Faculty of Engineering
Department of Textile Engineering

REPORT ON
Investigation on the defects found in washed woven garments.

Course Title: Project **Course Code: TE-4214**

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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

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APPROVAL SHEET

A Comprehensive Analysis of **"Investigation on the defects found in washed woven garments" at "Daffodil International University, April, 2019''** research and submitted by **Md. Alamin Hossain (162-23-4698) & Md. NazmusSalahin (162-23-4738)** in partial fulfillment of the requirement for the degree of **BACHELOR OF SCIENCE IN TEXTILE ENGINEERING** has been examined and hereby recommended for approval and acceptance.

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DECLARATION

We hereby declare that, this work has been finished by us and not replicated from elsewhere we additionally proclaim that neither this undertaking nor any piece of this venture has been submitted somewhere else for honor of any degree.

Signature of Students:

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……..

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DEDICATION

TO OUR BELOVED, ADORED & RESPECTED PARENTS

ABSTRACT

The Thesis is on “Investigation on the defects found in after wash Quality checking and their Remedies of Denim Garments” Denim is one of the most versatile fabrics on the planet, and the most popular all over the world. The purpose of this project is to analytical study of garments washing quality and identify after wash defects found of garments. Garments wash is identically new adapted technology in the garments finish technology. It is specially done on denim and denim garments. In garments finish it is an indispensable part for finished garments. The washing processes are normal wash, enzyme wash, acid wash, bleach wash, stone bleach wash, towel bleach washing and different dry wash process. The garments wash after quality check and different wash process has been different defects. We have investigated on the in line inspection report and found different defects (%) on garments after washing, Shade Dark (44.27%), Shade Blue (26.98%), Shade Light (10.34%), Hand Sand Less (8.48%) , Hand Sand Light (5.66%), Whisker Light (2.23%), Dye Spot (2.04%). Also we have investigated on the final quality report and found different defects (%) on garments after washing. They are, Shade Dark (20.55%), Off Shade (17.14%), Shade Light (16.21%), PP Spot (15.18%), Crease Mark (11.78%), Dye Spot (8.37%), Dappa (5.38%), Wrong Whisker (2.90%), Crinkle Spot (1.85%), Damaged Body (0.61%).We learn about all these defects occurs due to wash and learned the process of removing all the faults. So finally we think that, if we can find the washing problem and take precautionary steps to minimize the faults then we will get 100% good quality garments according to buyer requirements and also eliminate the reject of poor quality product. We specially focus after wash what type of effect comes in garments and especially what type of damages caused by this washing process.

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1. Introduction

1. Introduction

Wash is usually done at denim fabrics. It is also done on twill fabric. In this modern age garments wash is very important because all buyers required to wash their garments. And now washing became very popular and demandable sector. Normally garments washing means cleaning of dirty garments with soap or detergents or other chemicals. However, modern piece of clothing washing is an innovation which is utilized to change the outlook, appearance, agreeableness and design of the instant articles of clothing produced using strong shading colored or color printed texture is called article of clothing washing. With the difference in time, human choice, demand, pieces of clothing structure and design is changing very rapidly. To fulfill the need of clients, articles of clothing producers are adjusting new advancements and procedures. Garments wash is an innovation, which is capable to meet the present necessities. To be or get one of a kind in outlook garment washing is exceptionally helpful way. Garment washing is normally done after stitching. Wash types principally relies upon the product types. For denim fabric heavy enzyme is required to wash where for knitted fabric light softener wash should be ok.

Since 1978, garments pre washing has turned out to be increasingly well known. It is an innovation by which outlook, size and style of articles of clothing are changed or altered is called pieces of clothing washing. Washing is mainly applied on denim and twill garments and any other casual garments.

1.1 Objectives of the report

The purpose of this Report is to identify the defect and changes due to different washing process. We likewise endeavor to discover the obligations and duties of a service holder as we will experience this circumstance soon. Another objective of this Report was to know about different garments washing process in details. This Report also includes the different defect occurred due to washing on Denim fabric.

The specific objectives of the study are describing as follows:

- To find out the defect of garments after washing.

- To know about the different types washing process in details.
- To know about different types of dry process of garment washing.
- To know about the different types of wet process of garments washing.
- To determine the changes that defect occurs on denim fabric due to different washing process.
- Observe the changes that happen on the sample due to washing process.
- Compare the changes, before and after washing.
- Find out the defect which is occurred due to washing.
- And find the remedies of this damage.

1.2 Limitation of report

There are some limitations that we have faced due to make this report:

- We did not get exact cooperation from the operators.
- We did not get enough time to investigate deeply.

2. Literature Review

2. Literature Review

2.1 Garments Washing

Typically article of garments washing implies cleaning of grimy piece of clothing with detergent and soap. But in textile industry garments washing means the technology which we used to modify the appearance of garments, outlook, comfort ability and fashion of the garments is called garments washing.

2.2 Historical background of garments washing

Garments washing has been utilizing for most recent 50 years in various nations around the globe. In any case in Bangladesh it was created in 1988. Before this washing is done in Hong Kong. In the wake of sewing the piece of clothing they are sent to Hong Kong for washing and afterward again import here for completing and pressing. So additional overhead expense was attracted, for example, cargo cost, washing cost, time utilization and so forth. But now a days garments washing is done in Bangladesh and even washing machines are produced locally.

2.3 Objective of garments washing

- ✓ Washing process of garment is done to create wash look appearance. After washing the garments create a new looks which seems the new touch of fashion.
- ✓ By the washing technique, faded/old look is created in the garment which also seems the best touch of garments.
- ✓ Washing technique create new fashion such as tagging, grinding, destroy, Blasting, whiskering, permanent wrinkle, deep dye, tie dye, p.p spray, hand crapping etc. Which is also seems the best touch of garments.
- ✓ The main and important function of washing is to reduce size materials as a result the garment become size free and become soft hand feel.
- ✓ To attract the customers/Buyer by different types of Fashionable washing and market developments.
- ✓ Any dirt, spot or germ if added in the garments during manufacturing is also removed due to washing.

2.4 Requirements of garments washing

- Sizing material should be remove therefore feels soft during use.
- It ought to be expelled any residue, dirt, spot, polluting influences or germs which is included in the garments during manufacturing.
- It should be attracted the clients and purchaser by utilizing distinctive sorts of stylish washing and market improvement.
- Should be created faded or old look appearance in the garments.
- It should be conceivable to wear specifically the piece of clothing subsequent to buying from the shop.
- Should be used new/ modern and updated machines.
- It should be relatively more beneficial than others.

2.5 Effect of garments washing

- Change the appearance of the pieces of clothing.
- Change in size.
- Change in shading.
- Change viewpoint of the garments.
- Change in comfort.
- Change in plan or design.
- Change in style etc.

2.6 Advantage of garments washing

- Evacuation of starch or size materials makes the fabrics delicate hand feel.
- Softness could be expanded by the expansion of softener exactly at the last phase of washing.
- Dirt, spots, impurities, gum etc. can be removed from the garments by washing.
- Wash garments could be worn directly after purchasing from the shop.

- To create new fashion and to create faded or old look appearance washing is done on the garments.
- During washing garment can be shrink but after washing there is no possibility to create this type of problem.
- By the washing of the garments drape ability and comfort ability are significantly increased.
- Compare to other factory, lower capital is required to set up a washing plant.
- Lower land spaces are required to set up a washing plant.

2.7 Limitation of garments washing

There are also some limitations of garments washing process like other process.

They are included as below-

- **Garments size change:**Size change occurs because of shrinkage properties of fabric. The measure of shrinkage properties of texture decides the size difference in the piece of clothing.
- **Size material is partly removed:**Unfixed colors may stay on the outside of the pieces of clothing and it is important to evacuate totally in the wake of washing.

2.8 Flow chart of garments washing

Garments received

↓

Count

↓

Quality check

↓

Garments sent to the dry process (If there's any dry process)

↓

Whiskering

↓

Grinding and destroy

↓

Hands scraping

↓

Hand sand tagging

↓

Batch

↓

Garments sent to wet process

↓

Garments sent to the dry process (If there's needed any more dry process)

↓

P.P spray (If the process needed)

↓

P.P sprayed garments sent to the wet process

↓

P.P sprayed garments loading into the washing machine

↓

Washing (After complete rest of the wet process)

↓

Hydro-extractor

↓

Drying

↓

Garments send to dry process (If there needed any more dry process)

↓

3D (If needed)

↓

Quality Check

↓

Packing

↓

Delivery

2.9 Types of garments washing

There are two types of washing process. They are-

i. Dry process (Mechanical process)
ii. Wet process (Chemical process)

2.10 Dry process (Mechanical Process)

The process which we applied on garments on dry condition is called dry process. Generally dry process is applied on unwashed garments. This wash process is done manually/ by hand. To apply this process different types of machine and apparatus are used. Such as chalk, pencil, emery paper, tag gun, whisker pattern, 3D machine etc. This process is done on garments because of new fashion and to create faded or old look appearance on garments.

There are various kinds of dry process. They are-

- Whisker
- Hand sand/ Brushing
- Destroy
- Grinding
- PP spray
- 3D (Crinkle)
- Tagging
- Hand scraping

2.10.1 Whiskering

This is the first process of dry process section and it is very important dry process for denim garments. First a whisker pattern is made for this process according to buyer requirement. And then the pattern put in the garments and removed the color from garments by sharp edge emery paper. After wash the garments we can see the pattern design mark onto the garments. And it is a new design and fashion.

Whisker can be done manually or by laser. For laser whisker, no need to make the pattern. A designer makes the design by the computer. And input the design on laser machine and whisker is done.

Figure 2.1: Whisker

2.10.2 Hand sand/Brushing

This is another important dry process for garments. Hand sand or brushing is done almost all the garments. To apply this process first we have to mark the area where we want to apply this process. It is done manually on garments and abrasive paper is used to complete the process. This process creates faded effect on the garments. This process will be perfectly visible after complete the wash.

Figure 2.2: Hand sand (Brushing)

2.10.3 Destroy

Destroy is the process by which we destroy a garments in a specific area according to buyer requirement design. In this modern age destroy process became very much popular for fashion. For this process first we have to make a destroy pattern and the have to select the area of garments where we want to apply this process. Destroy process is done by the destroy machine which is called pen grinding machine. It is done manually. It also can be done by the laser machine. To complete the destroy process an air flow is done on the destroyed area of the garments. After wash the garments we get a good destroy look of the garments.

Figure 2.3: Destroy

2.10.4 Grinding

This is also an important dry process for garments. By this process we will get the used effect on the garments. This process is done by the grinding machine. Generally this process is done on the edge side of the garments such as pocket, leg opening. In the event that pieces of clothing has two time wash that time we will wash it after first wash to maintain a strategic distance from harms of articles of clothing.

After wash we get a used look on the edge side of the garments. And now it is very popular fashion among the people.

Figure 2.4: Destroy

2.10.5 PP Spray

PP spray is very much important dry process in dry process section. PP means potassium permanganate. PP spray is done on the garments before and after enzyme wash. It can be done in different ways and it is done according to the buyer requirement such as all over PP or a specific area of the garments. PP is sprayed with a gun named PP spray gun with air pressure. This chemical is sprayed on the garments to remove the color and to create a white look appearance on the garments.

After wash the garments we can see the appearance clearly and perfectly.

Figure 2.5: PP spray

2.10.6 3D (Crinkle)

Crinkle is now most popular fashion. Crinkle means to squeeze the garments in some specific area like front side of the garments and back knee area. In this process two chemicals are use. They are resin and hardener. First we spray the resin on the mark area of the garments. And the clipped the garments and put it in the woven for curing at 150 degree Celsius.

Crinkle is done mainly three different ways. They are –

- ✓ Clipping
- ✓ Ironing
- ✓ 3D machine

Figure 2.6: Crinkle

2.10.7 Tagging

This is another dry process for garments. This process is done on unwashed garments. Generally tagging is done edge area of garments. It is done by fold the garments and then pin up by the plastic tag pin. Tag gun or tagging machine is used for this process. It can also be done by manually. Sometimes garments damages are occurred in this process by creating hole.

This effect is visible after wash the garments.

Figure 2.7: Tagging

2.10.8 Hand Scraping

Hand scraping process is very important dry process for garments. This process is applied on garments after whisker. First we have to mark the area where we want to apply this process. Here abrasive paper is used to scrap the garments. Mainly this process is used to remove the color from the garments. This process is done manually by hand. While scraping with hands on the garments pressure should be uniform. This process is applied instead of sand blasting process which is banned due to hazardous to health. After wash the garments we can get the desired effect.

2.11 Flow chart of dry process section

Garments received

↓

Whisker

↓

Hand scraping

↓

Tagging

↓

Destroy

↓

Grinding

↓

PP spray (Potassium per manganate spray)

↓

3D (Crinkle)

2.12 Wet process (Chemical Process)

The process where we use water and chemical to wash the garments is called wet process. Here we use different types of chemical to wash the garments and to get the desired quality.

In wet process section we apply some process (De-sizing, Enzyme, Bleach etc.) so that we can get quality garments and to get desired outlook. In this process garments go through the different chemical process to remove impurities from garments, to get new outlook, and to make it soft in

hand feel and ready the garments for buyer. Wet process of garments wash is very much important and without it we cannot even think about the denim garments to wear.

There are different types of wet wash process. They are-

- Normal wash
- Enzyme wash
- Stone wash
- Acid wash
- Silicon wash
- Bleach wash
- Super white wash
- Pigment wash
- Caustic wash
- Stone enzyme wash
- Tinting & Over dyeing
- Soft wash

This is the wet wash process which we used to wash the garments and to create a different style of fashion.

2.13 Flow chart of wet process (Chemical Process)

De-sizing

↓

Enzyme

↓

Cleaning

↓

Bleaching

↓

Neutralize

↓

Extracting

↓

Dryer

↓

P.P Neutralize

↓

Tinting

↓

Softening

↓

Extracting

↓

Dryer

2.13.1 De-Sizing

De-sizing is very much important for garments washing. This is the first procedure of wet process segment in garments washing. Main function of this process is to remove the size material from the garments. Different types of chemicals are used to run this process. They are tanon eco, soda ash, caustic soda, hydrogen per oxide etc. To complete the de-sizing process (50-60) degree temperature is needed.

2.13.2 Enzyme

This is the second step of garments washing in wet process section. The main purpose of this process is to match the required shade. And it is done by the acid or neutral enzyme. Without

this, there are different chemical are used in enzyme process such as, enzyme, powder eco, powder texo, super L etc. There are three types of enzyme process. They are- medium enzyme, light enzyme, heavy enzyme. In this process 45 degree temperature is needed.

2.13.3 Cleaning

After complete the enzyme process, the garments are cleaned by the cold water. It is done two or three times. The main purpose of cleaning is to remove the chemical from the garments which we used before and to clean the garments. It takes (3-5) minutes maximum.

2.13.4 Bleaching

This process is use to remove color from garments uniformly. Bleaching is done to acquire buyer approved shade. Different types of chemicals are used in this process. They are- KCL bleach, Japanese bleach, potash etc. Here (45-50) degree temperature is needed to complete this process.

2.13.5 Neutralize

The function of this process is to neutralize the bleaching chemical. To neutralize the bleaching chemical sodium meta-bi-sulphite or sodium hypo is used. In this process (50-60) degree temperature is needed.

2.13.6 Extracting

After complete the above processes the garments are sent to the hydro-extractor machine. The main purpose of this process is to remove extra water from the garments. And it is done by hydro-extractor machine. The RPM of this machine is 750. Here (2-4) minutes time is needed to complete the process.

2.13.7 Dryer

The garments are dried here and it is done by the gas dryer and steam dryer. Selection of dryer is depends upon the desired shade. For reddish shade gas dryer is used and for bluish shade steam dryer is used. In this process (50-80) degree temperature is needed.After complete this process the garments are sent to the dry section for PP spray.

2.13.8 Neutralize

The function of this process is to neutralize the PP sprayed garment. To neutralize the PP sprayed garments sodium meta-bi-sulphite and sodium hypo is used.

2.13.9 Tinting

Generally to increase the attractiveness of garments this process is used. For matching with the desired shade tinting process also can be use.

2.13.10 Softening

Softening is very important process for garments wash. This process makes the garment comfortable to wear. The function of this process is to increase the softness properties of garments. This process can be done by using different types of softener such as flax softener, cationic softener and anionic softener.

2.14 Chemical used in washing plant

There are different types of chemical used in washing plant. They are-

1. Enzyme
2. Detergent
3. Acetic acid
4. Anti-stain
5. Bleaching powder
6. Sodium hypo sulphite
7. Caustic soda
8. Soda ash
9. Sodium bi-carbonate
10. Potassium per manganate
11. Softener
12. Micro emulsion silicon
13. Salt
14. Buffer
15. Hydrogen per oxide
16. Stabilizer
17. Fixing agent
18. Optical brightener
19. Resin

20. Sodium meta bi-sulphate
21. De-sizing agent
22. Anti-creasing agent
23. EPQ
24. Hardener

2.15 Function of chemical in washing plant

2.15.1 Enzyme

Enzyme is used during enzyme wash of garments. The main function of enzyme is to hydrolysis the cellulose. Enzyme first attack projecting fiber and hydrolyze them, after that enzyme attack yarn portion inside the fabric and hydrolyze them partly. As a result, colors come out from the yarn and create a faded effect on garments.

2.15.2 Detergent

Detergent is a chemical which is used in the continuous and discontinuous pretreatment. Detergent is used for all kind of fibers and their blends. The main function of detergent is to remove impurities, mineral oil contamination, dirts and size material from the garments.

2.15.3 Acetic Acid

Acetic acid is very important for wash bath. Acetic acid is used in wash bath to control the pH value. The main function of acetic acid is to neutralize the garments from alkaline condition. So that, every chemicals can work properly without occuring any damage.

2.15.4 Anti Staining Agent

Anti-staining agent is very important chemical a washing plant. This chemical is used in wash bath to protect garments from stain during washing. This chemical not only works to protect garments from stain but also work as anti-creasing agent. This chemical protects garments from creasing.

2.15.5 Bleaching Powder

Bleaching powder is an oxidizing agent. This chemical is very much important for wash bath to achieve required effect on garments. The main function of bleaching powder is to remove color from the garments. In washing plant KCL, Japanese bleach etc used as bleaching powder.

2.15.6 Sodium Hypo Sulphite

This chemical is used in wash bath to neutralize the garments from chlorine bleach.

2.15.7 Caustic Soda

Caustic soda is a chemical which can clean the garments without change the garments color and it good cleaning power. The main function of caustic soda is to create faded or old look appearance on garments.

2.15.8 Soda Ash

Soda ash is used in wash bath to uniform bleaching action during bleaching. Soda ash also has a good cleaning power and the main function of soda ash is to help to create color fading effect on garments. Soda ash is also use to fix the dye on garments in dye bath.

2.15.9 Sodium Bi-Carbonate

Sodium bi-carbonate is used in wash bath to create light effect on denim garments. This chemical is used because it has a power to color out from garments in short time. Sodium bi-carbonate is added washing plant during bleaching. By the use of this chemical production is increased and cost is low.

2.15.10 Potassium PerManganate

Generally, this chemical is used in acid wash. The main function of potassium per manganate is to color out from the denim garments. Potassium per manganate is use with pumic stone. It is also used in PP spray chamber and sprayed by PP spray gun to create white effect on garments.

2.15.11 Softener

The function of softener is to create soft hand feel property of garments and it also provides excellent lubricating properties. In washing plant flax softener is used to do this operation.

2.15.12 Micro Emulsion Silicon

Amino silicon is a material completing operator comprising of chiefly of amino adjusted silicon. It is used as a textile finishing agent. When it is applied on fabrics, it gives durable delicate quality, lubricity, flexible handle, anti-pilling, dimensional steadiness, tear opposition and texture to be cut and sewn all the more effectively permits and improving wear and simple consideration properties.

2.15.13 Salt
Salt is a chemical which helps to exhaust dye into the fiber.

2.15.14 Buffer
The main function of buffer solution is to control pH of washing bath. This solution is used in enzyme bath, softening bath and de-sizing bath.

2.15.15 Hydrogen Peroxide
Hydrogen per oxide is a chemical which discolor the coloring garments and creates a fading effect on garments. This chemical is used to remove the grey color from the garments. It is used in scouring and bleaching bath for white or ready for dyeing gray fabric garments.

2.15.16 Stabilizer
Hydrogen per oxide works above 90°c temperature, when temperature is raised above 90°c then hydrogen per oxide starts to break. Here, the function of stabilizer is to protect hydrogen per oxide to break so that it can work smoothly.

2.15.17 Fixing Agent
The main function of fixing agent is to fix the unfixed dyes on the fabric. If the dyes are fixed on the garments properly color fastness properties and rubbing properties will be increase.

2.15.18 Optical Brightener
The function of optical brightener is to improve the brightness of garments. This chemical is used when we need extreme white garments. In washing plant we use two types of brightener such as red brightener and blue brightener.

2.15.19 Resin
Resin is high effectiveness material pitch dependent on etherified dimethylolglyoxalinmonoureineurea. The function of resin is to create semi-permanent crease on denim garments as well as other cellulosic fabrics. Resin can also be used for cotton and polyester fabrics. Texture holds delicate handle in the wake of washing.

2.15.20 Sodium Meta Bi-Sulphite
This chemical is very important for washing bath. It is used for neutralize the garments. The function of sodium Meta bi-sulphite in wash bath is to neutralize the garments from potassium per manganate (PP). After use this chemical faded effect created on garments.

2.15.21 De-Sizing Agent

De-sizing agent is very important chemical for washing plant. It can be called cleaning agent. This chemical is used in wash bath at the start of garments washing. De-sizing agent is utilized to expel for the most part starches, waxes, fats, gelatins and minerals from the pieces of clothing. De-sizing agent is also use to remove unfixed indigo dyes from the garments.

2.15.22 Anti Creasing Agent

This is another important chemical for washing plant. Anti-creasing agent is used in washing plant to protect crease on garments. This is generally used for hard garments such as denim garments.

2.15.23 EPQ

It is one of the most important chemical for wash bath. This chemical is used almost every steps of washing. The function of EPQ is to protect lycra from damage. If the lycra is damaged, it is not recoverable. So this is very important for washing plant.

2.15.24 Hardener

This chemical is used in dry process section. The function of this chemical is to create a permanent crease on the garments. Generally it is done on denim garments.

2.16 Defect of garments

A garments piece that does not meet the client prerequisite is called defective garments. A defective garments can also be characterized another way that an article of clothing which has unsatisfactory imperfections or blemishes is a defective piece.

There are various types of defects are seen in the garments. They are-

- Presence of broken needle
- Presence of insects in the garments
- Lycra out
- Patta/ Barre mark
- Needle mark
- Hole
- Sinker mark

- Crease mark
- Missing yarn
- Slub, etc.

2.17 Types of defect

Defects are categorized according to visually of defects. There are mainly three types of defect. They are-

1. Critical defect
2. Major defect
3. Minor defect

2.17.1 Critical defect

Critical defect of a garment can be defined which is harmful, unsafe and hazardous for end users or that violet the mandatory provision is called critical defect of garments.

Example: Presence of insects in the garments, presence of broken needle in the garments etc.

2.17.2 Major defect

The defect which is available in the garments may not lead the garments be dismissed rather subsequent to evacuating this imperfection piece of clothing are executed for shipment is called major defect. Major defect should not be above 3% depending on buyers requirements.

Example: Broken stitch, stain etc.

2.17.3 Minor defect

The defects which are available in the garments cannot lead the pieces of clothing be dismissed rather if little amount of this imperfection are available in the garments, garments can be acknowledged for shipment. Over 5% minor defect are not permitted relying upon purchasers prerequisites.

Example: Minor stain, puckering in small scale etc.

2.18 AQL chart

Footwear Industry Standard Final Inspection Sampling Plan (Normal)*								
Lot Size or Quantity Audited	Acceptable Quality Level (AQL) Level							
	1.5		2.5		4		6.5	
	Inspect	Accept	Inspect	Accept	Inspect	Accept	Inspect	Accept
Less than 150	20	1	20	1	20	2	20	3
151 – 280	32	1	32	2	32	3	32	5
281 – 500	50	2	50	3	50	5	50	7
501 – 1,200	80	3	80	5	80	7	80	10
1,201 – 3,200	125	5	125	7	125	10	125	14
3,201 – 10,000	200	7	200	10	200	14	200	21
10,001 – 35,000	315	10	315	14	315	21	315	21
35,001 – 150,000	500	14	500	21	500	21	500	21
150,001 – 500,000	800	21	800	21	800	21	800	21
500,001&Over	1250	21	1250	21	1250	21	1250	21

3. Methodology

3. Methodology

3.1 Data Collection

We have collected secondary data from a washing plant. The industries from where we collected our data named Confidence Industries Limited.

We found two types of washing report. They are-

- ✓ In line inspection report
- ✓ Final inspection report

3.1.1 In Line Inspection

In line inspection implies checking nature of the item in the process as opposed to checking toward the finish of the procedure when item is totally washed.

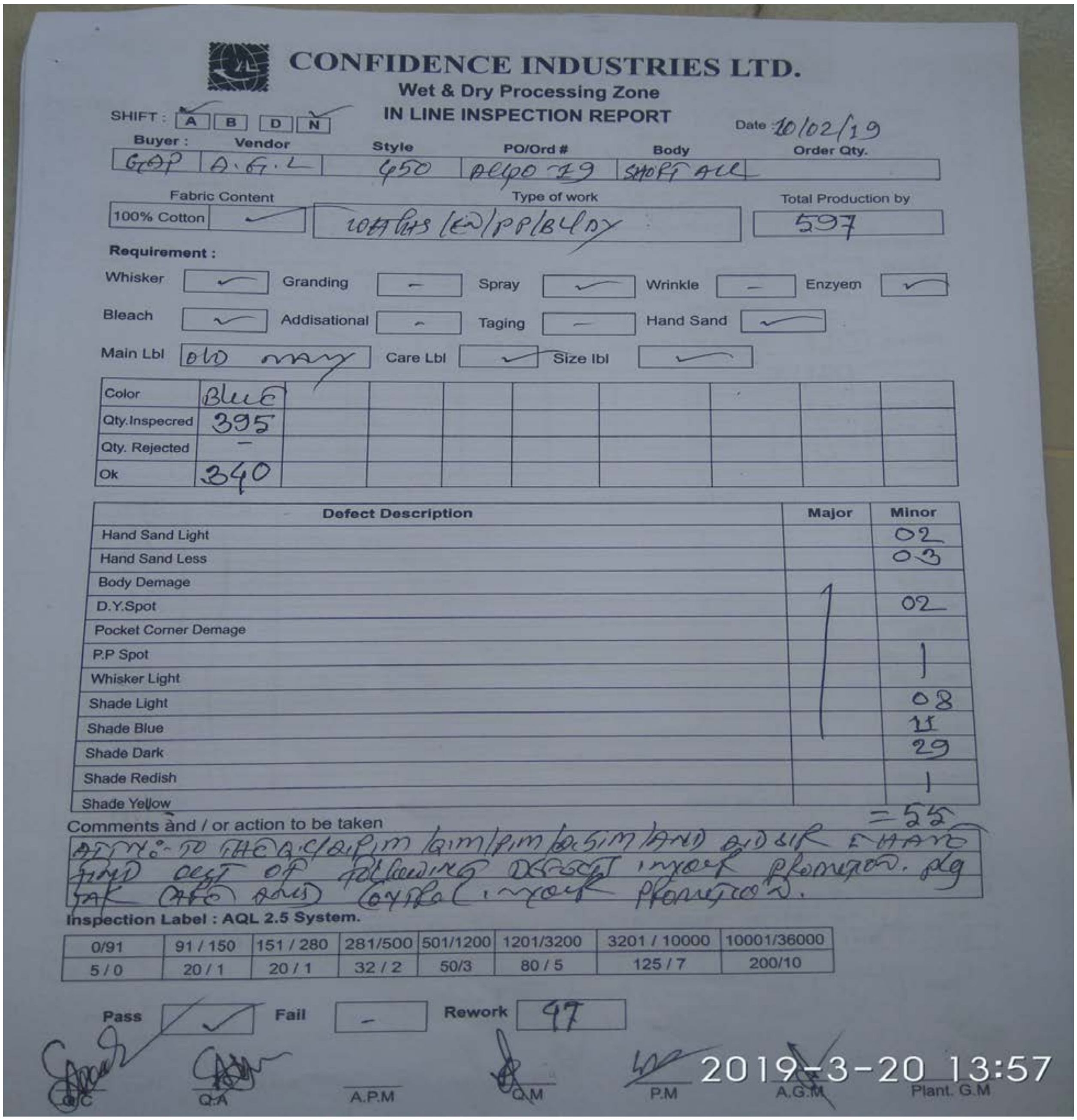
The fault which we found in line inspection report can be recover and rework.

3.1.2 Final Inspection

Final inspection report is the last activity of the quality section and it done before the delivery of the finished garments.

The defect or fault which we found in this report can't be recovery and it will go through the delivery.

3.2 In Line Inspection Report



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A B D N

Date 10/02/19

Buyer	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	450		SHORT ALL	

Fabric Content: 100% Cotton

Type of work

Total Production by: 597

Requirement :

Whisker, Granding, Spray, Wrinkle, Enzyem

Bleach, Addisational, Taging, Hand Sand

Main Lbl: OLD NAVY; Care Lbl; Size lbl

Color	Blue								
Qty.Inspecred	395								
Qty. Rejected	–								
Ok	340								

Defect Description	Major	Minor
Hand Sand Light		02
Hand Sand Less		03
Body Demage		
D.Y.Spot		02
Pocket Corner Demage		
P.P Spot		1
Whisker Light		
Shade Light		08
Shade Blue		11
Shade Dark		29
Shade Redish		1
Shade Yellow		
		= 55

Comments and / or action to be taken

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 97

Q/C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

2019-3-20 13:57

Fig: 3.1 Report No. 1

Summary of report: 01

Buyer Name: GAP

Vendor: A.G.L

Style No: 2387450

Garments Color: Blue

Total Quantity Inspected: 395

Total Pass Quantity: 340

Total Defect Quantity: 55

Total Defects: 13.92%

Types of defect of this report:

Hand Sand Light: 02 (3.63%)

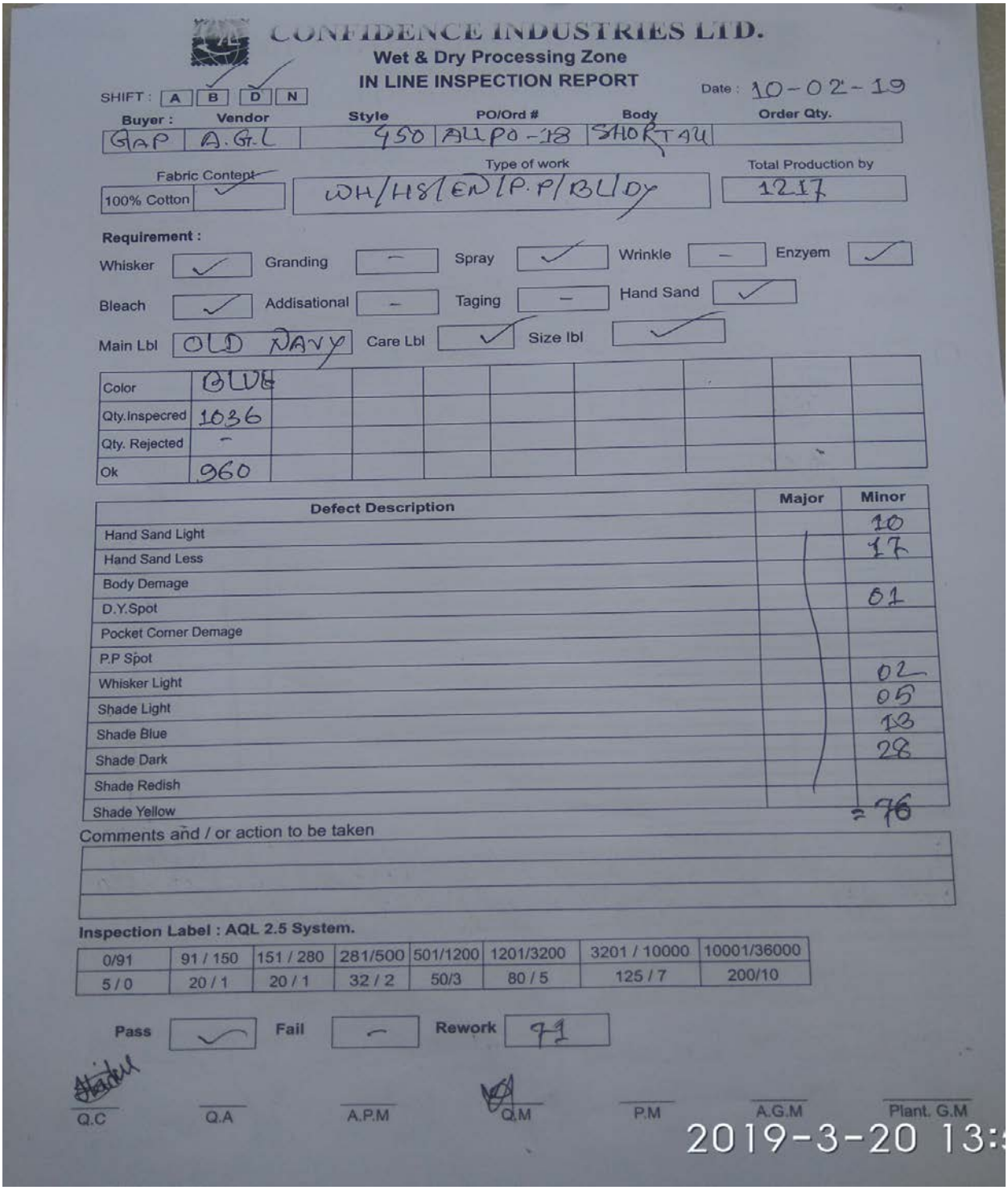
Hand Sand Less: 03 (5.45%)

Dye Spot: 02 (3.63%)

Shade Light: 08 (14.54%)

Shade Blue: 11 (20%)

Shade Dark: 29 (52.72%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

Date : 10-02-19

SHIFT : A B D N

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	450	ALL PO-18	SHORT 4/4	

Fabric Content: 100% Cotton

Type of work: WH/HS/EMB/P.P/BLDY

Total Production by: 1217

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE							
Qty.Inspecred	1036							
Qty. Rejected	–							
Ok	960							

Defect Description	Major	Minor
Hand Sand Light		10
Hand Sand Less		17
Body Demage		
D.Y.Spot		01
Pocket Corner Demage		
P.P Spot		
Whisker Light		02
Shade Light		05
Shade Blue		13
Shade Dark		28
Shade Redish		
Shade Yellow		
		= 76

Comments and / or action to be taken

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 71

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

2019-3-20 13:

Fig: 3.2 Report No. 2

Summary of report: 02

Buyer Name: GAP

Vendor: A.G.L

Style No: 2387450

Garments Color: Blue

Total Quantity Inspected: 1036

Total Pass Quantity: 960

Total Defect Quantity: 76

Total Defects: 7.33%

Types of defect of this report:

Hand Sand Light: 10 (13.15%)

Hand Sand Less: 17 (22.36%)

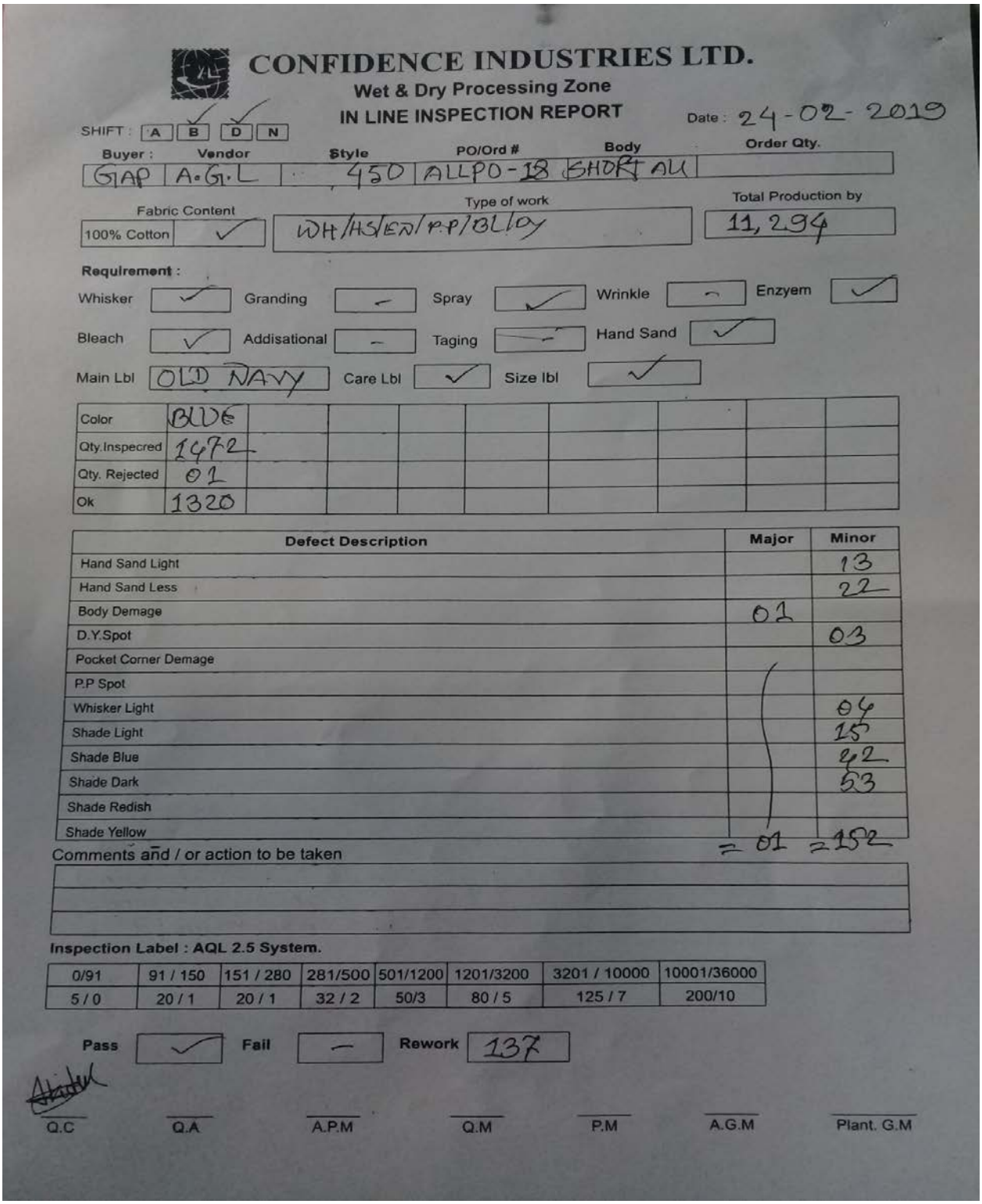
Dye Spot: 01 (1.31%)

Whisker Light: 02 (2.63%)

Shade Light: 05 (6.57%)

Shade Blue: 13 (17.10%)

Shade Dark: 28 (36.84%)



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Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

Date : 24-02-2019

SHIFT : A ✓B ✓D N

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	450	ALLPO-18	SHORT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WH/HS/EN/P.P/BLDy	11,294

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE								
Qty.Inspecred	1472								
Qty. Rejected	01								
Ok	1320								

Defect Description	Major	Minor
Hand Sand Light		13
Hand Sand Less		22
Body Demage	01	
D.Y.Spot		03
Pocket Corner Demage		
P.P Spot		
Whisker Light		04
Shade Light		15
Shade Blue		42
Shade Dark		53
Shade Redish		
Shade Yellow		
	= 01	= 152

Comments and / or action to be taken

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 137

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.3 Report No. 3

Summary of report: 03

Buyer Name: GAP

Vendor: A.G.L

Style No: 2387450

Garments Color: Blue

Total Quantity Inspected: 1472

Total Pass Quantity: 1320

Reject Quantity: 01

Total Defect Quantity: 152

Total Defects: 10.32%

Types of defect of this report:

Hand Sand Light: 13 (8.55%)

Hand Sand Less: 22 (14.47%)

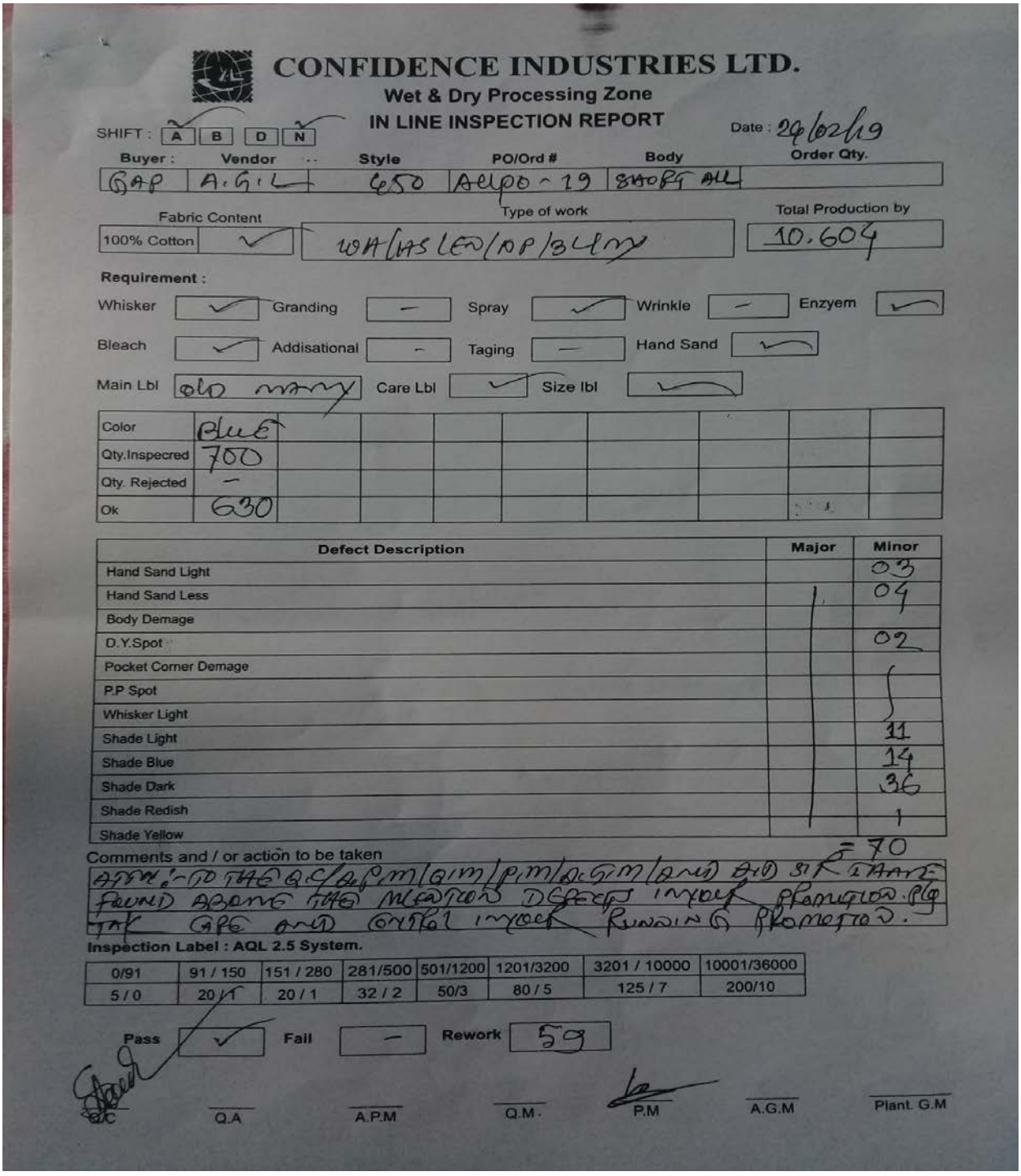
Dye Spot: 03 (1.97%)

Whisker Light: 04 (2.63%)

Shade Light: 15 (9.87%)

Shade Blue: 42 (27.63%)

Shade Dark: 53 (34.87%)



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Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓ B D N ✓ Date : 24/02/19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	650	AGPO-19	STRAIGHT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WASH (HAS LEG/OP/BACK)	10,604

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	old many	Care Lbl	✓	Size lbl	✓				

Color	Blue								
Qty.Inspecred	700								
Qty. Rejected	–								
Ok	630								

Defect Description	Major	Minor
Hand Sand Light		03
Hand Sand Less		04
Body Demage		
D.Y.Spot		02
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		11
Shade Blue		14
Shade Dark		36
Shade Redish		
Shade Yellow		1
		= 70

Comments and / or action to be taken

AFTER TO THE Q.C/A.P.M/Q.M/P.M/A.G.M/AND DID SIR I HAVE FOUND ABOVE THE MEASUREMENT DEFECTS INFORM PRODUCTION PLG TAK CARE AND CONTROL INFORM RUNNING PRODUCTION.

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 59

Q.C Q.A A.P.M Q.M. P.M A.G.M Plant. G.M

Fig: 3.4 Report No. 4

Summary of report: 04

Buyer Name: GAP

Vendor: A.G.L

Style No: 2387450

Garments Color: Blue

Total Quantity Inspected: 700

Total Pass Quantity: 630

Total Defect Quantity: 70

Total Defects: 10%

Types of defect of this report:

Hand Sand Light: 03 (4.28%)

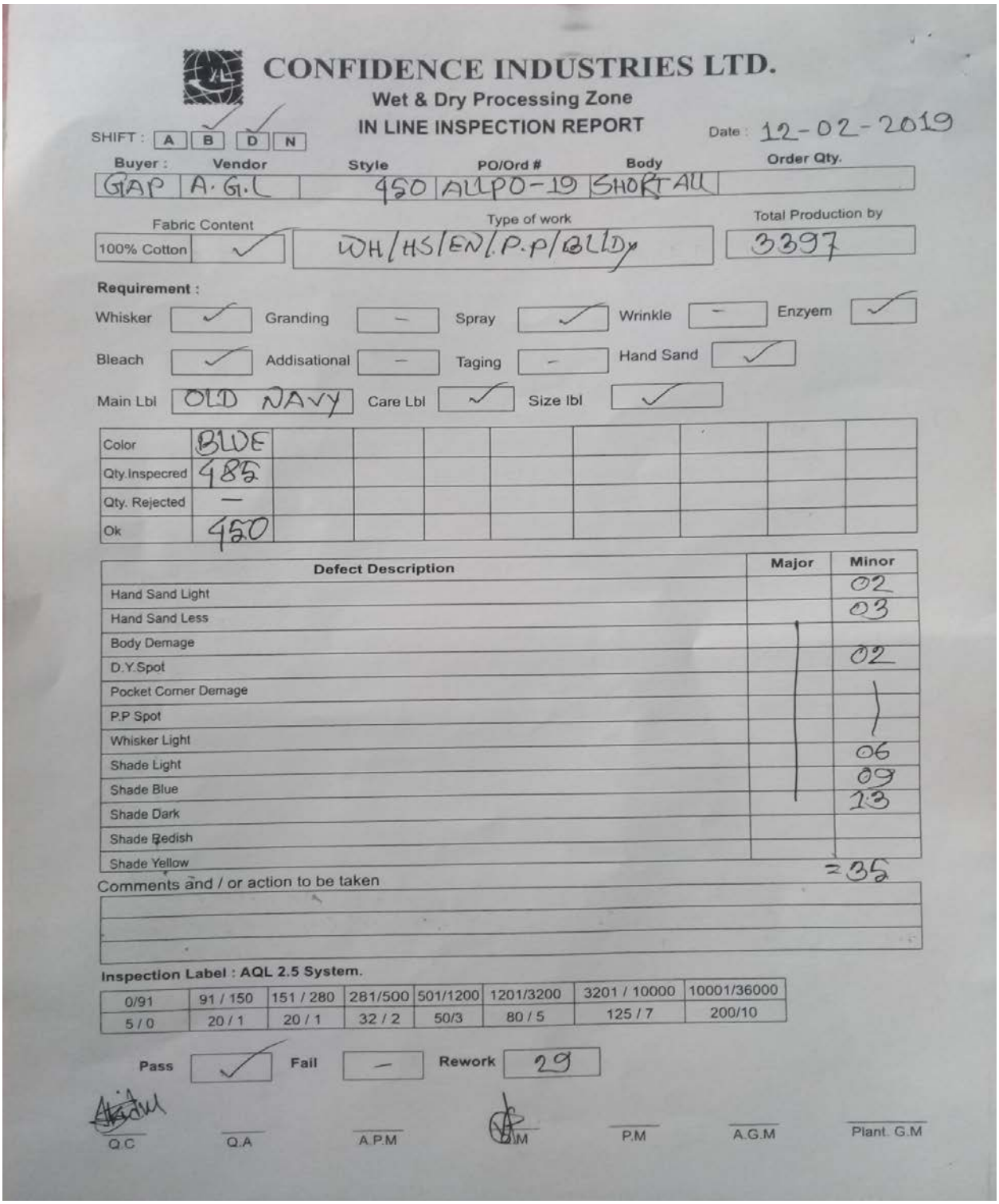
Hand Sand Less: 04 (5.71%)

Dye Spot: 02 (2.85%)

Shade Light: 11 (15.71%)

Shade Blue: 14 (20%)

Shade Dark: 36 (51.42%)



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Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓B ✓D N Date : 12-02-2019

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	450	ALLPO-19	SHORT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WH/HS/EN/P.P/BLDY	3397

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE								
Qty.Inspecred	485								
Qty. Rejected	–								
Ok	450								

Defect Description	Major	Minor
Hand Sand Light		02
Hand Sand Less		03
Body Demage		
D.Y.Spot		02
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		06
Shade Blue		09
Shade Dark		13
Shade Redish		
Shade Yellow		
		=35

Comments and / or action to be taken

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 29

Q.C Q.A A.P.M P.M A.G.M Plant. G.M

Fig: 3.5 Report No. 5

Summary of report: 05

Buyer Name: GAP

Vendor: A.G.L

Style No: 2387450

Garments Color: Blue

Total Quantity Inspected: 485

Total Pass Quantity: 450

Total Defect Quantity: 35

Total Defects: 7.21%

Types of defect of this report:

Hand Sand Light: 02 (5.71%)

Hand Sand Less: 03 (8.57%)

Dye Spot: 02 (5.71%)

Shade Light: 06 (17.14%)

Shade Blue: 09 (25.71%)

Shade Dark: 13 (37.14%)

CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A B D N

Date 12/02/19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	650	ALPO-19	SHORT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WH/AS/EN/PP/BLDY	3197

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE								
Qty.Inspecred	303								
Qty. Rejected	–								
Ok	250								

Defect Description	Major	Minor
Hand Sand Light		02
Hand Sand Less		03
Body Demage		
D.Y.Spot		01
Pocket Corner Demage		
P.P Spot		/
Whisker Light		
Shade Light		12
Shade Blue		14
Shade Dark		21
Shade Redish		/
Shade Yellow		/
		= 53

Comments and / or action to be taken

ATTN:- TO THE Q.C/Q.P.M/Q.M/P.M/Q.G.M/AND DID SIR I HAVE FOUND ABOVE THE MENTION DEFECTS, MAJOR PROBLEM. PLS TAK CARE AND CONTROL MAJOR RUNNING PROBLEMS.

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ **Fail** – **Rework** 41

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.6 Report No. 6

Summary of report: 06

Buyer Name: GAP

Vendor: A.G.L

Style No: 2387450

Garments Color: Blue

Total Quantity Inspected: 303

Total Pass Quantity: 250

Total Defect Quantity: 53

Total Defects: 17.49%

Types of defect of this report:

Hand Sand Light: 02 (3.77%)

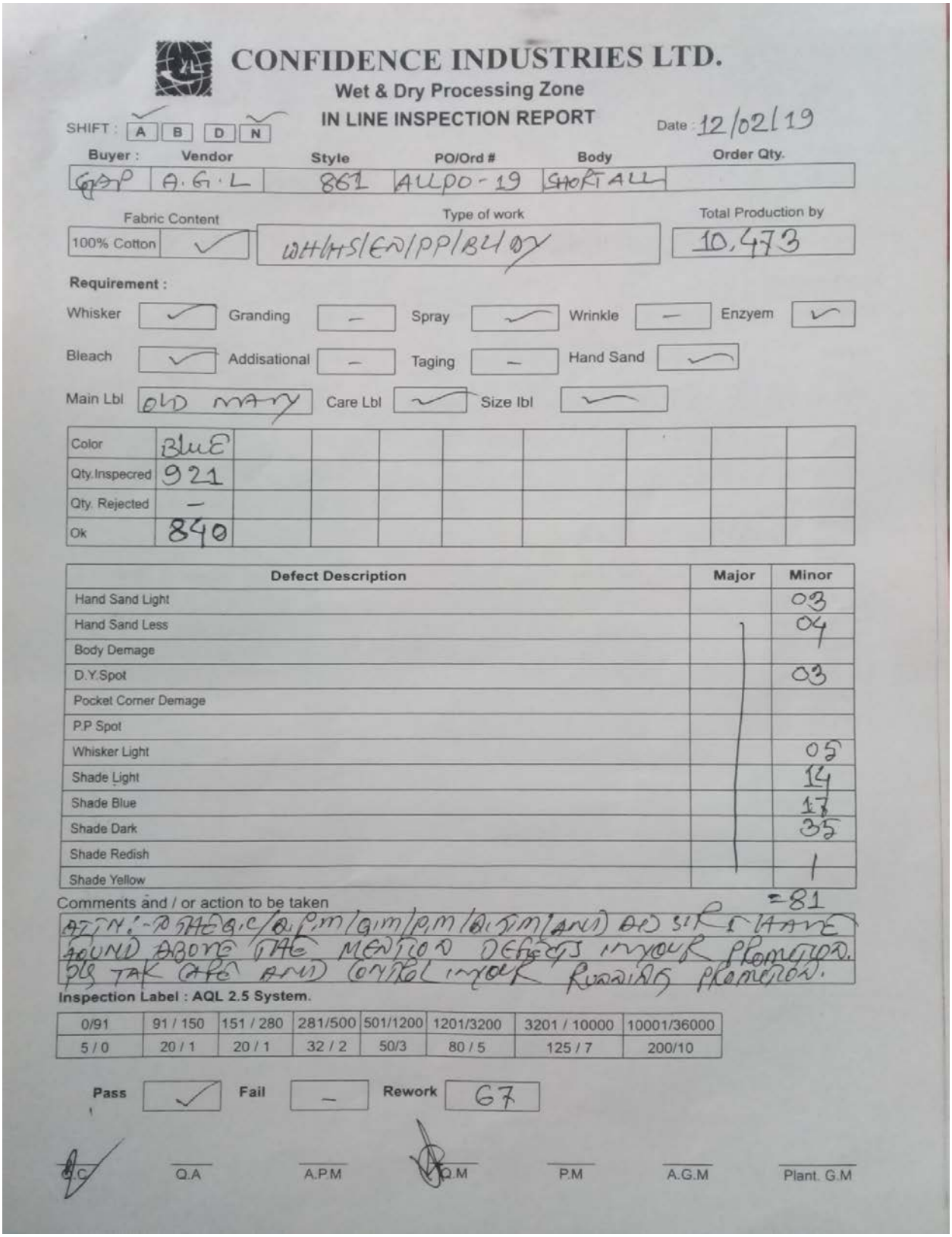
Hand Sand Less: 03 (5.67%)

Dye Spot: 01 (1.89%)

Shade Light: 12 (22.64%)

Shade Blue: 14 (26.41%)

Shade Dark: 21 (39.62%)



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Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A B D N

Date : 12/02/19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	861	ALLPO-19	SHORT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WH/HS/EM/PP/BL/DY	10,473

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD MARY	Care Lbl	✓	Size lbl	✓				

Color	BLUE									
Qty.Inspecred	921									
Qty. Rejected	–									
Ok	840									

Defect Description	Major	Minor
Hand Sand Light		03
Hand Sand Less		04
Body Demage		
D.Y.Spot		03
Pocket Corner Demage		
P.P Spot		
Whisker Light		05
Shade Light		14
Shade Blue		17
Shade Dark		35
Shade Redish		
Shade Yellow		1
		=81

Comments and / or action to be taken

ATTN:- PRODUCTION/QUALITY/MAINTENANCE AND SIL TEAM
FOUND ABOVE THE MENTIOD DEFECTS IN YOUR PRODUCTION.
PLS TAKE ACTION AND CONTROL IN YOUR RUNNING PRODUCTION.

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ **Fail** – **Rework** 67

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.7 Report No. 7

Summary of report: 07

Buyer Name: GAP

Vendor: A.G.L

Style No: 5367861

Garments Color: Blue

Total Quantity Inspected: 921

Total Pass Quantity: 840

Total Defect Quantity: 81

Total Defects: 8.79%

Types of defect of this report:

Hand Sand Light: 03 (3.70%)

Hand Sand Less: 04 (4.93%)

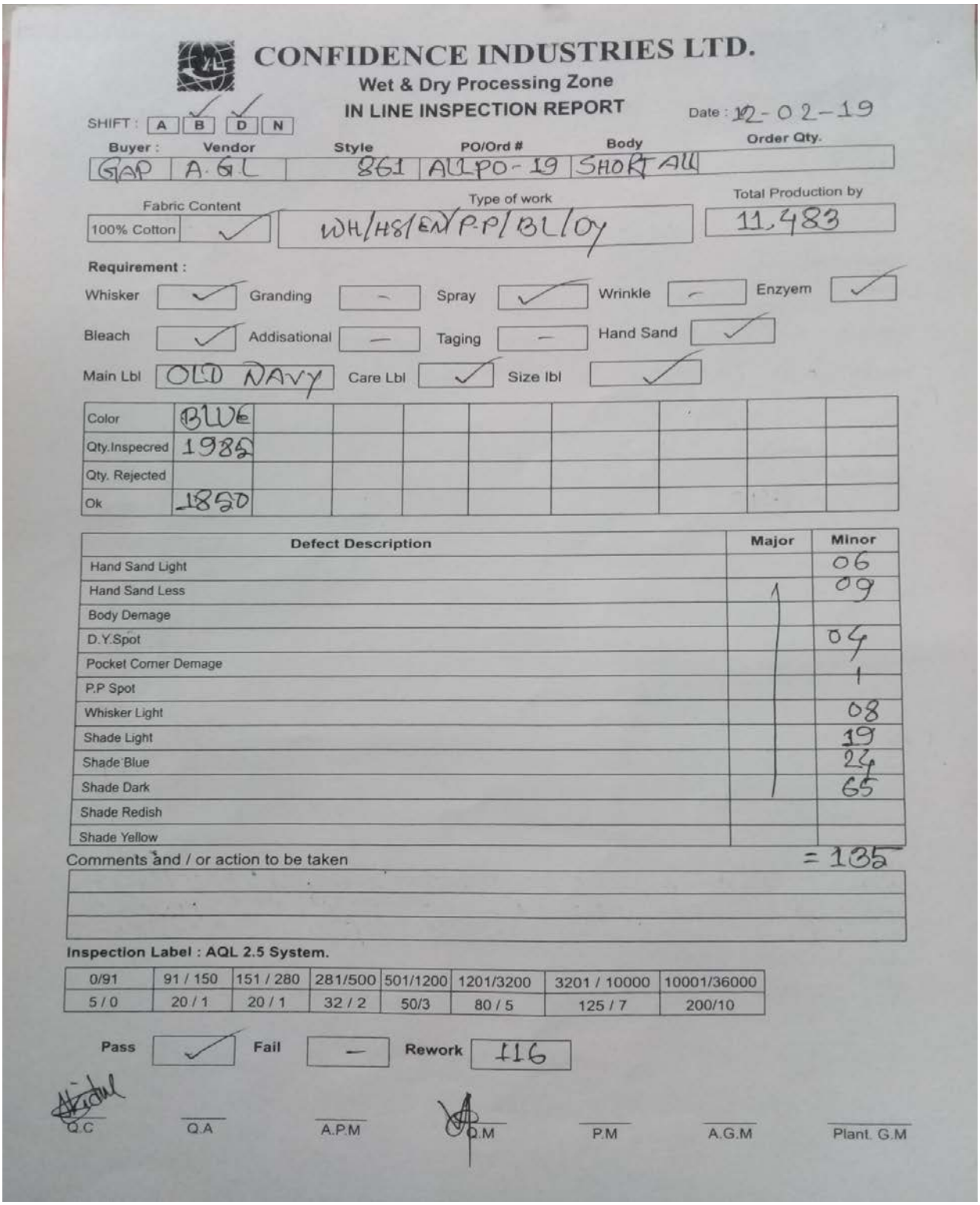
Dye Spot: 03 (3.70%)

Whisker Light: 05 (6.17%)

Shade Light: 14 (17.28%)

Shade Blue: 17 (20.99%)

Shade Dark: 35 (43.20%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓B D ✓D N Date : 12-02-19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	861	ALLPO-19	SHORT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WH/HS/EN/PP/BL/OY	11,483

Requirement :

Whisker ✓ Granding – Spray ✓ Wrinkle – Enzyem ✓

Bleach ✓ Addisational – Taging – Hand Sand ✓

Main Lbl OLD NAVY Care Lbl ✓ Size lbl ✓

Color	BLUE								
Qty.Inspecred	1985								
Qty. Rejected									
Ok	1850								

Defect Description	Major	Minor
Hand Sand Light		06
Hand Sand Less	1	09
Body Demage		
D.Y.Spot		04
Pocket Corner Demage		1
P.P Spot		
Whisker Light		08
Shade Light		19
Shade Blue		24
Shade Dark		65
Shade Redish		
Shade Yellow		

Comments and / or action to be taken = 135

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 116

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.8 Report No. 8

Summary of report: 08

Buyer Name: GAP

Vendor: A.G.L

Style No: 5367861

Garments Color: Blue

Total Quantity Inspected: 1985

Total Pass Quantity: 1850

Total Defect Quantity: 135

Total Defects: 6.80%

Types of defect of this report:

Hand Sand Light: 06 (4.45%)

Hand Sand Less: 09 (6.67%)

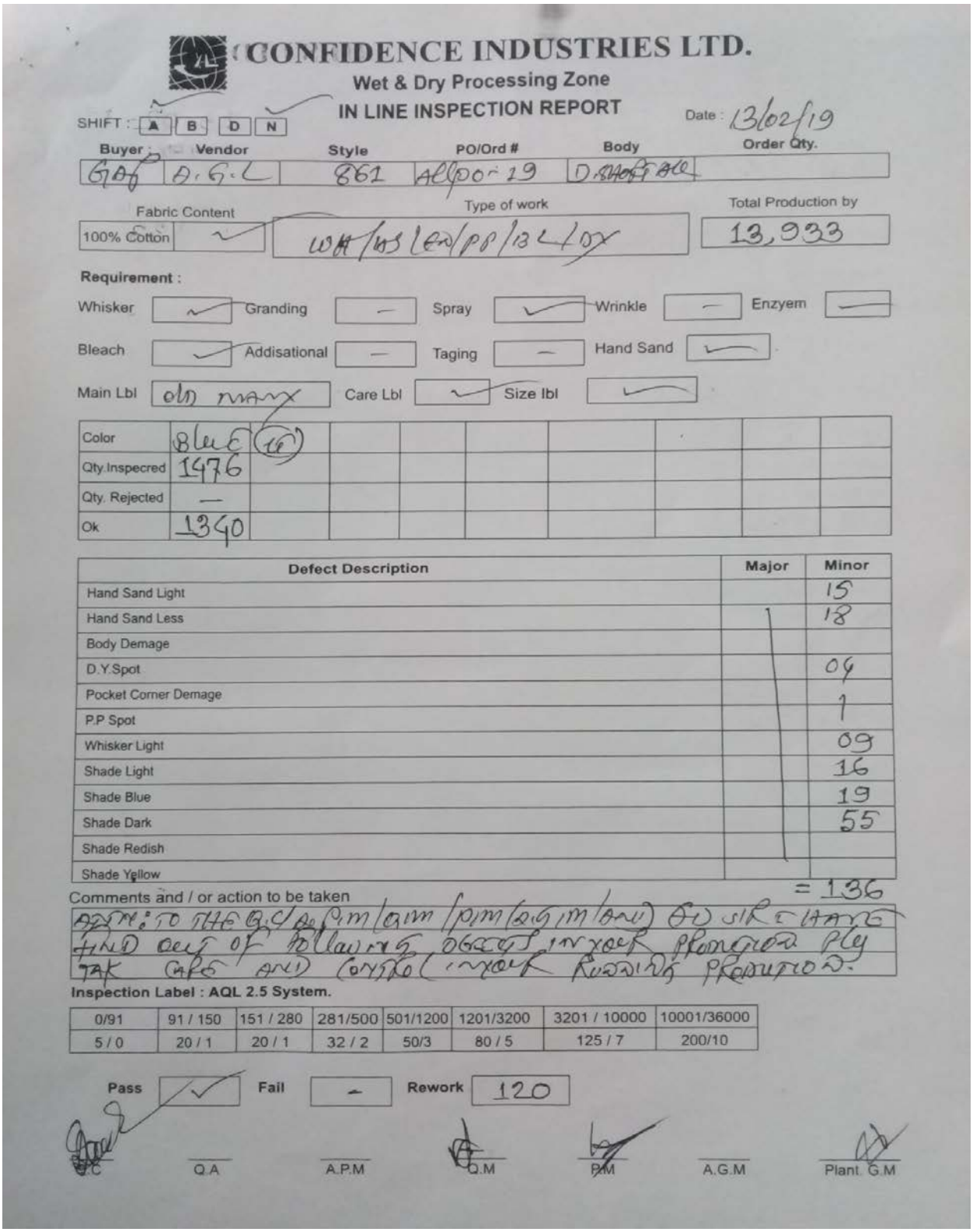
Dye Spot: 04 (2.96%)

Whisker Light: 08 (5.92%)

Shade Light: 19 (14.07%)

Shade Blue: 24 (17.78%)

Shade Dark: 65 (48.14%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

Date : 13/02/19

SHIFT : A B D N

Buyer	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	D.G.L	861	ALPO-19	DENIM BOTTOM	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WASH/HS/LEW/PP/BL/DX	13,933

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	–
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	old many	Care Lbl	✓	Size lbl	✓				

Color	BLUE (16)								
Qty.Inspecred	1476								
Qty. Rejected	–								
Ok	1340								

Defect Description	Major	Minor
Hand Sand Light		15
Hand Sand Less		18
Body Demage		
D.Y.Spot		04
Pocket Corner Demage		1
P.P Spot		
Whisker Light		09
Shade Light		16
Shade Blue		19
Shade Dark		55
Shade Redish		
Shade Yellow		

= 136

Comments and / or action to be taken

ATTN: TO THE Q.C (1pm/2pm/3pm/4pm/5pm) DU SIR CHANGE AND OUT OF FOLLOWING DEFECTS IN YOUR PRODUCTION PLY TAK CARE AND CONTROL IN YOUR RUNNING PRODUCTION.

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 120

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.9 Report No. 9

Summary of report: 09

Buyer Name: GAP

Vendor: A.G.L

Style No: 5367861

Garments Color: Blue

Total Quantity Inspected: 1476

Total Pass Quantity: 1340

Total Defect Quantity: 136

Total Defects: 9.21%

Types of defect of this report:

Hand Sand Light: 15 (11.02%)

Hand Sand Less: 18 (13.23%)

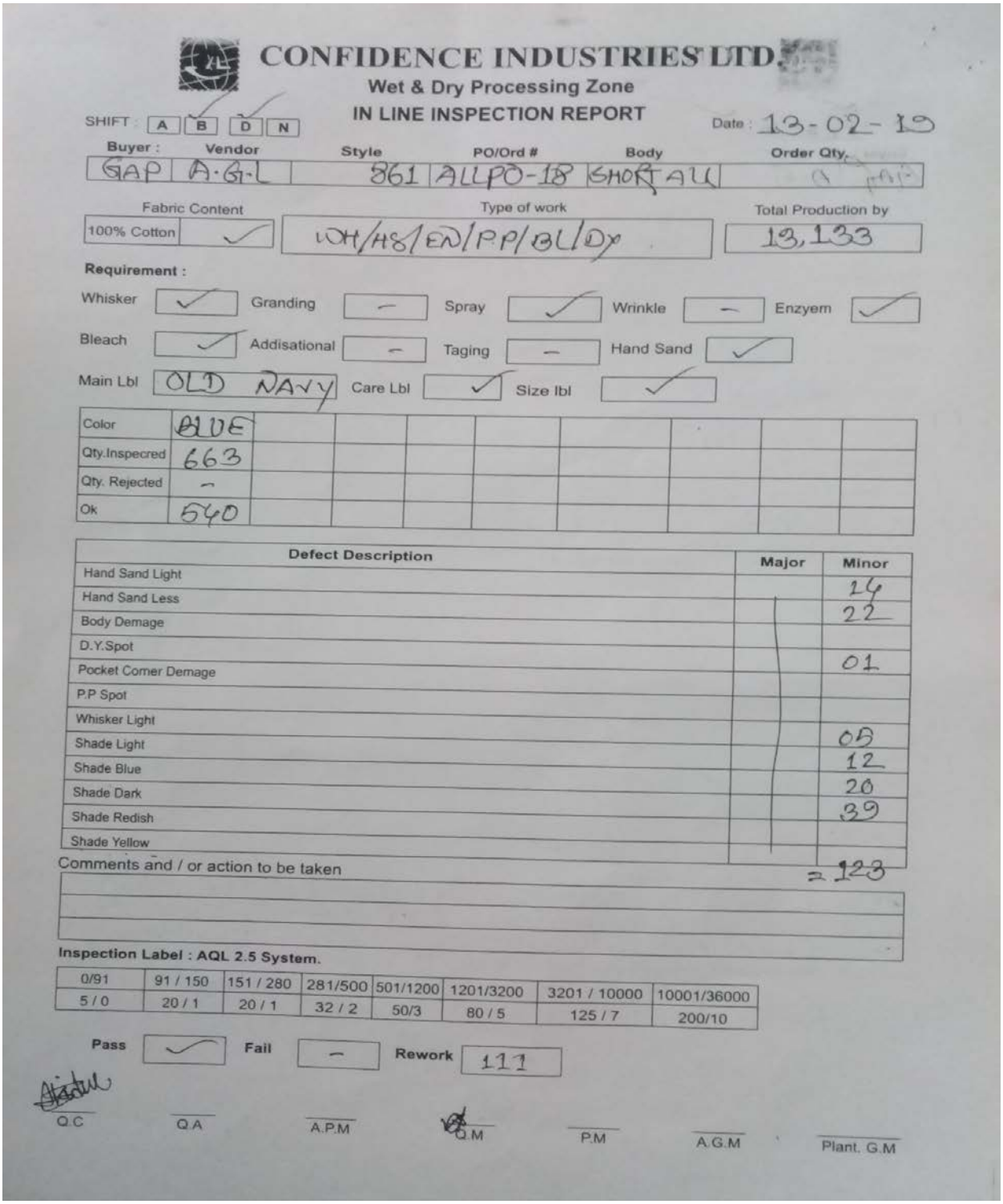
Dye Spot: 04 (2.94%)

Whisker Light: 09 (6.61%)

Shade Light: 16 (11.76%)

Shade Blue: 19 (13.98%)

Shade Dark: 55 (40.44%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A B D N

Date : 13-02-19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	861	ALLPO-18	SHORT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	LOH/HS/EN/PP/BL/DX	13,133

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE								
Qty.Inspecred	663								
Qty. Rejected	–								
Ok	540								

Defect Description	Major	Minor
Hand Sand Light		14
Hand Sand Less		22
Body Demage		
D.Y.Spot		01
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		05
Shade Blue		12
Shade Dark		20
Shade Redish		39
Shade Yellow		
		= 123

Comments and / or action to be taken

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 111

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.10Report No. 10

Summary of report: 10

Buyer Name: GAP

Vendor: A.G.L

Style No: 5367861

Garments Color: Blue

Total Quantity Inspected: 663

Total Pass Quantity: 540

Total Defect Quantity: 123

Total Defects: 18.55%

Types of defect of this report:

Hand Sand Light: 14 (11.38%)

Hand Sand Less: 22 (17.89%)

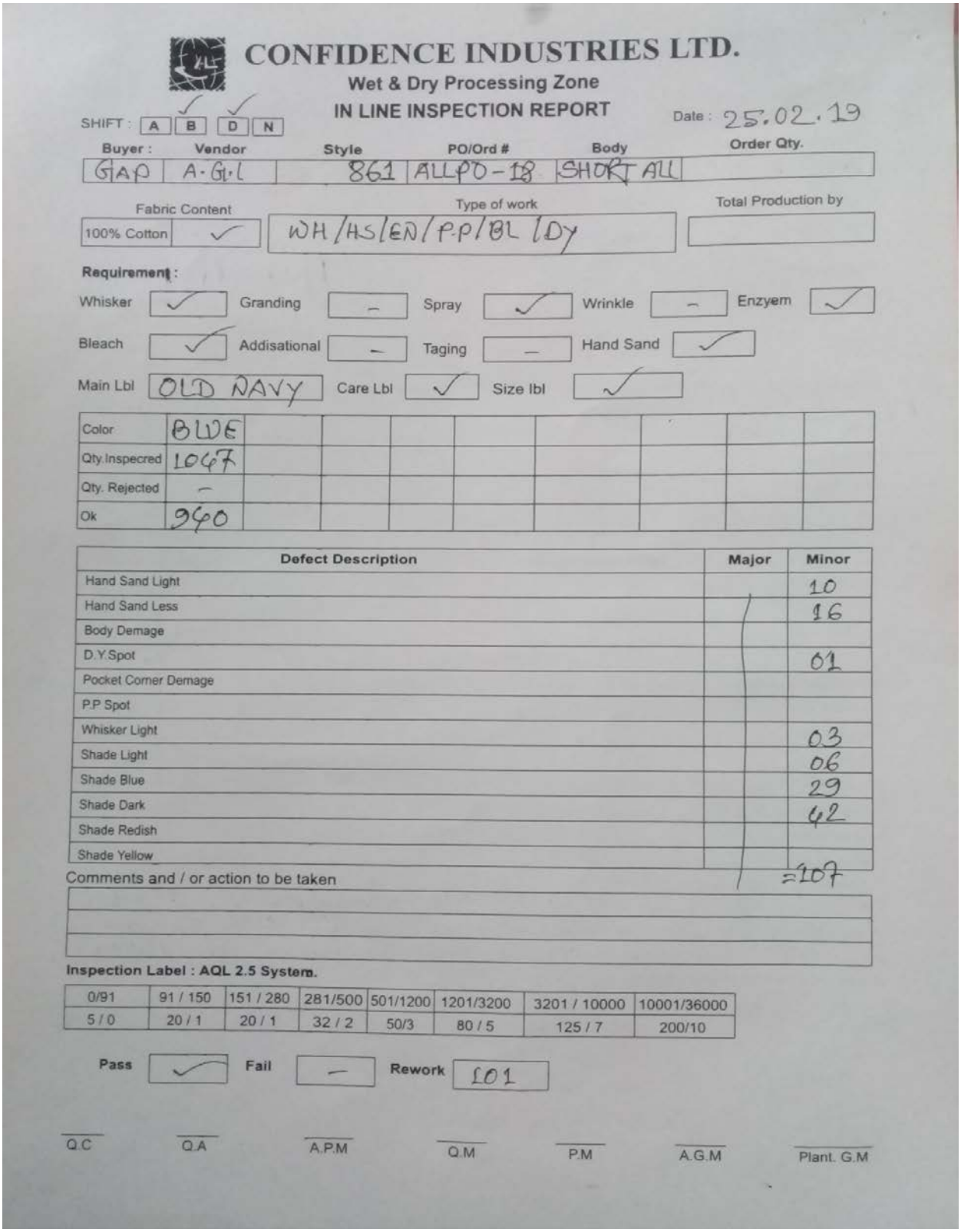
Dye Spot: 01 (0.81%)

Whisker Light: 05 (4.06%)

Shade Light: 12 (9.75%)

Shade Blue: 20 (16.26%)

Shade Dark: 39 (31.70%)



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Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓ B ✓ D N

Date : 25.02.19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	861	ALLPO-18	SHORT ALL	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WH/HS/EN/PP/BL/DY	

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE								
Qty.Inspecred	1047								
Qty. Rejected	–								
Ok	940								

Defect Description	Major	Minor
Hand Sand Light		10
Hand Sand Less		16
Body Demage		
D.Y.Spot		01
Pocket Corner Demage		
P.P Spot		
Whisker Light		03
Shade Light		06
Shade Blue		29
Shade Dark		42
Shade Redish		
Shade Yellow		
		=107

Comments and / or action to be taken

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ **Fail** – **Rework** 101

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.11 Report No. 11

Summary of report: 11

Buyer Name: GAP

Vendor: A.G.L

Style No: 5367861

Garments Color: Blue

Total Quantity Inspected: 1047

Total Pass Quantity: 940

Total Defect Quantity: 107

Total Defects: 10.21%

Types of defect of this report:

Hand Sand Light: 10 (9.34%)

Hand Sand Less: 16 (14.95%)

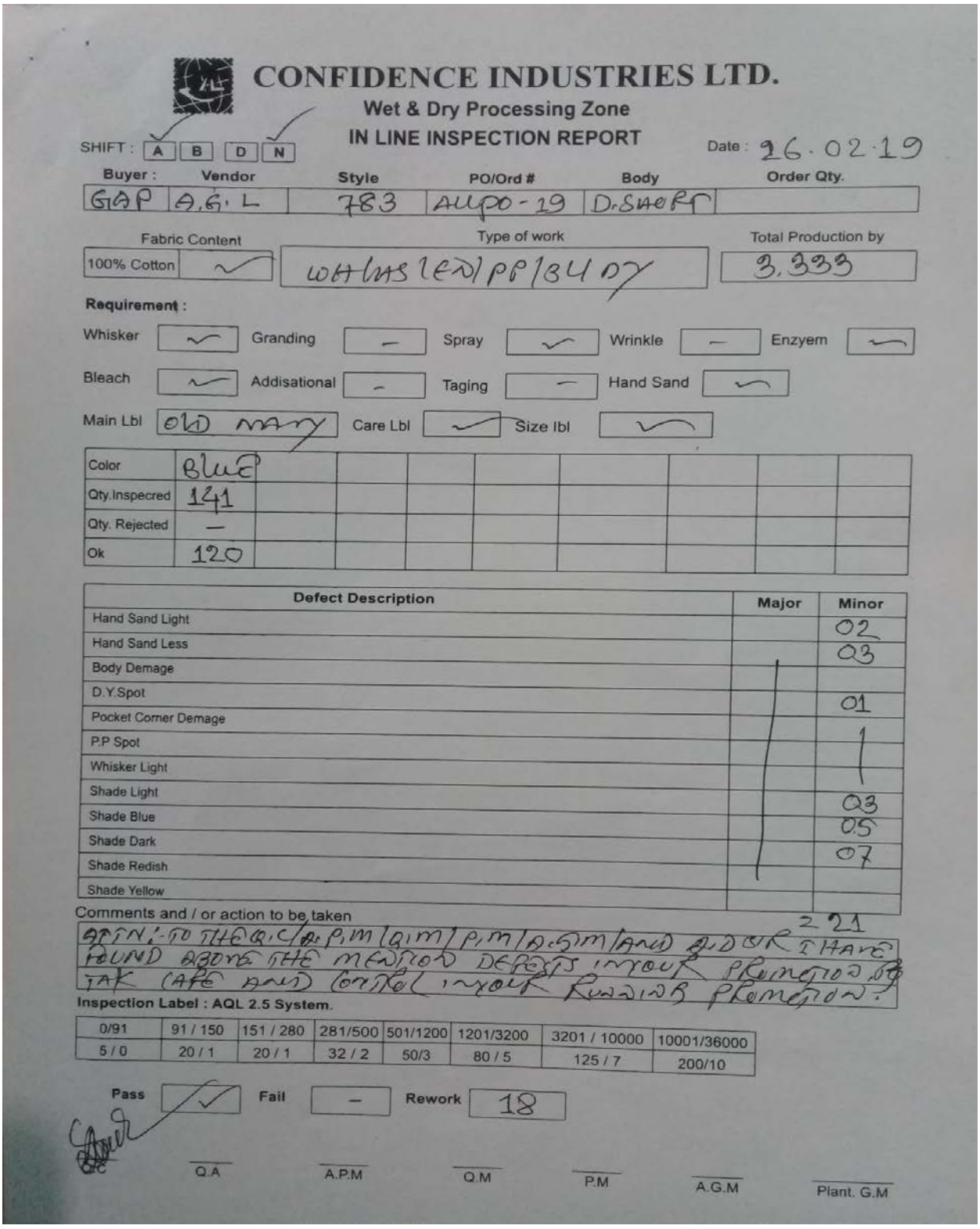
Dye Spot: 01 (0.93%)

Whisker Light: 03 (2.80%)

Shade Light: 06 (5.60%)

Shade Blue: 29 (27.10%)

Shade Dark: 42 (39.25%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓ B D N ✓ Date : 16.02.19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	783	ALPO-19	D.SHORT	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WHISKER(HAND)PP/BODY	3,333

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD MARY	Care Lbl	✓	Size lbl	✓				

Color	BLUE							
Qty.Inspecred	141							
Qty. Rejected	–							
Ok	120							

Defect Description	Major	Minor
Hand Sand Light		02
Hand Sand Less		03
Body Demage		
D.Y.Spot		01
Pocket Corner Demage		
P.P Spot		1
Whisker Light		
Shade Light		03
Shade Blue		05
Shade Dark		07
Shade Redish		
Shade Yellow		

Comments and / or action to be taken

2.21

SPIN: TO THE Q.C/Q.P.M/Q.I.M/P.I.M/A.G.M/AND Q.D.O.R I HAVE FOUND ABOVE THE MENTION DEFECTS IN YOUR PRODUCTION, SO TAK CARE AND CONTROL IN YOUR RUNNING PRODUCTION.

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 18

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.12 Report No. 12

Summary of report: 12

Buyer Name: GAP

Vendor: A.G.L

Style No: 9753783

Garments Color: Blue

Total Quantity Inspected: 141

Total Pass Quantity: 120

Total Defect Quantity: 21

Total Defects: 14.89%

Types of defect of this report:

Hand Sand Light: 02 (9.52%)

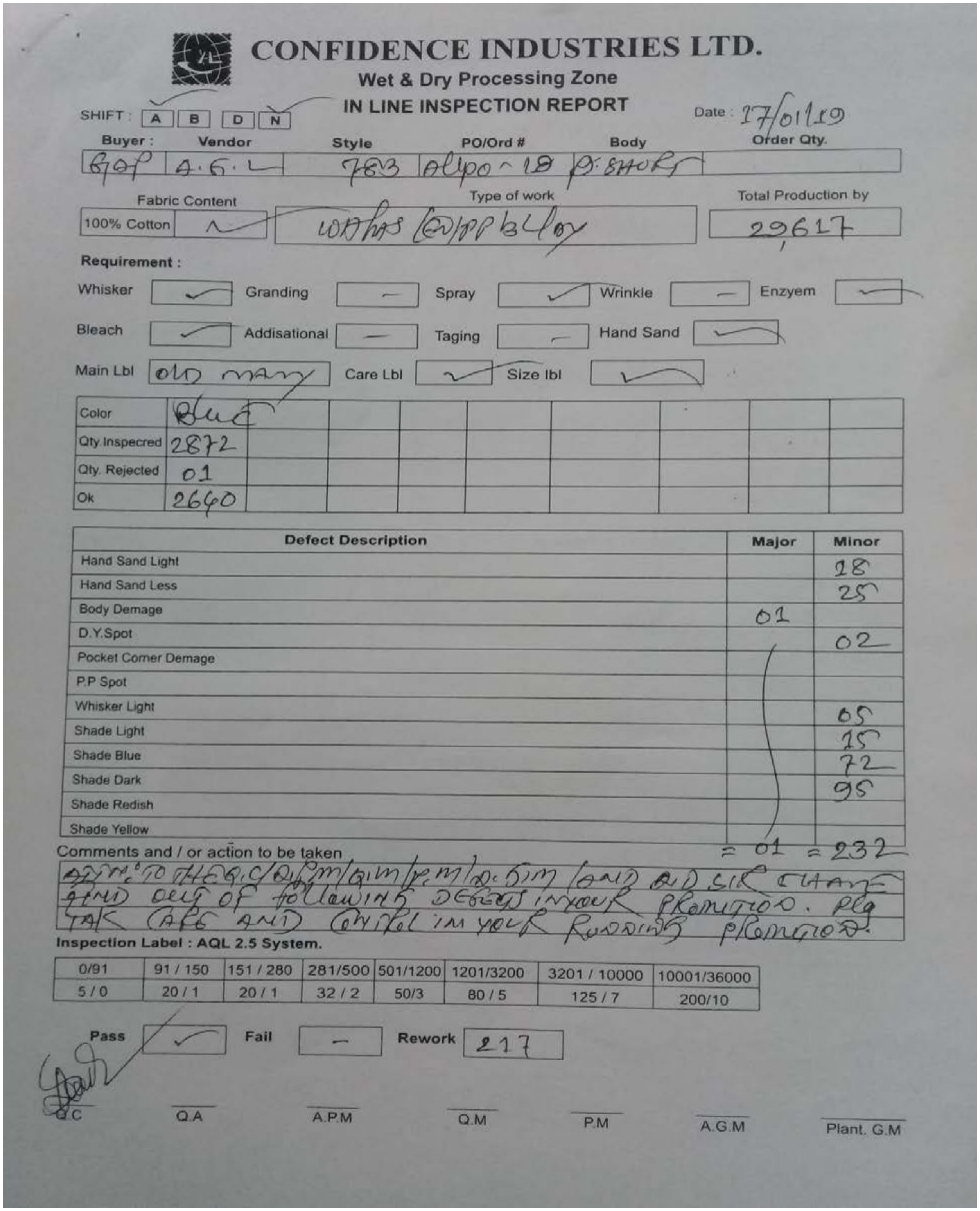
Hand Sand Less: 03 (14.28%)

Dye Spot: 01 (4.76%)

Shade Light: 03 (14.28%)

Shade Blue: 05 (23.80%)

Shade Dark: 07 (33.34%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT: A B D N

Date: 17/01/19

Buyer:	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	783	Alipo ~ 18	B: SHORT	

Fabric Content		Type of work	Total Production by
100% Cotton	~		29617

Requirement:

Whisker ✓ Granding — Spray ✓ Wrinkle — Enzyem ✓

Bleach ✓ Addisational — Taging — Hand Sand ✓

Main Lbl OLD NAVY Care Lbl ✓ Size lbl ✓

Color	Blue								
Qty Inspecred	2872								
Qty. Rejected	01								
Ok	2640								

Defect Description	Major	Minor
Hand Sand Light		18
Hand Sand Less		25
Body Demage	01	
D.Y.Spot		02
Pocket Corner Demage		
P.P Spot		
Whisker Light		05
Shade Light		15
Shade Blue		72
Shade Dark		95
Shade Redish		
Shade Yellow		
	= 01	= 232

Comments and / or action to be taken

[illegible] AND QID SIR CHANGE AND OUT OF FOLLOWING DEFECT IN YOUR PROMOTION. PLS TAKE CARE AND CONTROL IN YOUR RUNNING PROMOTION.

Inspection Label: AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail — Rework 217

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.13 Report No. 13

Summary of report: 13

Buyer Name: GAP

Vendor: A.G.L

Style No: 9753783

Garments Color: Blue

Total Quantity Inspected: 2872

Total Pass Quantity: 2640

Total Defect Quantity: 232

Reject Quantity: 01

Total Defects: 8.07%

Types of defect of this report:

Hand Sand Light: 18 (7.75%)

Hand Sand Less: 25 (10.78%)

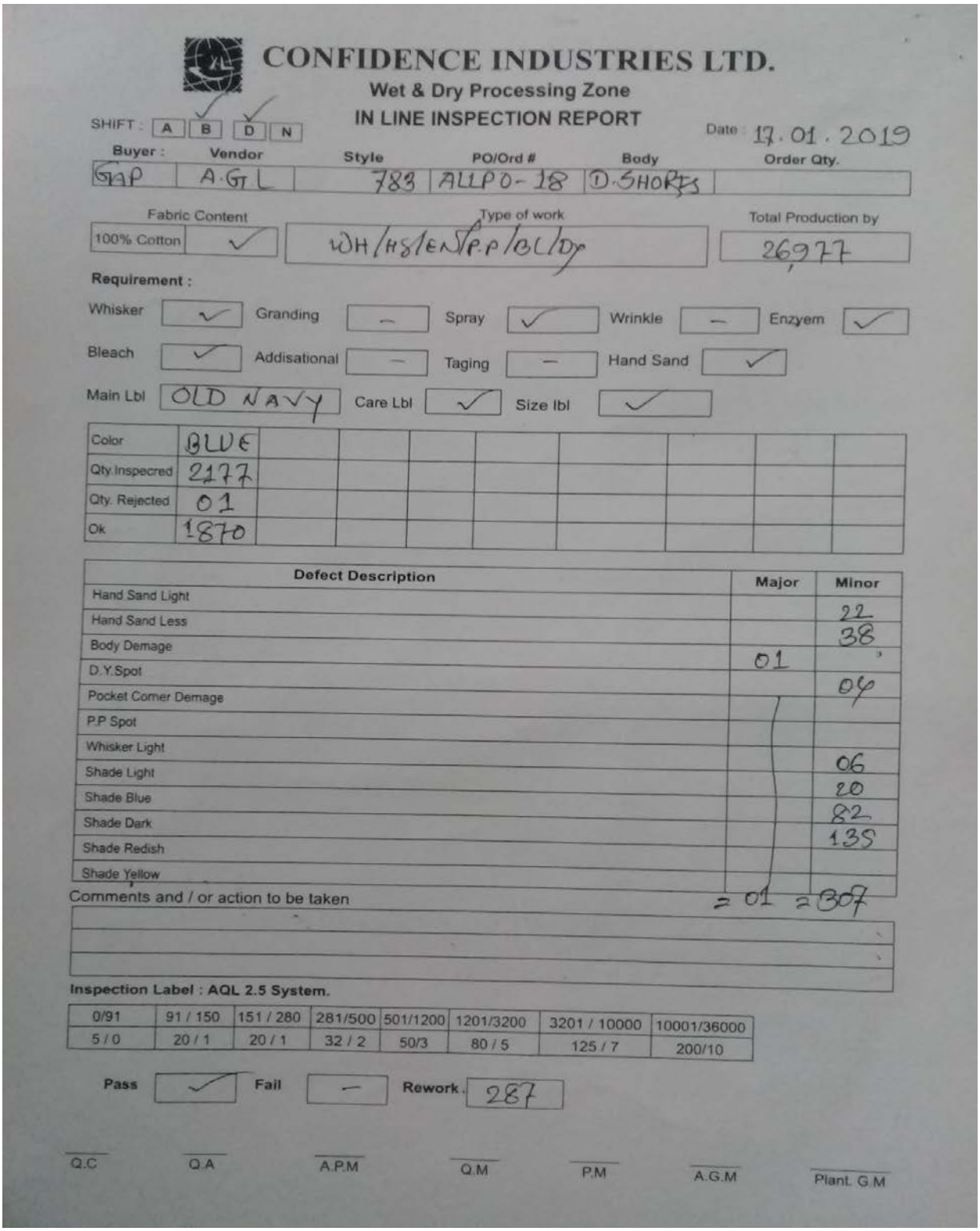
Dye Spot: 02 (0.87%)

Whisker Light: 05 (2.15%)

Shade Light: 15 (6.46%)

Shade Blue: 72 (31.03%)

Shade Dark: 95 (40.94%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓ B D ✓ N

Date : 17.01.2019

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.G.L	783	ALLPO-18	D.SHORTS	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	WH/HS/EN/PP/BL/DS	26977

Requirement :

Whisker	✓	Granding	–	Spray	✓	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	✓		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE								
Qty.Inspecred	2177								
Qty. Rejected	01								
Ok	1870								

Defect Description	Major	Minor
Hand Sand Light		
Hand Sand Less		22
Body Demage		38
D.Y.Spot	01	
Pocket Corner Demage		04
P.P Spot		
Whisker Light		
Shade Light		06
Shade Blue		20
Shade Dark		82
Shade Redish		135
Shade Yellow		

Comments and / or action to be taken = 01 = 307

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 287

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.14 Report No. 14

Summary of report: 14

Buyer Name: GAP

Vendor: A.G.L

Style No: 9753783

Garments Color: Blue

Total Quantity Inspected: 2177

Total Pass Quantity: 1840

Total Defect Quantity: 307

Reject Quantity: 01

Total Defects: 14.10%

Types of defect of this report:

Hand Sand Light: 22 (7.17%)

Hand Sand Less: 38 (12.37%)

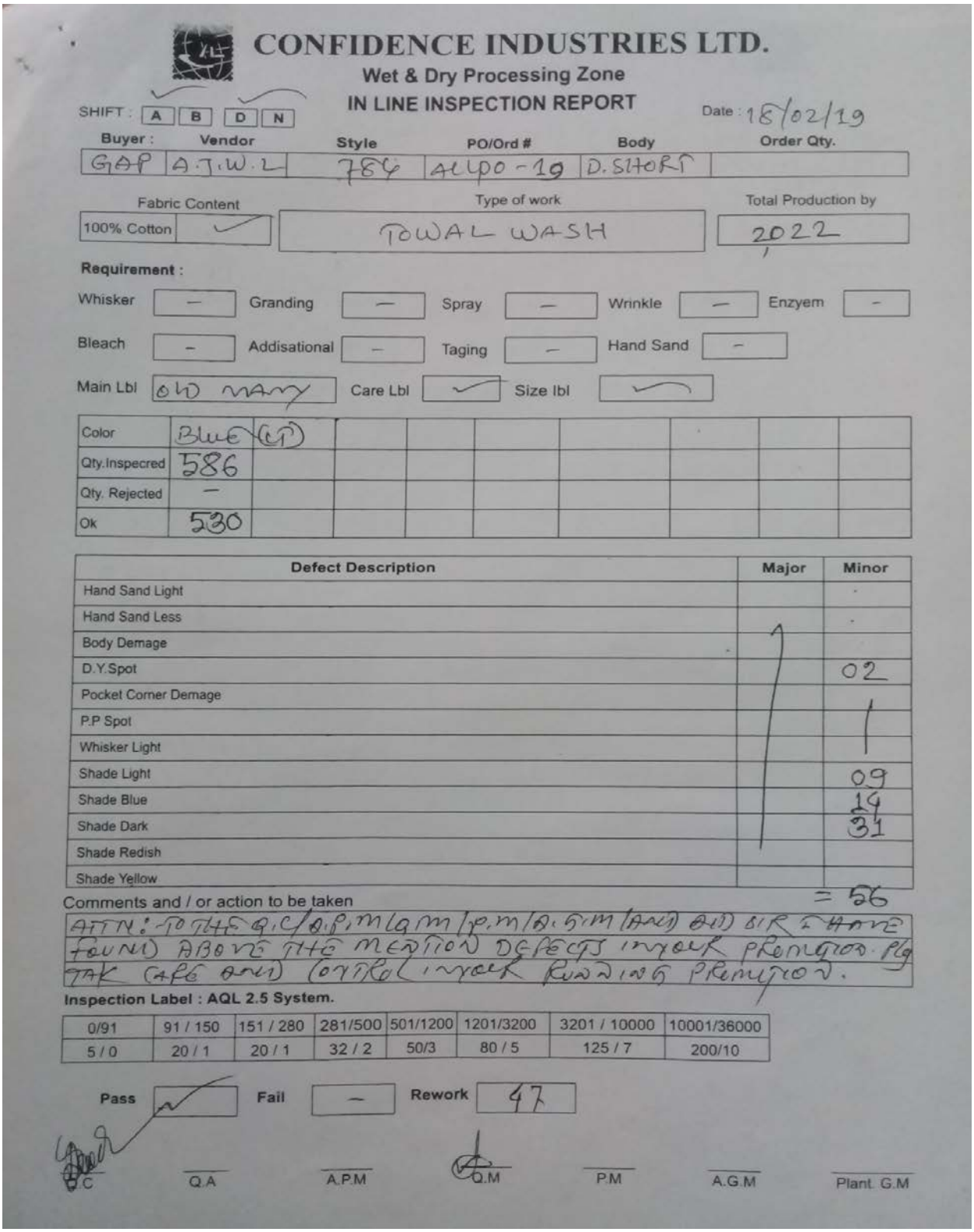
Dye Spot: 04 (1.30%)

Whisker Light: 06 (1.96%)

Shade Light: 20 (6.51%)

Shade Blue: 82 (26.31%)

Shade Dark: 135 (43.98%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A B D N

Date : 18/02/19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.J.W.L	784	ALPO-19	D.SHORT	

Fabric Content	Type of work	Total Production by
100% Cotton ✓	TOWAL WASH	2022

Requirement :

Whisker – Granding – Spray – Wrinkle – Enzyem –

Bleach – Addisational – Taging – Hand Sand –

Main Lbl OLD NAVY Care Lbl ✓ Size lbl ✓

Color	Blue (G)								
Qty.Inspecred	586								
Qty. Rejected	–								
Ok	530								

Defect Description	Major	Minor
Hand Sand Light		
Hand Sand Less		
Body Demage		
D.Y.Spot		02
Pocket Corner Demage		
P.P Spot		1
Whisker Light		
Shade Light		09
Shade Blue		14
Shade Dark		31
Shade Redish		
Shade Yellow		
		= 56

Comments and / or action to be taken

ATTN: TO THE Q.C/A.P.M/A.G.M/P.M/A.G.M (ALL) AND SIR I HAVE FOUND ABOVE THE MENTION DEFECTS IN OUR PRODUCTION PLS TAK CARE AND CONTROL IN OUR RUNNING PRODUCTION.

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 47

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.15 Report No. 15

Summary of report: 15

Buyer Name: GAP

Vendor: A.J.W.L

Style No: 6583784

Garments Color: Blue

Total Quantity Inspected: 586

Total Pass Quantity: 530

Total Defect Quantity: 56

Total Defects: 9.55%

Types of defect of this report:

Dye Spot: 02 (3.57%)

Shade Light: 09 (16.07%)

Shade Blue: 14 (25%)

Shade Dark: 31 (55.35%)

CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓ B D ✓ N

Date : 18-02-19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.J.W.L	784	ALLPO-19	① SHORTS	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	TOWAL WASH	2462

Requirement :

Whisker	–	Granding	–	Spray	–	Wrinkle	–	Enzyem	–
Bleach	–	Addisational	–	Taging	–	Hand Sand	–		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE (LT)								
Qty.Inspecred	453								
Qty. Rejected	–								
Ok	460								

Defect Description	Major	Minor
Hand Sand Light		–
Hand Sand Less		–
Body Demage		
D.Y.Spot		01
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		02
Shade Blue		03
Shade Dark		07
Shade Redish		
Shade Yellow		= 13

Comments and / or action to be taken

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 11

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.16 Report No. 16

Summary of report: 16

Buyer Name: GAP

Vendor: A.J.W.L

Style No: 6583784

Garments Color: Blue

Total Quantity Inspected: 453

Total Pass Quantity: 440

Total Defect Quantity: 13

Total Defects: 2.86%

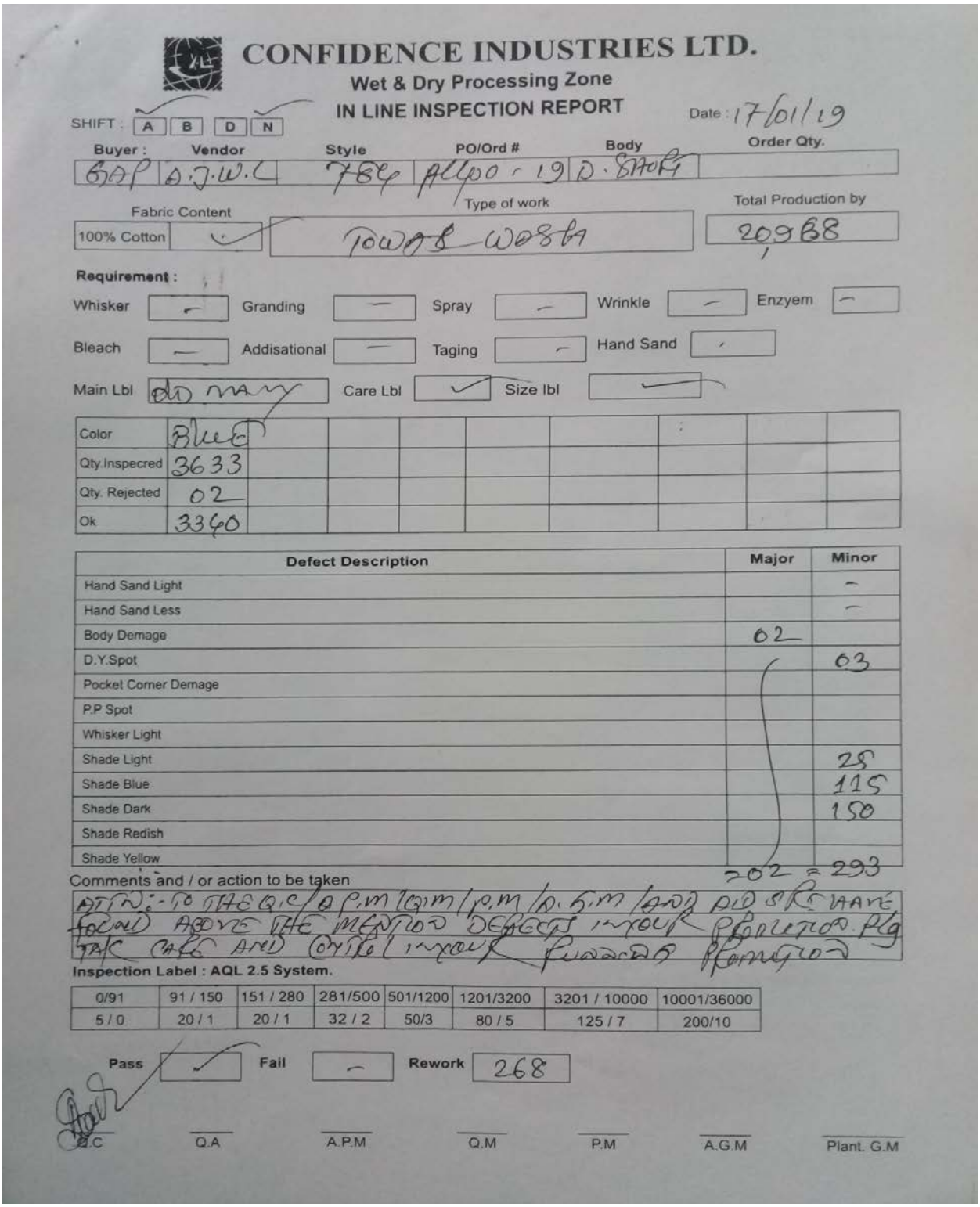
Types of defect of this report:

Dye Spot: 01 (7.70%)

Shade Light: 02 (15.38%)

Shade Blue: 03 (23.07%)

Shade Dark: 07 (53.84%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓ B D N ✓ Date : 17/01/19

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.J.W.C	7864	A4400 - 19	D. STORY	

Fabric Content: 100% Cotton ✓ — Type of work: TOWN WASH — Total Production by: 20968

Requirement :

Whisker	–	Granding	–	Spray	–	Wrinkle	–	Enzyem	–
Bleach	–	Addisational	–	Taging	–	Hand Sand	.		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	–				

Color	Blue							
Qty.Inspecred	3633							
Qty. Rejected	02							
Ok	3340							

Defect Description	Major	Minor
Hand Sand Light		–
Hand Sand Less		–
Body Demage	02	
D.Y.Spot		03
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		25
Shade Blue		115
Shade Dark		150
Shade Redish		
Shade Yellow		
	202 =	293

Comments and / or action to be taken

ATTN:- TO THE Q.C / A.P.M (A.M) / P.M / A.S.M (AND) PLS MAKE FOCUS ABOVE THE MENTION DEFECTS IN YOUR PRODUCTION. PLS TAKE CARE AND CONTROL IN YOUR PRODUCTION

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 268

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.17 Report No. 17

Summary of report: 17

Buyer Name: GAP

Vendor: A.J.W.L

Style No: 6583784

Garments Color: Blue

Total Quantity Inspected: 3633

Total Pass Quantity: 3340

Total Defect Quantity: 293

Rejected Quantity: 02

Total Defects: 8.06%

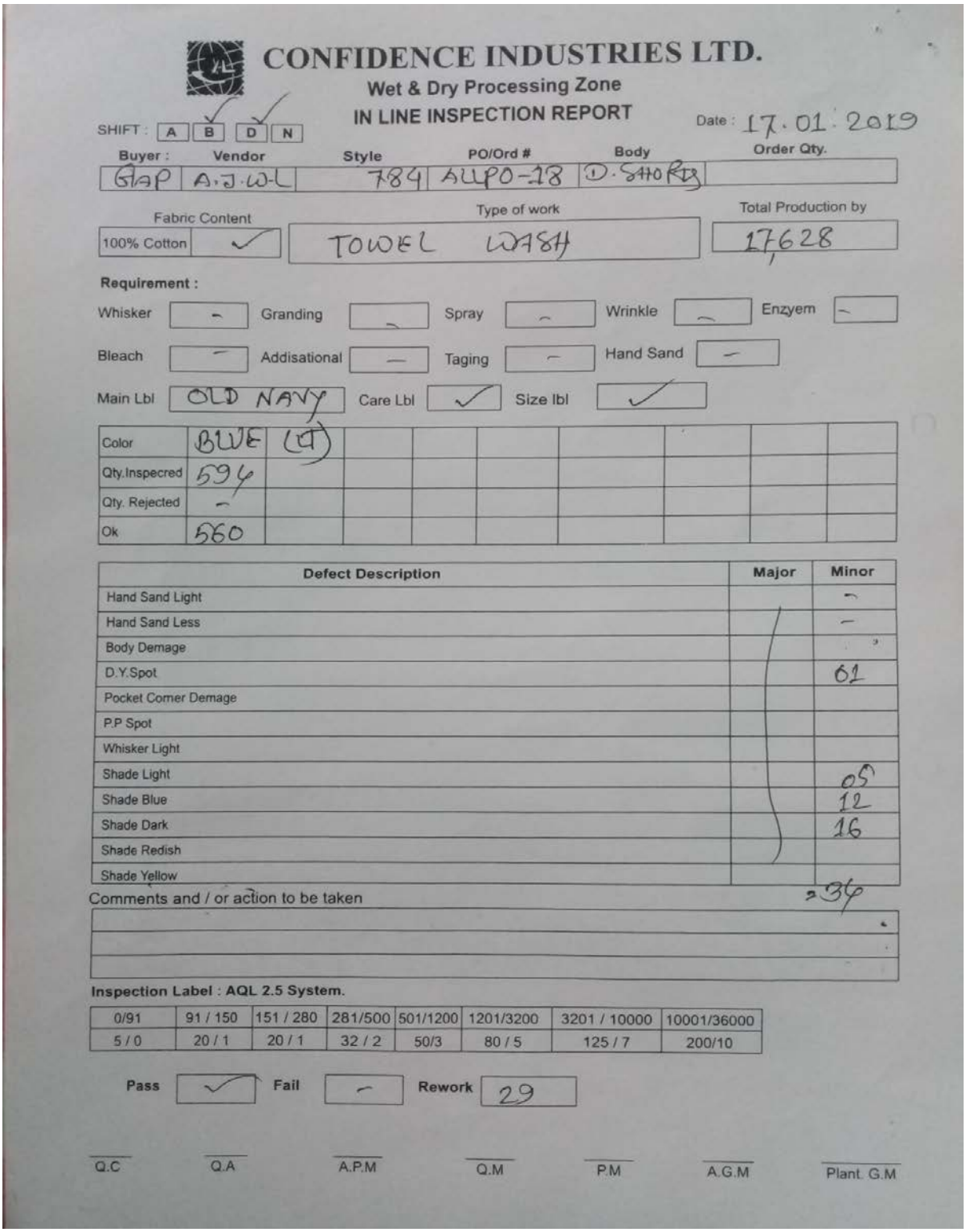
Types of defect of this report:

Dye Spot: 03 (1.02%)

Shade Light: 25 (8.53%)

Shade Blue: 115 (39.24%)

Shade Dark: 150 (51.20%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A ✓B D ✓N Date : 17.01.2019

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GAP	A.J.W.L	784	ALPO-18	D.S110 RB	

Fabric Content	Type of work	Total Production by
100% Cotton ✓	TOWEL WASH	17628

Requirement :

Whisker	-	Granding	-	Spray	-	Wrinkle	-	Enzyem	-
Bleach	-	Addisational	-	Taging	-	Hand Sand	-		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE (LT)								
Qty.Inspecred	594								
Qty. Rejected	-								
Ok	560								

Defect Description	Major	Minor
Hand Sand Light		-
Hand Sand Less		-
Body Demage		
D.Y.Spot		01
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		05
Shade Blue		12
Shade Dark		16
Shade Redish		
Shade Yellow		

Comments and / or action to be taken =34

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail - Rework 29

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.18 Report No. 18

Summary of report: 18

Buyer Name: GAP

Vendor: A.J.W.L

Style No: 6583784

Garments Color: Blue

Total Quantity Inspected: 594

Total Pass Quantity: 560

Total Defect Quantity: 34

Total Defects: 5.72%

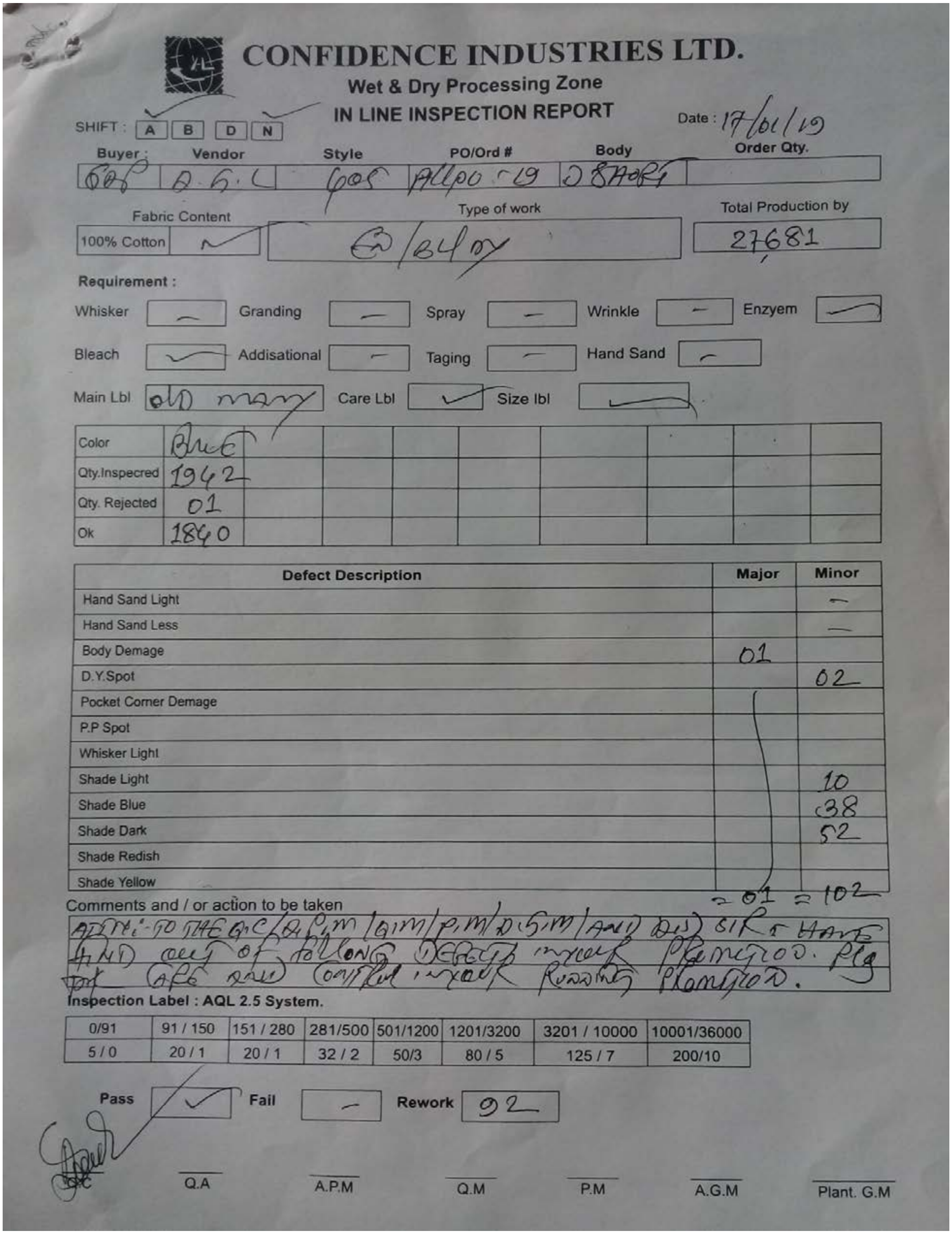
Types of defect of this report:

Dye Spot: 01 (2.94%)

Shade Light: 05 (14.70%)

Shade Blue: 12 (35.30%)

Shade Dark: 16 (47.05%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A B D N

Date : 17/01/19

Buyer	Vendor	Style	PO/Ord #	Body	Order Qty.
608	D.G.L	605	Allpo -19	D SHORT	

Fabric Content		Type of work	Total Production by
100% Cotton	✓	G/B4 DY	27681

Requirement :

Whisker — Granding — Spray — Wrinkle — Enzyem ✓

Bleach ✓ Addisational — Taging — Hand Sand —

Main Lbl old many Care Lbl ✓ Size lbl ✓

Color	Blue								
Qty.Inspecred	1942								
Qty. Rejected	01								
Ok	1840								

Defect Description	Major	Minor
Hand Sand Light		—
Hand Sand Less		—
Body Demage	01	
D.Y.Spot		02
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		10
Shade Blue		38
Shade Dark		52
Shade Redish		
Shade Yellow		
	= 01	= 102

Comments and / or action to be taken

ATTN:- TO THE G.C/A.P.M/Q.M/P.M/D.G.M/AND D.S) SIR I HAVE FIND OUT OF FOLLOWING DEFECTS MY WORK PLEASE IMPROVED. PLS FOR CARE AND CONTROL MY WORK RUNNING IMPROVED.

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail — Rework 92

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.19 Report No. 19

Summary of report: 19

Buyer Name: GAP

Vendor: A.G.L

Style No: 1865405

Garments Color: Blue

Total Quantity Inspected: 1942

Total Pass Quantity: 1840

Total Defect Quantity: 102

Rejected Quantity: 01

Total Defects: 5.25%

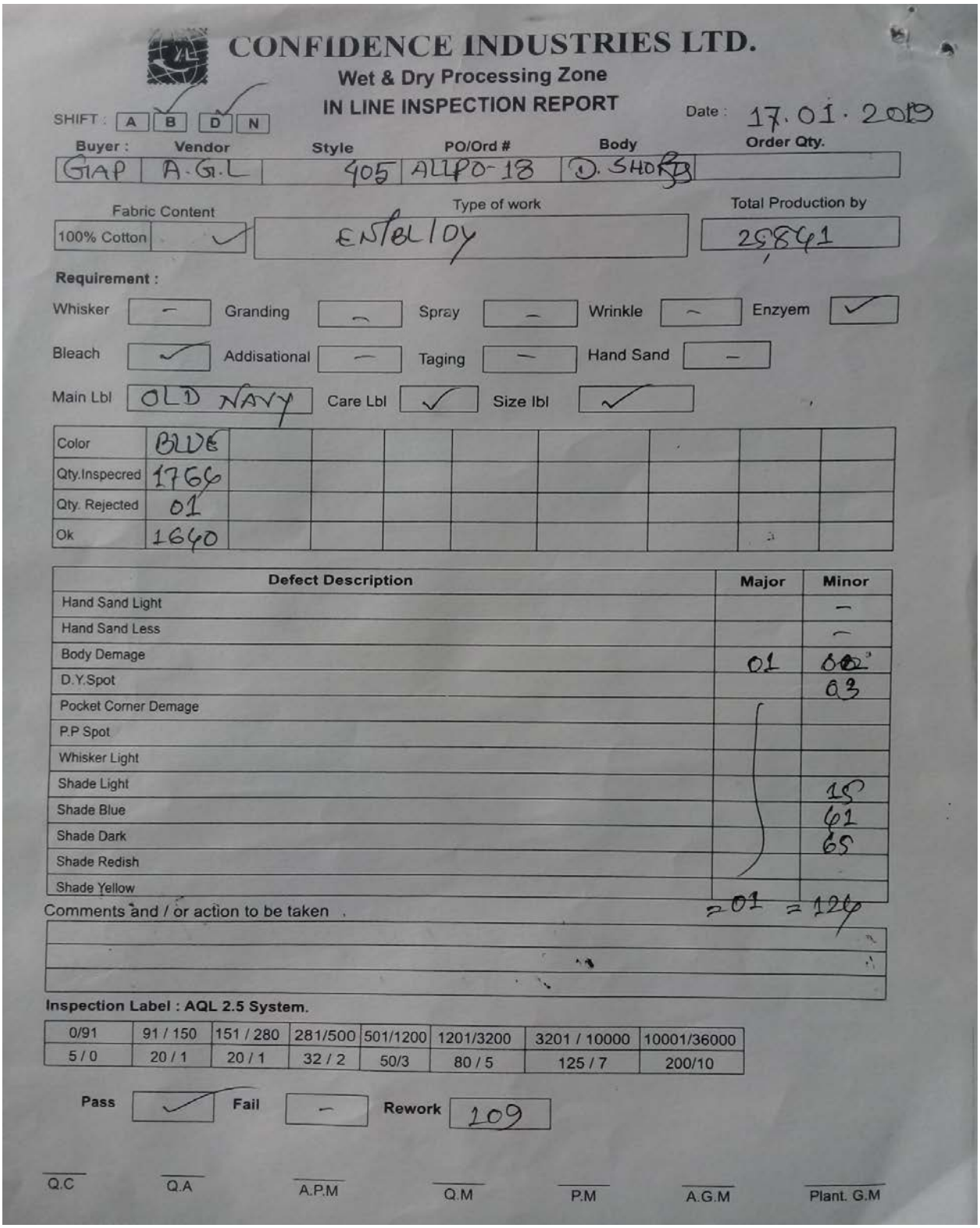
Types of defect of this report:

Dye Spot: 02 (1.97%)

Shade Light: 10 (9.80%)

Shade Blue: 38 (37.25%)

Shade Dark: 52 (50.99%)



CONFIDENCE INDUSTRIES LTD.

Wet & Dry Processing Zone

IN LINE INSPECTION REPORT

SHIFT : A [B] D [N] Date : 17.01.2019

Buyer :	Vendor	Style	PO/Ord #	Body	Order Qty.
GIAP	A.G.L	405	ALLPO-18	D. SHORTS	

Fabric Content	Type of work	Total Production by
100% Cotton ✓	ENZYM	25841

Requirement :

Whisker	–	Granding	–	Spray	–	Wrinkle	–	Enzyem	✓
Bleach	✓	Addisational	–	Taging	–	Hand Sand	–		
Main Lbl	OLD NAVY	Care Lbl	✓	Size lbl	✓				

Color	BLUE								
Qty.Inspecred	1766								
Qty. Rejected	01								
Ok	1640								

Defect Description	Major	Minor
Hand Sand Light		–
Hand Sand Less		–
Body Demage	01	02
D.Y.Spot		03
Pocket Corner Demage		
P.P Spot		
Whisker Light		
Shade Light		15
Shade Blue		61
Shade Dark		65
Shade Redish		
Shade Yellow		
	=01	=126

Comments and / or action to be taken .

Inspection Label : AQL 2.5 System.

0/91	91 / 150	151 / 280	281/500	501/1200	1201/3200	3201 / 10000	10001/36000
5 / 0	20 / 1	20 / 1	32 / 2	50/3	80 / 5	125 / 7	200/10

Pass ✓ Fail – Rework 109

Q.C Q.A A.P.M Q.M P.M A.G.M Plant. G.M

Fig: 3.20 Report No. 20

Summary of report: 20

Buyer Name: GAP

Vendor: A.G.L

Style No: 1865405

Garments Color: Blue

Total Quantity Inspected: 1764

Total Pass Quantity: 1640

Total Defect Quantity: 124

Rejected Quantity: 01

Total Defects: 7.02%

Types of defect of this report:

Dye Spot: 03 (2.42%)

Shade Light: 15 (12.10%)

Shade Blue: 41 (33.06%)

Shade Dark: 65 (52.41%)

3.2.1 Summery of In Line Inspection Reports

Report No.	Inspected quantity	Ok quantity	Defects							Total defect
			A	B	C	D	E	F	G	
Report No: 01	395	340	02	03	02	08	11	29	-	55
Report No:02	1036	960	10	17	01	05	13	28	02	76
Report No: 03	1472	1320	13	22	03	15	42	53	04	152
Report No: 04	700	630	03	04	02	11	14	36	-	70
Report No: 05	485	450	02	03	02	06	09	13	-	35
Report No: 06	303	250	02	03	01	12	14	21	-	53
Report No: 07	921	840	03	04	03	14	17	35	05	81
Report No: 08	1985	1850	06	09	04	19	24	65	08	135
Report No: 09	1476	1340	15	18	04	16	19	55	09	136
Report No: 10	663	540	14	22	01	12	20	39	05	123
Report No: 11	1047	940	10	16	01	06	29	42	03	107
Report No: 12	141	120	02	03	01	03	05	07	-	21
Report No: 13	2872	2640	18	25	02	15	72	95	05	232
Report No: 14	2177	1840	22	38	04	20	82	135	06	307
Report No: 15	586	530	-	-	02	09	14	31	-	56

Report No:16	453	440	-	-	01	02	03	07	-	13
Report No: 17	3633	3340	-	-	03	25	115	150	-	293
Report No: 18	594	560	-	-	01	05	12	16	-	34
Report No: 19	1942	1840	-	-	02	10	38	52	-	102
Report No: 20	1764	1640	-	-	03	15	41	65	-	124
Total	24645	22440 (91.06%)	125	187	45	228	595	976	49	2205 (8.94%)

Table 3.1 Summary of In Line Inspection Reports

Here,

- A (Hand Sand Light) = 125 (5.67%)
- B (Hand Sand Less) = 187 (8.48%)
- C (Dye Spot) = 45 (2.04)
- D (Shade Light) = 228 (10.34%)
- E (Shade Blue) = 595 (26.99%)
- F (Shade Dark) = 976 (44.27%)
- G (Whisker Light) = 49 (2.23%)

3.3 Final Inspection Report

Here we attached some final inspection report of a washing plant. This report is made at the last stage of process. Here we found some fault which is remain on the garments and deliver to the client.

3.3.1 Report No – 1

Style No	Total Check Quantity	Total Pass Quantity	Total Defect Quantity	Total Defect Percentage	Defects Types	Defects Quantity	Defects Percentage
2387450	4391	4206	185	4.21 %	PP Spot	24	12.98 %
					Dye Spot	15	8.10 %
					DAPPA	16	8.64 %
					Crease Mark	25	13.51 %
					Shade Light	29	15.68 %
					Shade Dark	41	22.16 %
					Off Shade	32	17.30 %
					Wrong Whisker	2	1.08 %
					Damaged Body	1	0.54 %

Table 3.2 Final Inspection Report of style no 2387450

3.3.2 Report No – 2

Style No	Total Check Quantity	Total Pass Quantity	Total Defect Quantity	Total Defect Percentage	Defects Types	Defects Quantity	Defects Percentage
5367861	6092	5872	220	3.61 %	PP Spot	30	13.63 %
					Dye Spot	18	8.19 %
					DAPPA	18	8.19 %
					Crease Mark	27	12.27 %
					Shade Light	31	14.10 %
					Shade Dark	52	23.63 %
					Off Shade	39	17.72 %
					Wrong Whisker	5	2.27 %
					Damaged Body	-	-

Table 3.3 Final Inspection Report of style no 5367861

3.3.3 Report No – 3

Style No	Total Check Quantity	Total Pass Quantity	Total Defect Quantity	Total Defect Percentage	Defects Types	Defects Quantity	Defects Percentage
9753783	5190	4985	205	3.94 %	PP Spot	31	15.12 %
					Dye Spot	15	7.31 %
					DAPPA	18	8.79 %
					Crease Mark	23	11.21 %
					Shade Light	31	15.12 %
					Shade Dark	46	22.43 %
					Off Shade	35	17.07 %
					Wrong Whisker	5	2.43 %
					Damaged Body	1	0.49 %

Table 3.4 Final Inspection Report of style no 9753783

3.3.4 Report No – 4

Style No	Total Check Quantity	Total Pass Quantity	Total Defect Quantity	Total Defect Percentage	Defects Types	Defects Quantity	Defects Percentage
6583784	5266	5054	212	4.02 %	PP Spot	41	19.33 %
					Dye Spot	19	8.97 %
					Crinkle Spot	9	4.24 %
					Crease Mark	26	12.27 %
					Shade Light	41	19.33 %
					Shade Dark	32	15.10 %
					Off Shade	36	16.99 %
					Wrong Whisker	6	2.83 %
					Damaged Body	2	0.94 %

Table 3.5 Final Inspection Report of style no 6583784

3.3.5 Report No – 5

Style No	Total Check Quantity	Total Pass Quantity	Total Defect Quantity	Total Defect Percentage	Defects Types	Defects Quantity	Defects Percentage
1865405	3706	3560	146	3.93 %	PP Spot	21	14.39 %
					Dye Spot	14	9.59 %
					Crinkle Spot	9	6.16 %
					Crease Mark	13	8.90 %
					Shade Light	25	17.12 %
					Shade Dark	28	19.17 %
					Off Shade	24	16.43 %
					Wrong Whisker	10	6.84 %
					Damaged Body	2	1.37 %

Table 3.6 Final Inspection Report of style no 1865405

3.4 Summary of Final Inspection Report

Style No.	Inspected quantity	Ok quantity	Defects										Total defect
			A	B	C	D	E	F	G	H	I	J	
Style No: 2387450	4391	4206	24	15	-	25	29	41	32	02	01	16	185
Style No: 5367861	6092	5872	30	18	-	27	31	52	39	05	-	18	220
Style No: 9753783	5190	4985	31	15	-	23	31	46	35	05	01	18	205
Style No: 6583784	5266	5054	41	19	09	26	41	32	36	06	02	-	212
Style No: 1865405	3706	3560	21	14	09	13	25	28	24	10	02	-	146
Total	24645	23677 (96.08%)	147	81	18	114	157	199	166	28	06	52	968 (3.92%)

Table 3.7 Summery of Final Inspection Report

Here we got some defects, they are

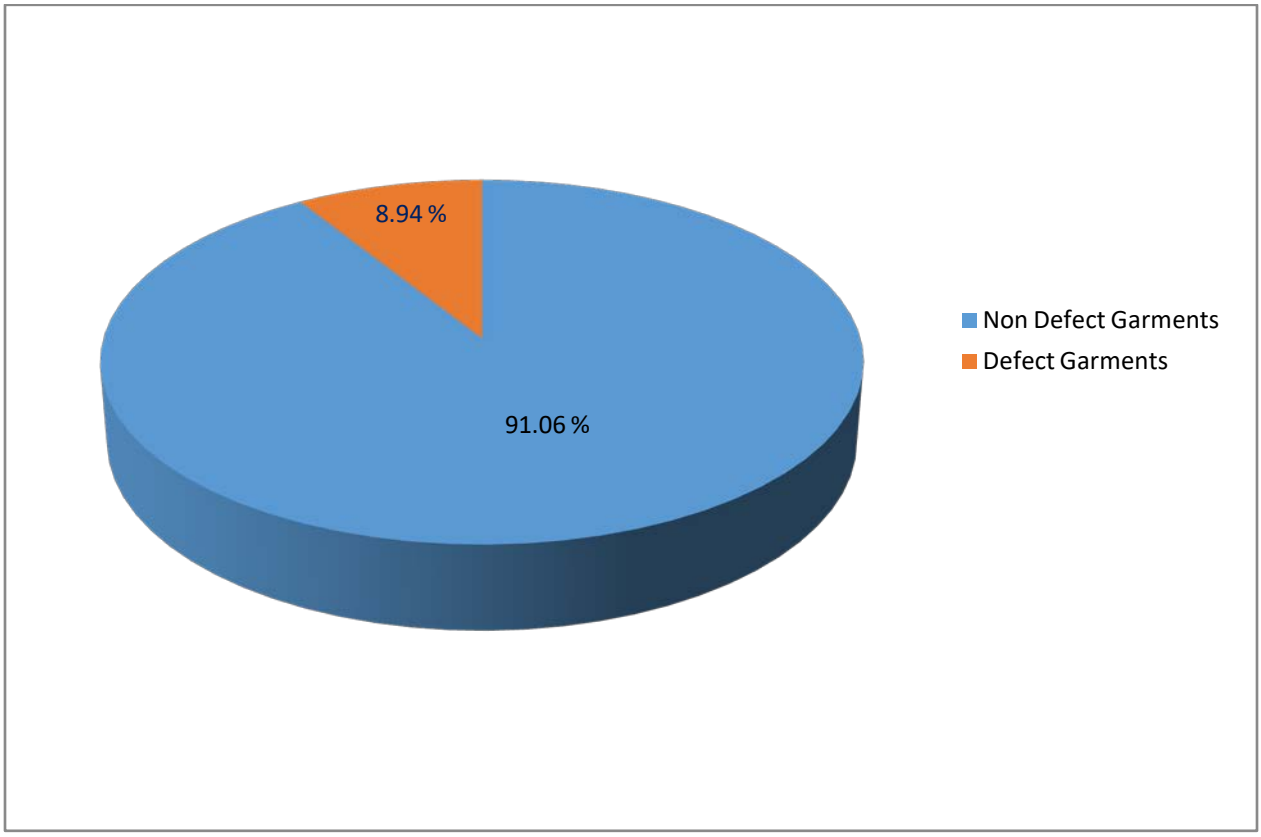
- A (PP Spot) = 147 (15.18%)
- B (Dye Spot) = 81 (8.37%)
- C (Crinkle Spot) = 18 (1.85%)
- D (Crease Mark) = 114 (11.78%)
- E (Shade Light) = 157 (16.21%)
- F (Shade Dark) = 199 (20.55%)
- G (Off Shade) = 166 (17.14%)
- H (Wrong Whisker) = 28 (2.90%)
- I (Body Damage) = 06 (0.61%)
- J (Dappa) = 52 (5.37%)

After analyze some final report of a washing plant, we got some fault which is usually occurred in washing plant. If we care properly about this fault then we can increase efficiency of washing plant and also can maintain quality product.

4. Result & Discussion

4. Result & Discussion

4.1 Graph of defect percentage of In Line Inspection Report



Graph 4.1: Pie chart of defect percentage

4.2 Graph of Different types of defect percentage of in line inspection report:

Here, Shade Dark = 44.27%

Shade Blue = 26.98%

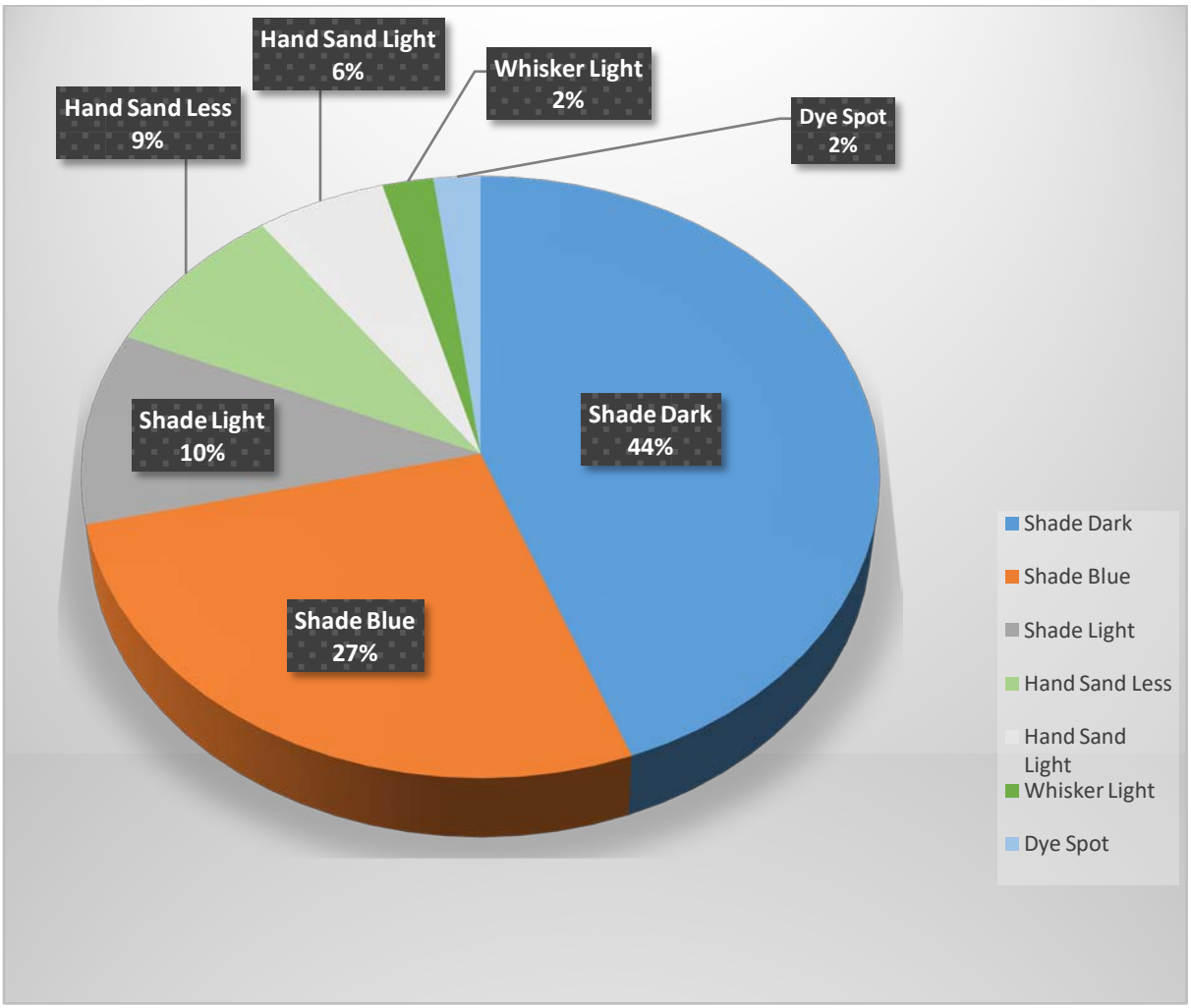
Shade Light = 10.34%

Hand Sand Less = 8.48%

Hand Sand Light = 5.66%

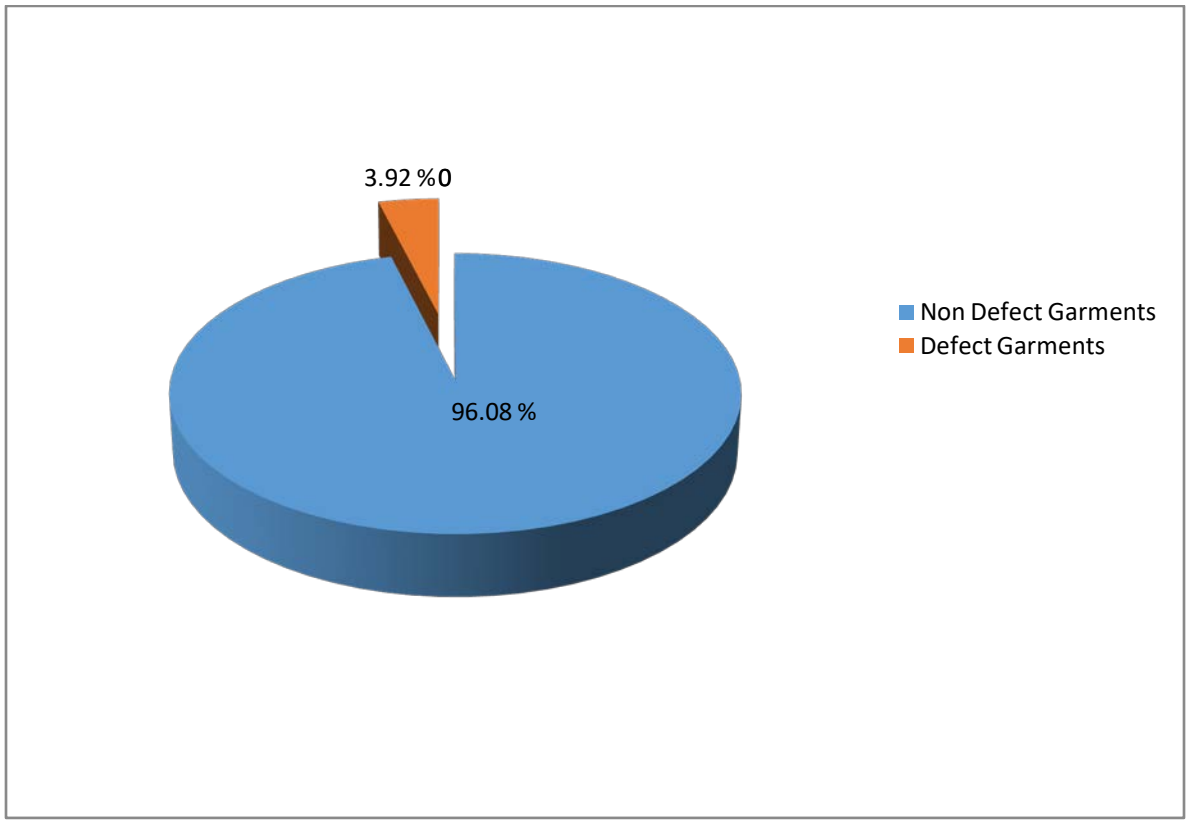
Whisker Light = 2.23%

Dye Spot = 2.04%



Graph 4.2: Pie chart of different types of defect percentage

4.3 Graph of defect percentage of Final Inspection Report



Graph 4.3: Pie chart of defect percentage

4.4 Graph of different types of defect percentage

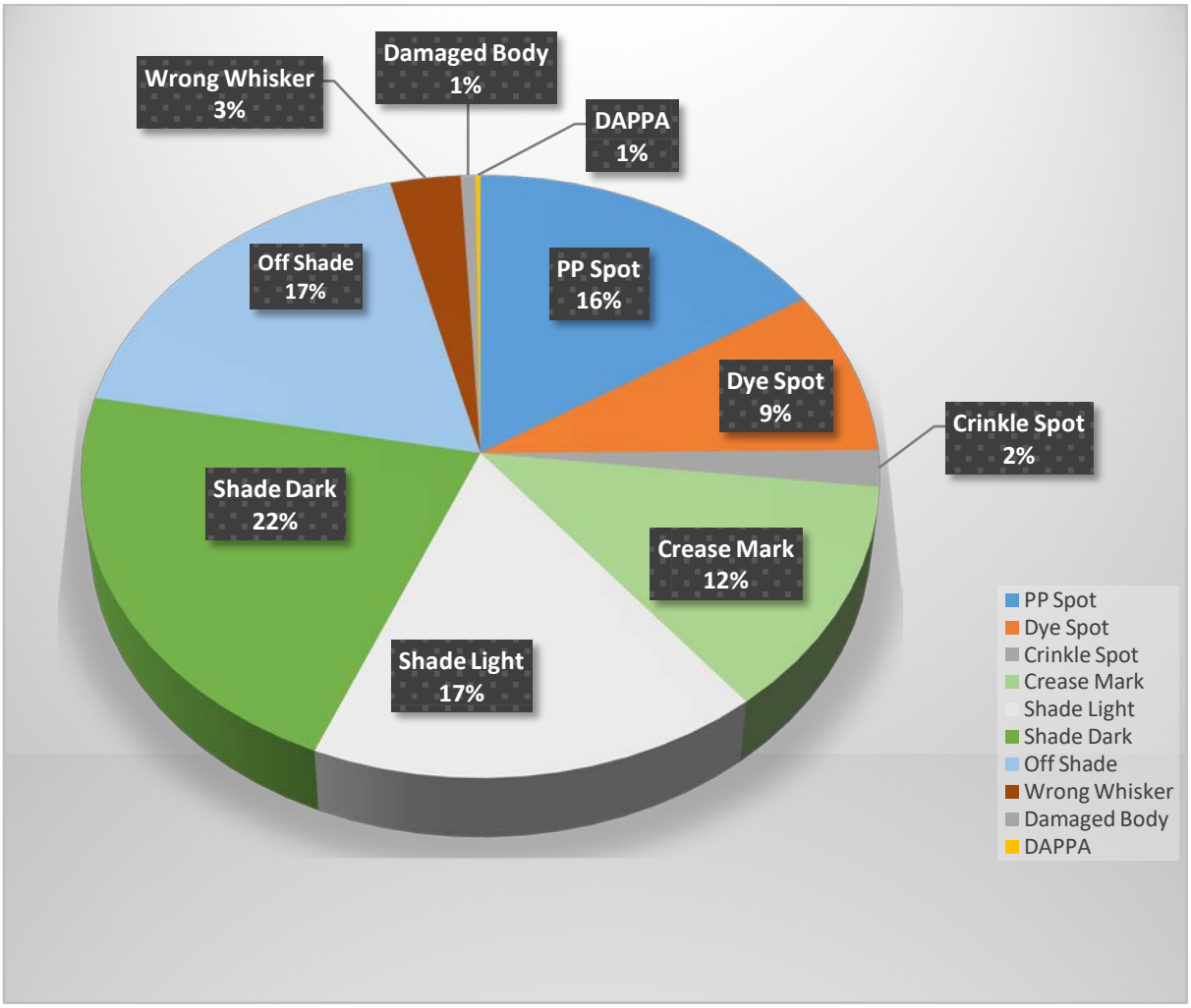
Here, Shade Dark = 20.55% , Off Shade = 17.14%

Shade Light = 16.21% , PP Spot = 15.18%

Crease Mark = 11.78% , Dye Spot = 8.37%

Dappa = 5.38% , Wrong Whisker = 2.90%

Crinkle Spot = 1.85% , Damaged Body = 0.61



Graph 4.4: Pie chart of defect percentage

4.4 Discussion about defect

We found different types washing fault in a washing plant. The fault which we found in a washing plant, we will discuss about this fault below and why this fault is occurred and what are the remedies of this fault.

Various types of defect/ fault:

- Shade Dark = 20.55%
- Off Shade = 17.14%
- Shade Light = 16.21%
- PP Spot = 15.18%
- Crease Mark = 11.78%
- Dye Spot = 8.37%
- Dappa = 5.38%
- Wrong Whisker = 2.90%
- Crinkle Spot = 1.85%
- Damaged Body = 0.61

4.4.1 Shade Dark (20.55%):

Standard Shade Dark Shade

Figure 4.1: Shade Dark

Cause:

- ✓ This fault can happen by the mixing of fabric and mixing of different lots.

- ✓ This fault can also be occurred if we do not maintain process parameters. Such as Time, Temperature, M/C speed etc.
- ✓ It can happen if the recipe does not maintain properly.

Remedies:

- ✓ We have to ensure that all garments from one lot and the garments are not mixing with others.
- ✓ Should maintain process parameter properly such as time, temperature, speed etc.
- ✓ We have to make recipe carefully.

4.4.2 Off Shade (17.14%):

Standard Shade Off Shade

Figure 4.2: Off Shade

Cause:

- ✓ It can occur when the garments are made from different lots of fabric.
- ✓ Not use proper cycle of washing machine.
- ✓ If the operator is not skilled it can happen.

Remedies:

- ✓ Make sure that the garments are made from the same lot of fabric.
- ✓ Should appoint skilled operator.
- ✓ Should have maintained the chemical dosing.

4.4.3 Shade Light (16.21%):

Shade Light Standard Shade

Figure 4.3: Shade Light

Cause:

- ✓ If time and temperature is not maintain properly.
- ✓ If the garments is made of different lot of fabric or mixing of different garments.
- ✓ This fault is occurred in washing plant if the recipe of washing is not made properly.
- ✓ It can also happen if the workers are unskilled.

Remedies:

- ✓ Time, temperature and other process parameter should maintain properly.
- ✓ To ensure that garments are made of same lot of fabric and they are not mixed with other garments.

- ✓ Recipe should make very carefully.
- ✓ To appoint skilled workers.

4.4.4 PP Spot (15.18%):

PP Spot

Figure 4.4: PP Spot

Cause:

- ✓ It can happen exceed spray of PP (Potassium per manganate).
- ✓ If PP (Potassium per manganate) is dropped on the garments instead of spray.
- ✓ If the concentration and range are not maintain properly then PP spot can occurred.
- ✓ If the garments keep over another garment then it can happen.

Remedies:

- ✓ Operator should be skilled.
- ✓ PP concentration and spray range should maintain properly.
- ✓ Should avoid keep the garments over after another at the same time of spray.
- ✓ Recipe should make perfectly.

4.4.5 Crease Mark (11.78%):

Crease Mark

Figure 4.5: Crease Mark

Cause:

- ✓ If the garments are folded condition in wash bath then crease mark can occurred.
- ✓ If the use of water is not proper in wash bath then it can happen.
- ✓ If the RPM of machine is higher than crease mark can produce.
- ✓ It also can happen because of garments and types of fabric or quality of fabric.

Remedies:

- ✓ We should check and ensure that the garments are not folded condition in wash bath.
- ✓ We should use anti-creasing agent to protect garments from crease.
- ✓ Should maintain machine RPM.
- ✓ The amount of water is needed to wash garments, we should use that amount of water. And should maintain it properly.

4.4.6 Dye Spot (8.37%):

Dye Spot

Figure 4.6: Dye Spot

Cause:

- ✓ To use excess dye in wash bath.
- ✓ Dosing of dyes is not done in proper way.
- ✓ If time and temperature is not maintain properly.
- ✓ If the dyes are not fixed with garments.

Remedies:

- ✓ Operator should be skilled.
- ✓ Machine should clean properly so that the dyes are not attached with the body parts of machine.
- ✓ To use chemical and rework to remove this fault.
- ✓ Fixing agent should use to fix the dye.

5. Conclusion

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During this thesis report we had tried to our best to done our duty. In the whole report we have highlighted the parameter changes due to washing on denim fabric. It is completely a new experience about washing defects. We visited wet wash section, dry process section, dryer section, sample checking section, chemical store and we have learned about machineries, environments, working process and so on but mainly we work by the final quality section and thesis by Investigation on the defects found in after wash Quality checking and their Remedies of Denim Garments. In our total thesis work we have found that defects (%) is, Shade Dark (44.27%), Shade Blue (26.98%), Shade Light (10.34%), Hand Sand Less (8.48%), Hand Sand Light (5.66%), Whisker Light (2.23%) and Dye Spot (2.04%). Also we have investigated on the final quality report and found different defects (%) on garments after washing. They are, Shade Dark (20.55%), Off Shade (17.14%), Shade Light (16.21%), PP Spot (15.18%), Crease Mark (11.78%), Dye Spot (8.37%), Dappa (5.38%), Wrong Whisker (2.90%), Crinkle Spot (1.85%), Damaged Body (0.61%).we also learned about the process of how we can take remedies to remove this problems at all. We really have worked hard to complete this thesis well ahead. In this period we realized that practical experience is more valuable for service life. The demand of denim is increasing day by day. To meet this huge requirement of denim new finishes techniques is developed, which is economic and ecological and our textile industry follows all those processes.

There are a lots of advantages are in garment washing. The demand of washed garment is increasing day by day because of its stability, flexible design, and popularity. We should use the latest technology on the garment washing and should have to implement the research works and experiment on washed garment industry.