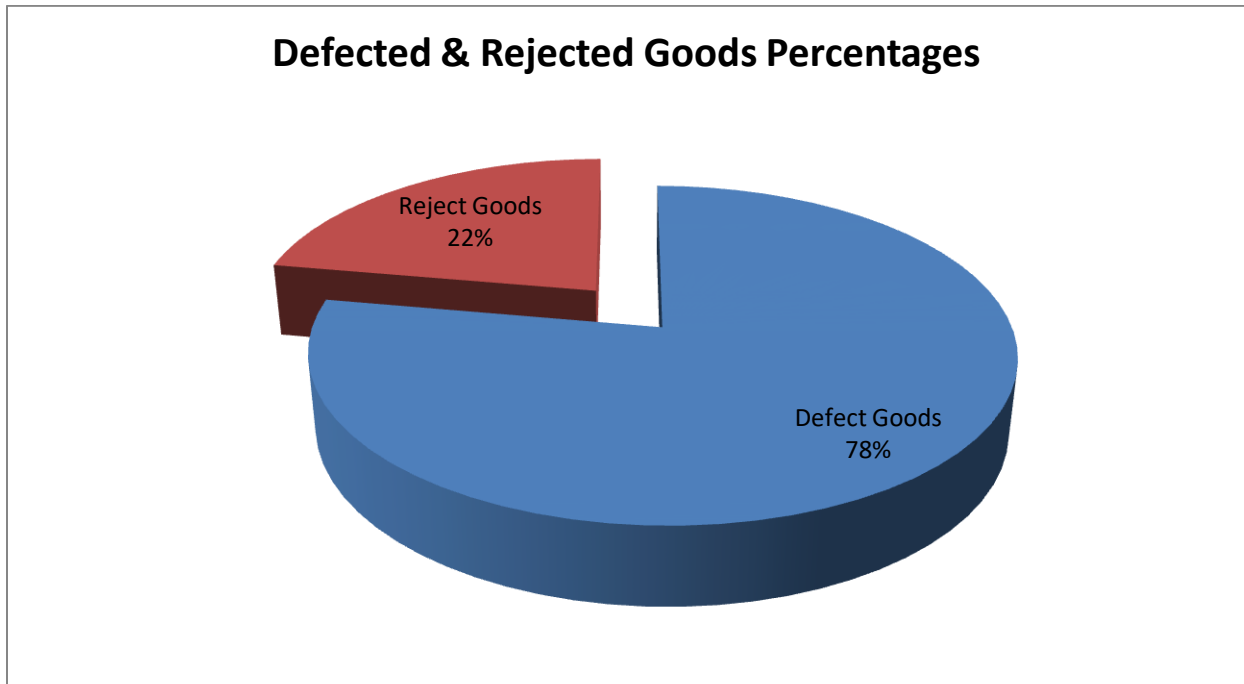


Chart no 11: Defected & Rejected Goods Percentages

4.7 Buyer wise OK Goods-Vs.-Defective Goods:

Here we show a comparison of OK goods and sewing defects quantity for “Apparel village Ltd.” are given below

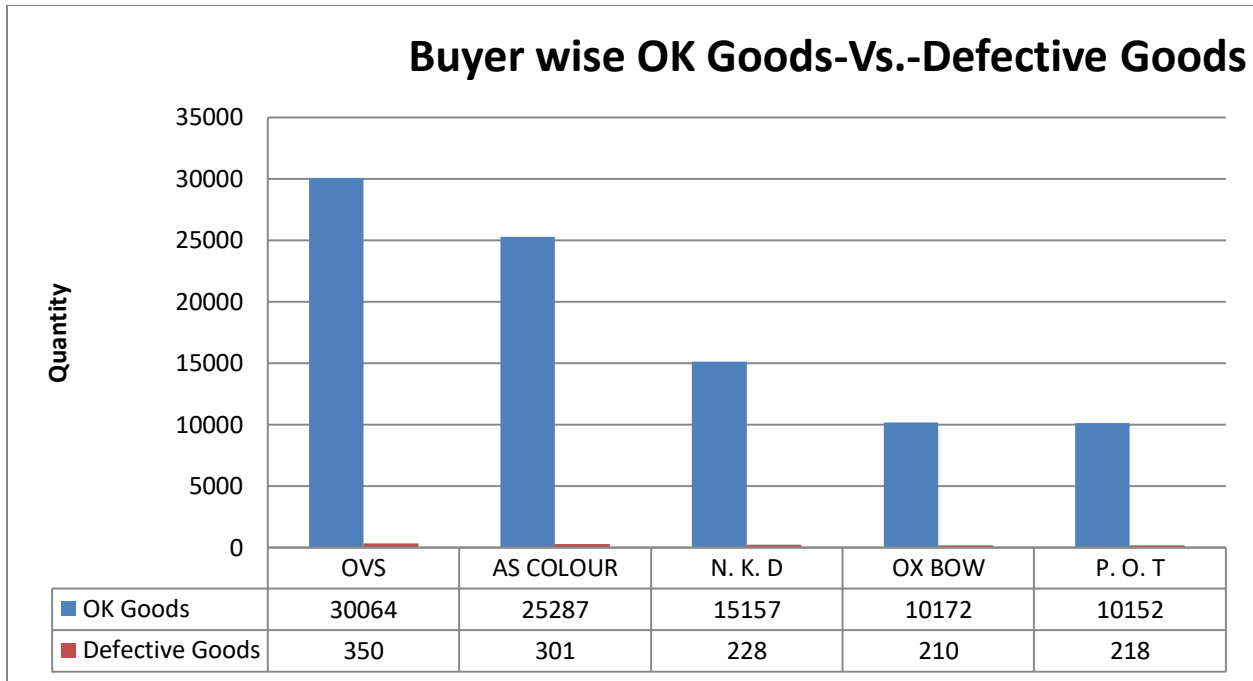


Chart no 12: Buyer wise OK Goods-Vs.-Defective Goods

Here, this graph shows quantity of ok goods and defective goods for different buyer about 27 working days. Blue color indicates “OK Goods” and Red color indicate “Defective Goods”.

Total ok goods are 90832 and total defective goods are 1307.

4.8 OK Goods, Defective Goods & Rejected Goods Percentages:

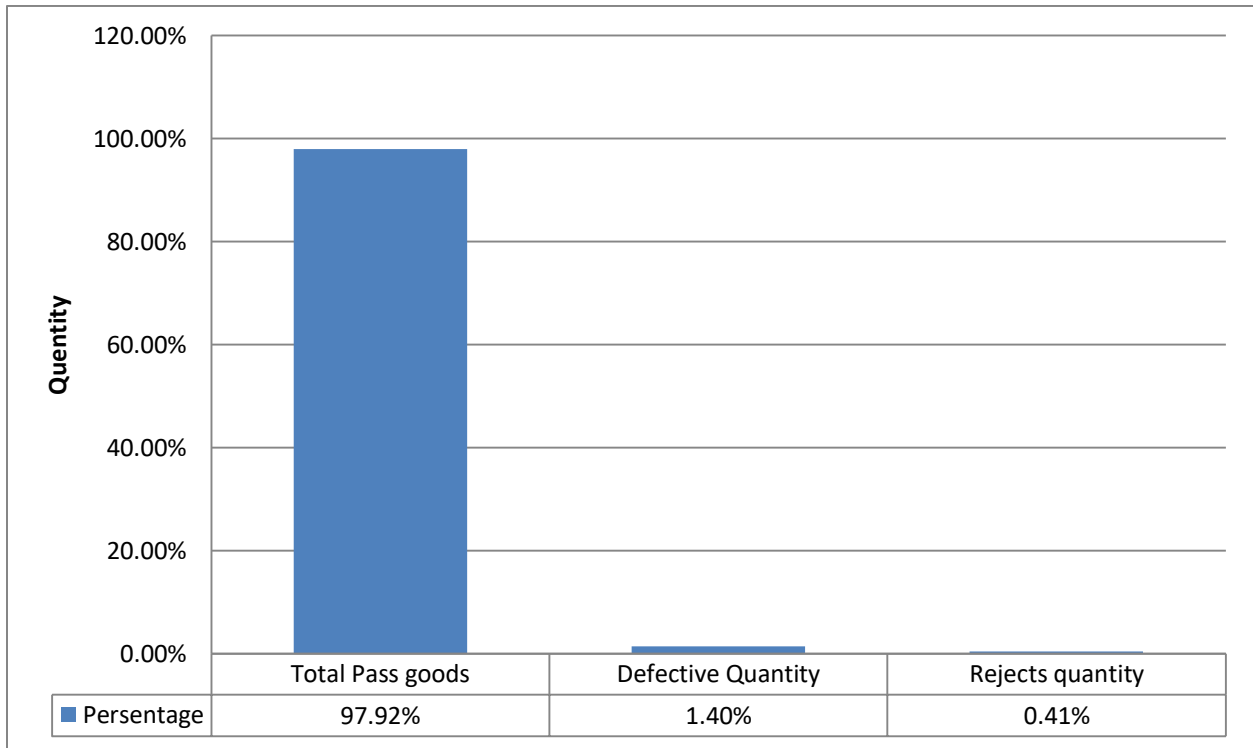


Chart no 13: OK Goods, Defective Goods & Rejected Goods Percentages

In this graph we see total pass goods 97.92%, Defective Goods 1.40% and Rejected Goods 0.41%. In this calculation total OK goods is 90832, total defective goods 1307, in where 374 are totally rejected, and 1307 only defective, it will be recoverable for again quality check.

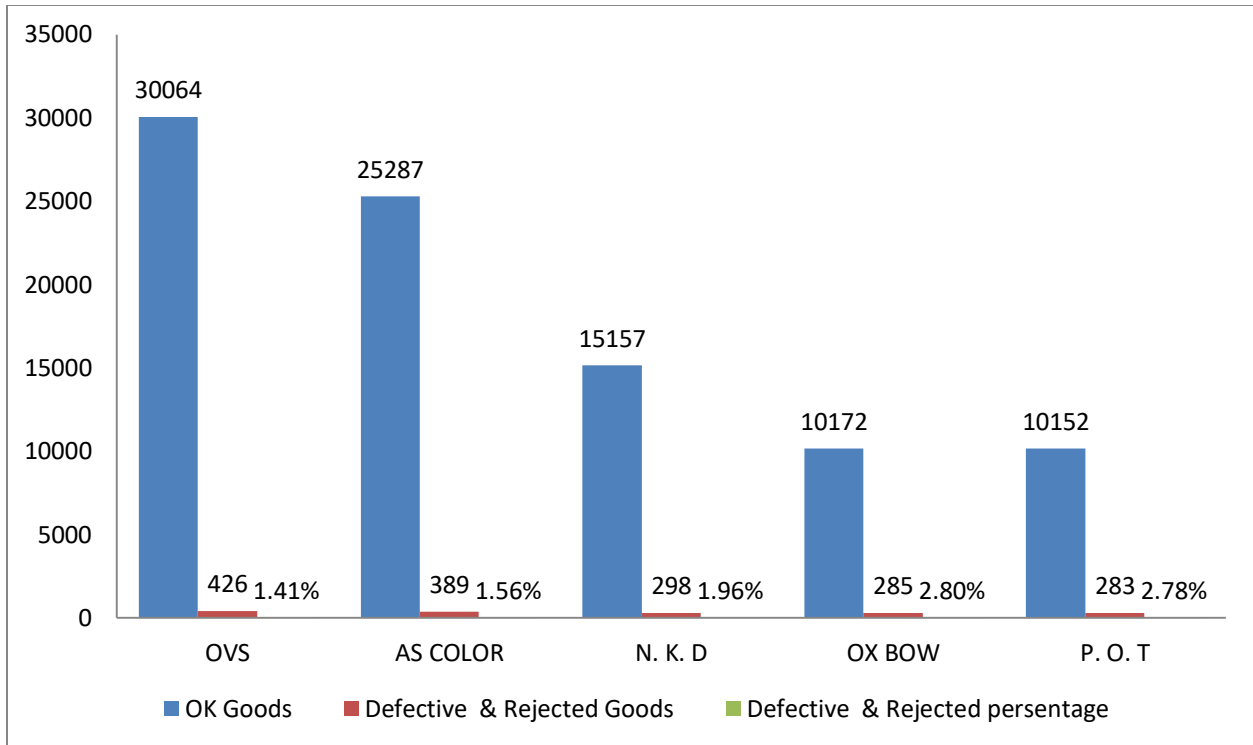


Chart no 14: OK Goods, Defective Goods & Rejected Goods Percentages on buyer serial

In this graph we see OK Goods 97.62%, Defective Goods 2.37% and Rejected Goods 0.52% In this calculation total OK goods is 90832, total defective goods 1307, in where 374 are totally rejected, and 1307 only defective which are manually OVS 426, AS COLOR is 389. N.K.D. is 298, OX BOW 285, P.O.T is 283 pcs, it will be recoverable for again quality check.

4.9 Discussion:

In Apparel Village Ltd. we observing & collected data for 27 working days in different line. In there we observed that, totally 92763 pieces garments are inspected, in where ok goods are 90832 pieces, defective garments are 1307 pieces, in where 374 ate totally rejected, and 1307 only defective, it will be recoverable.

CHAPTER-V

CONCLUSION

5.1 Conclusion:

From this venture we have accomplished our insight about how sewing is done, why flaws are happens during sewing, why sewing deformities need to cures and how those issues are limit during generation. We study researched knitwear sewing process in instant apparel Enterprise, the reasons expanding quality flaws and the needs were resolved for the improvement thinks about. When we inspection total goods is 92763, then we At long last found altogether average 1.82% of sewing Faults. Various sewing faults detect as broken stitch, skip stitch, puckering, open seam and others. To enable a good quality system in enterprises, there should be adequate number of quality staff and the quality consciousness of workers should be increased. In this present condition garments industry are contributing to decrease unemployment problem in our Bangladesh. So here we can comprehend from this exploration that on the off chance that we can diminish this sort of sewing flaws, at that point we can decrease our efficient dangers and increment our creation. Furthermore, our generation will be quality full. Quality level ought to be always improved and for this reason, standard trainings ought to be set up in the endeavor.

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