Faculty of Engineering

Department of Textile Engineering

REPORT ON

Study on Faults of Garments Washing

Course Title: Project

Course Code: 4214

Submitted By

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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

Fall, 2018

LETTER OFAPPROVAL

To

The Head

Department of Textile Engineering
Daffodil International University 102,
Shukrabad, Mirpur Road, Dhaka 1207.

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

Dear Sir,

We are just to let you know that this report titled as **"Study On Faults of Garments Washing"** has been prepared by the student A.K.M. Arifur Rahman, Amit Sharma & Mahabubur Rahman bearing ID 151-23-4213, 151-23-4264 &151-23-4276 is 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 students 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

……..
Engr. Mohammad Abdul Baset
Assistant Professor
Department of Textile Engineering
Daffodil International University

ACKNOWLEDGEMENT

At first, we would like to express our heart -felt thanks to Almighty Allah for his kind blessing for completion of this process successfully. We would like to thank the people, who have made a significant contribution to make this industrial attachment. Their guide lines, suggestions & inspiration helps me a lot. We would like to express our deepest appreciation to our respected teacher & academic supervisor **Engr. Mohammad Abdul Baset, Assistant Professor, Dept. of textile engineering (DIU)**. Deep knowledge & keen interest of helps & assists me much to carry out this report on Industrial engineering. His endless patience, scholar guidance, constant encouragement, energetic supervision, constructive criticism, valuable advice, checking many raw data & correcting them at all stages have made it possible to complete this report.

We would like to express our heartiest gratitude **Prof. Dr. Mahbubul Haque, Head of the Dept. Textile Engineering** for his suggestion & also the other faculty members & the stuffs of TE department of Daffodil International University. We also very much glad to HAMS Washing & Dyeing Ltd. Authority for giving us opportunity to do my report work in their factory. We also thankful to Besides, this internship program makes us realized the value of working together as a team & gives a new experienced in working environment, which challenges us every time. Finally, we express our sincere thanks to all those who have either directly or indirectly helped us to make this industrial attachment successfully.

Declaration

We declare that this Industrial Attachment report is original and not from elsewhere. We also declare that this Attachment report nor any part of this Industrial Attachment Report has been submitted for award of any degree.

Prepared by:

Name	ID	Signature
A.K.M Arifur Rahman	151-23-4213	
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Dedication to our
Beloved Teacher& Respected Parents

ABSTRACT

Garments washing is one of the most important process for change the outlook of garments and also improve garments quality. The quality of washing is depends on the whole process. And the process includes all the chemicals, machineries, operations and the skills of the operator. It is very important to maintain process sequence to achieve the require washing result.

This report we present after wash what kind of defect we saw in garments. In this report we collected data from Cutting Edge Washing Plant, MBM Group. This report we find various types of washing defect in garments such as shade light, shade dark, pp less, pp more, tint less, tint more, grinding, crease mark & spot. Most defect we found in shade dark. Which percentage is 19.82 & less defect we found in grinding which percentages is 1.19. Over all this report helps us to understand the fault of after wash garments.

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CHAPTER 1

Introduction

1.1 Background of the report:

A thesis paper referred to as research paper that offers important information for a specific topic to the reader. We have made this paper on the topic of garments washing. We understood the present demand of garments washing and its future. So we decide to work on this topic and want to know about the different washing process and the problem solving which occurs in time of operation. We practically worked in the washing plant named "Cutting Edge Industries Limited". This is a well-furnished washing plant which includes all the modern technology. The background for making this report includes the research on washing section with present and previous issues and also the historical background of that.

1.2 Objectives of the report:

The specific objectives of the study are given below:

- To know about garments wash
- To know about different types of washing
- To know about different types of washing process.
- To observe the changes that happens during garments washing.
- To observe the changes that happens after washing.
- To compare the changes that occurs before and after washing.
- To find different faults during and after washing.
- To find the remedies of this damages.

1.3 Significance of the report:

Garments washing demand increasing day by day. Now a day's consumers need more fashionable and attractive design. As growing garments washing there also came-out different types of problem of washing. Here we collect the problems that occurs in time of washing and the solution of those problem. Different types of washing that contain different recipe and method which gives various output. Quality of washing can be improve by proper use of chemical and proper handling of process.

1.4 Scope of the report:

This report is based on different types of washing, it includes from the starting of a unwashed garments to finished washed garments. Different types of washing process, chemicals, machine includes for require garments washing effects. A proper study on this particular topic can improve the quality of product. So this report can be helpful for whose want to gain a clear concept about garments washing.

1.5 Limitations:

Here are some limitations that we faced during making this report:

- We faced some difficulties to collecting data from the factory.
- We did not get any investigation report.
- Sometime we did not get exact cooperation from the staffs.

CHAPTER 2

LITERATURE REVIEW

2.1 Garment Washing:

Now a days garments washing are increase day by day.For the reason of garments washing garments become fashionable & comfortable. On the other word we can say Garments washing is a process by which impurities such as oil, dust, starch etc. can be removed and change the outlook of garment, creates a fashionable attire and modify the appearance.

2.2 Historical Background of Garments Washing:

In Bangladesh, garments wash was first developed in 1988 though it has been using for last 50 years in worldwide in different countries. Hongkong was first done washing in garments in Asian continent after swing garments are sent. Nowadays, washing sector are

2.3 Objectives of Garments Washing:

- To remove the size material and impurities such as oil, dirt, dust, starch etc.
- To change the outlook of garment, creates a fashionable attire and modify the appearance.
- To achieve the different wash effect.
- For soft hand feel and increase the aesthetic property, garments washing is necessary.
- To add the features on garments like Tagging, Grinding, Destroy, Whiskering, Tie Dye,3D, Wrinkle, Water proof properties, Water breathable properties, Flame retardant finish etc. are available in garments washing.
- Shrinkage may occur in garments during washing. It is noted that, shrinkage will not appear in garments further.
- To remove any kind of spot, dust during manufacturing, washing process is needed very much.

2.4 Effects of Garments wash:

- To create garments fashionable
- Change the outlook of Garments
- Remove impurities such as oil, dust, dirt, starch etc.
- Increase the aesthetic properties
- Increase better handfeel.
- Increase garments softness

2.5 Advantages of garments washing:

- Different type of wash effect will appear on garments.
- Remove the impurities during manufacturing and size materials.
- Soft hand feel can be increased on garments by washing process
- Different type of fashionable product can be produced.
- Durability of garments can be increase by washing process.
- Shrinkage can be minimized by using of wash technique.
- Similar appearance and outlook can be done by different washing method.

2.6 Types of Garments Washing:

- Dry Process.
- Wet Process.

2.6.1 Flow Chart of Dry Process in Garments Washing:

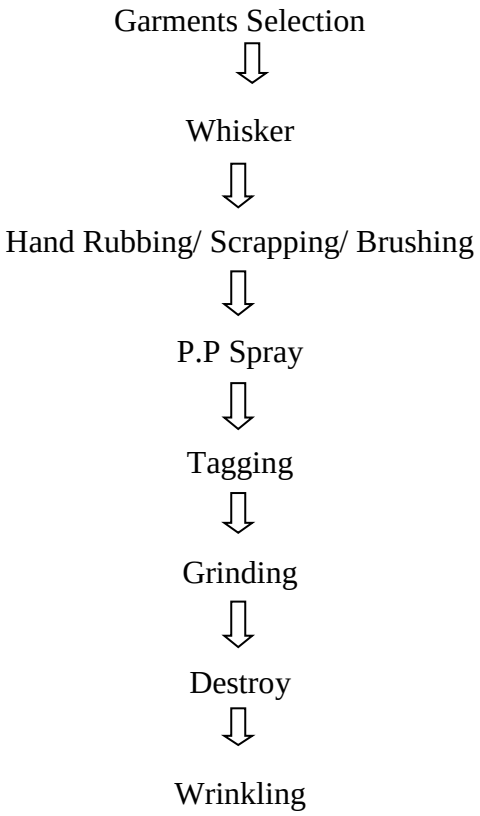


Fig3.5.1: Process flow chart of dry process in garments washing

2.6.2 Flow Chart of Wet Process in Garments Washing:

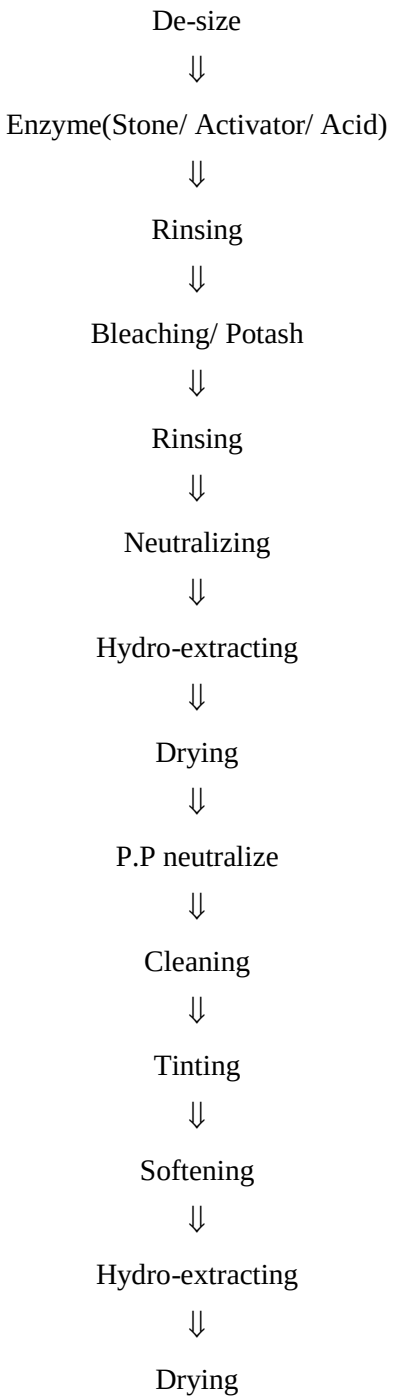


Fig3.5.1: Process flow chart of wet process in garments washing

2.7 Dry Process/Mechanical Process:

2.7.1Whiskering:

Whiskering is a process where emery paper is used in a specific area of garments for color fading. It is done manually. Here whisker pattern and sand or emery paper is used. Make a pattern just like specific whisker and put it inside the garment, then rubbing garment over pattern. As a result, color of garments are fade.

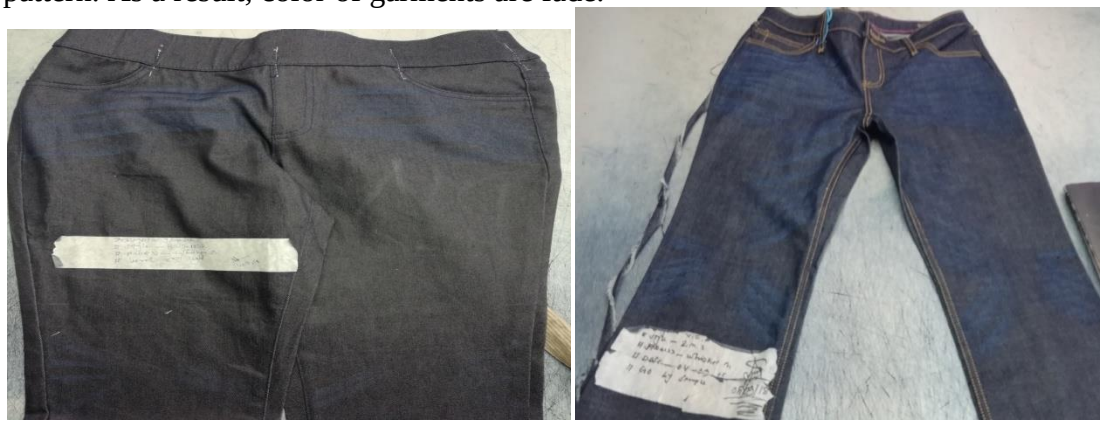


FIG 2.7.1: Whiskering

2.7.2Hand Rubbing:

Hand rubbing is a process where emery paper is used for color fading in a specific area of garments .It is done by manually. Main different between whiskering & hand rubbing that hand rubbing has no pattern. Garments are set in a dummy and rubbing the specific area of garments by emery paper

FIG2.7.2:Hand Rubbing

2.7.3Grinding:

Grinding is done by grinding machine manually. It is doing on garment for mainly old/used look appearance & fashion. Basically, it is done on hem, pocket, waist belt, pocket opening, and pocket flap of garments.

FIG 2.7.3: Grinding

2.7.4 P.P Spray:

P.P means Potassium Permanganate. P.P spray is a process which is manually done by specific area of garments for color fading. It is done by spry gun.In this process P.P mix with Acid Or boost etc. But most commonly used phosphoric acid. The ratio of PP & acid is depend on color fading

.

FIG 2.7.4: P.P Spray

2.7.5 Tagging:

Tagging is done by tagging machine Or tag gun. It is done also by needle and thread manually. After wash upper portion of garment occurs crease marks and inside of tagging occurs dark shade.

FIG 2.7.5: Tagging

2.7.6 Destroy:

Destroy is a process where specific area of garments are destroy by Different type of destroy machine for older look of garments. It is done manually on the garments. Different types of machine used for destroy the garments- Laser, Grinding machine, Emery cloth, Hacksaw blade, Knife etc

FIG 2.7.6: Destroy

2.7.7 Permanent Wrinkle Process:

Generally permanent wrinkle is done on garments after all types of wet process wash & garment should be in dry position. Resin ids diluted with water which is recommended by chemical supplier, generally 20% resin & 80% water. For permanent wrinkle we use diluted resin, which is sprayed on garments at specific area by nozzle. After resin sprayed on respective area, then fold and clip is attached on the folding area. Now hang the garments in hanger trolley. Then Trolley with resin treatment garments put inside the industrial oven.

FIG 2.7.7: Permanent Wrinkle Process

2.7.8 Laser

Laser is an electromagnetic magnetic radiation. Laser is used on garments to create different types of effect. Generally, a design is previously set on the computer then it is applied on the garment. It is totally a computerized system.

FIG 2.7.8: Laser

2.8 Wet process/ Chemical process:

2.8.1 De-size:

De-sizing is a process where oil, dirt & dust are removing from the garments. De-sizing process also helps to remove certain amount of color from garments and create fading effect on it.

2.8.2 Enzyme:

Enzyme is a bio-chemical which helps to fade color on garments body.
Classification of Enzyme:

- Liquid
- Powder

2.8.3 Rinsing:

Rinsing is done with normal water.

2.8.4 Bleaching:

Bleaching is done to create color fading on garments body.

2.8.5 Neutralization:

To neutralizethe garments and remove the hazardous chemicals.

2.8.6 Hydro-extracting:

These process is used to squeeze the garments parts and it will shift on extracting machine from washing machine to remove water. These process is done by Hydro-extractor machine. The RPM of inner drum of hydro machine is 700-1200.

2.8.7 Drying:

Drying is next process which takes place after Hydro-extracting. Drying is used to dry the fabric. The gas dryer or stream dryer is used to dried the garments. Then garments will send to dry process section for P.P spray.

2.8.8 Tinting:

Addition of slight amount of color on garments if required.

2.8.9 Softening:

Softening is done on garments to increase softness and hand feel.

2.9 Types of Chemical Used in Washing Plant

1. De-sizing agent
2. Enzyme
3. Anti-crease
4. Anti-stain
5. Acetic acid
6. Bleaching powder
7. Caustic soda
8. Soda ash
9. SVN

10. Sodium bicarbonate
11. Potassium Permanganate
12. Hydrogen peroxide
13. Biopolishing agent
14. Hypo
15. Fixing agent
16. Catalyzer
17. Sodium metabisulphate
18. Optical brightness
19. Micro emulsion silicon
20. Buffer
21. Hardener

2.10 Function of Chemicals in Washing:

2.10.1 De-sizing agent:

De-sizing agent is used to maintain color-tone and removes the impurities such as dirt, oil and dusts.

Example: Soda ash, H2O2, detergent etc.

2.10.2 Enzyme:

During enzyme wash, enzyme is used to attack the long chain of cellulose. As a result, the long chain of cellulose will break down and converted into a short chain of glucose. Thus, the effect of enzyme is in garments surface.

2.10.3 Anti-crease:

Anti-creasing agent reduce the crease mark on garments. It can be applied on de-sizing.

2.10.4 Antistain:

Antistain is used to increase tearing strength of garments. It also works to prevent the staining on pocket of garments.

2.10.5 Acetic acid:

Acetic acid has various uses at garments washing process. It is used to neutralize the garments and control the pH in bath and also remove the dullness of garments color.

2.10.6 Bleaching powder:

Bleaching powder is used in garments washing to cut the color from garments. The different shade like Dark, Medium, Light depends on amount of bleaching powder.

Example; KCI-bleach, Japanese Bleach etc.

2.10.7 Caustic soda:

Strong alkali based caustic is a desizing and cleaning agent.

2.10.8 Soda ash:

Soda ash is used in chemical process like de-sizing, cleaning. It is one kind of alkali substance.

2.10.9 Sodium hyposulphite:

Sodium hyposulphite is used as a neutralizing agent. It is used to neutralize the garments after bleaching process.

2.10.10 Potassium permanganate:

Potassium permanganate is used in potash wash and acid wash. It can be applied with pumic stone and towel on denim. The effect of potassium permanganate is Reddish.

2.10.11 Hydrogen peroxide:

Hydrogen peroxide is used in de-sizing and cleaning process in garments wash.

2.10.14 Biopolishing:

Biopolishing is used in acid enzyme process to create buffer solution for good effect on garments. After using biopolishing, garments shown more softer than others.

2.10.15 Hypo:

Hypo is a neutralization agent. Mainly used in bleach wash and Enzyme wash.

2.10.16 Fixing agent:

Fixing agent is applied during washing to fix the unfix dye. The color fastness and rubbing fastness is depend on how much color is fixed.

2.10.17Catalyzer

To increase the chemical reaction

2.10.18Sodium metabisulphite:

Sodium metabisulphite is a neutralizing agent. Mainly used in Potash wash, Bleach wash and Acid wash.

2.10.19 Optical brightness:

Optical brightness is used to help the garment more whiter.

2.10.20Micro emulsion silicon:

Micro emulsion silicon is used as a finishing agent. It gives durable softness, lubricating properties, anti-pilling, dimensional stability, elastic handle on fabric.

2.10.21 Hardener

Hardener is a chemical which helps to prevent lycra distracting from a garments body.

2.11 Enzyme Wash

Enzyme are bio chemical substances that behave as catalysts toward specific reactions. The action of enzyme during enzyme wash, it hydrolysis the cellulose. At first it attack the projecting fiber & hydrolyzed them. Then it attacks the yarn portion inside fabric and partly hydrolyzed the yearn portion and faded affect is produced. Mainly two type of enzyme are use in garments wash one is powder & another are liquid enzyme.

2.11.1 Flow chart of Enzyme wash:

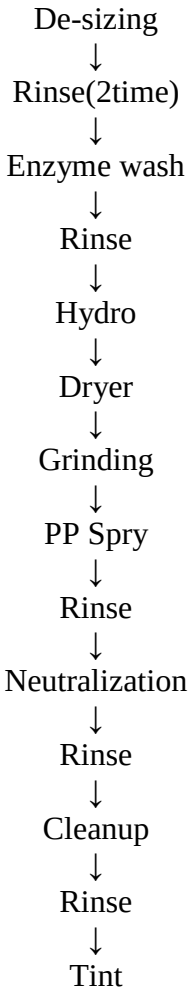


Fig3.3.1: Process flow chart of enzyme wash

2.11.2 Recipe of enzyme wash :

Style No: 77mwzls

Types of garments : D-L- Pant

Wash lot quantities Pcs : 60Pcs

Table 3.3.2 : Recipe of enzyme wash

Process	Chemical	Dozes in Kg/lt	Water in Ltr	L:R	Time	Temp . ^{o}c
Desize	Soda ash QDP	1kg 200gm	5oo		10m	RT
Rinse 2time with 500 ltr water						
Enzyme 1	Powder enzyme 68 QDP	600gm 200gm	400		30m	RT
Rinse 2time with 500 ltr water						
Enzyme 2	Powder enzyme 68 QDP	5oogm 200gm	4oo		25	RT
Rinse 2time with 500 ltr water						
Then for the buyer requirement garments send for hydro » Dryer » Grinding »pp spray						
Neutral	Meta by sulphate	2kg	5oo		8	Rt
Rinse 2time with 500 ltr water						
Clean up	Soda ash QDP	1kg 200grm	500		10m	RT
Rinse 2time with 500 ltr water						
Tint	Brown Gtl Black NF Yellow Rl G.salt	8gm 2gm 2gm 3kg	400		8m	RT

2.12.Bleach Wash:

Bleach wash is a process where bleach is use for color fading. Basically bleach are two type one is powder and another is liquid bleach.

2.12.1 Flow chart of bleach wash

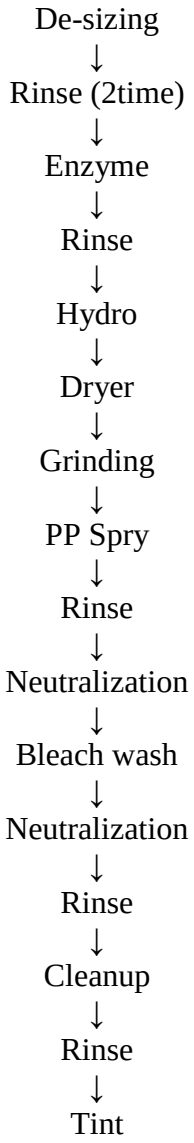


Fig3.4.1: Process flow chart of bleach wash

2.12.2 Recipe of Bleach wash

Style No: 2014156

Types of garments : D-L- Pant

Wash lot quantities Pcs : 100Pcs

Recipe of bleach wash

Process	Chemical name	Dozes in kg/ltr	Water in ltr	R:L	Temp	Time
Desize	Soda Ash RM	1kg 300gm	600	1:6	50	15
Rinse 2time with 600 ltr water						
Enzyme	Powder enzyme 63 Rm	400gm 300gm	400	1:4	45	25
Rinse 2time with 600 ltr water						
Bleach	KCl Bleach	5kg	600	1:6	50	8min
Neutral	Hypo	2kg	500	1:5	RT	10min
Clean	H_2O_2 Detergent A.Acid	500gm 200gm 400gm	500	1:5	RT	7min
Then for buyer requirement it send for Hydro» Dryer » PP Spray						
Rinse 2time with 600 ltr water						
Neutral	Meta By Sulphate	2kg	400ltr	1:4	RT	10 min
Rinse 2time with 600 ltr water						
Bleach	L.Bleach	1kg	500	1:5	RT	5min
Rinse 2time with 600 ltr water						
Neutral	Meta By Sulphate	1.5kg	400	1:4	RT	10min
Rinse 2time with 600 ltr water						
	Detergent	300gm	400	1:4	RT	5-7
Rinse 2time with 600 ltr water						
Tint	Turquiose blue Yellow Rl Navy blue G.salt Citric acid	700mmg 300mmg 500mmg 2kg 500gm	400	1:4	RT	10

2.13 Potash Wash:

Potash wash is a process where potassium permanganate is use for color fading. After washing by potash garments turn into radish tone.

2.13.1.Flow chart of Potash wash

De-sizing
↓
Rinse(2time)
↓
Enzyme
↓
Rinse
↓
Hydro
↓
Dryer
↓
Grinding
↓
PP Spry
↓
Rinse
↓
Neutralization
↓
Potash wash
↓
Neutralization
↓
Rinse
↓
Cleanup
↓
Rinse
↓
Tint

2.13.2Recipe of Potash wash

Style No: Boilersult

Types of garments : Denim overall

Wash lot quantities Pcs : 150 pcs.

Recipe of bleach wash

Process	Chemical Name	Dozes in kg/ltr	Water in ltr	L:R	pH	Temp	Time
Desize	Detergent Soda ash	300gm 500gm	600			50	15
Rinse 2time with 600 ltr water							
Enzyme	Powder Enzyme-63	200gm	500			45	10
Enzyme	Powder Enzyme-68 Detergent SVN	200gm 300gm 700gm				45	10
Rinse 2time with 600 ltr water							
Cleanup	Soda Ash Detergent	500gm 300gm	600			50	10
Rinse 2time with 600 ltr water							
For buyer requirement Send for Hydro » dryer» PPSpray							
Rinse 2time with 600 ltr water							
Cleanup	Soda Ash	1kh	500			60	10
Rinse 1time with 600 ltr water							
Potash wash	Potassium Permanganate	50gm	600			60	7
Rinse 1time with 500 ltr water							
Newtral	Meta by sulphate	2kg	600			RT	10
Rinse 2time with 500 ltr water							
Cleanup	Soda Ash H2O2 Detergent	1kg 1kg 300gm	600			60	6
Rinse 2time with 400 ltr water							
Acid	A.Acid	300ml	600			RT	5
Rinse 1time with 400 ltr water							
Tint	Browen Gtl Red bws G.Salt	4gm 500gm 2kg	400			RT	10
Fixing	A.ECO	300gm				RT	5
Tearing	SVN C.Acid	700gm 500gm			4.5	RT	5

2.14 Acid Wash:

Here are three type of acid wash they are .
1)Stone wash
2)Towel wash &
3) Cocksheet Wash

We saw two types of acid wash in factory .here we

2.14.1 chart of Acid wash

Desizing
↓
Rinse
↓
Enzyme
↓
Rinse
↓
Hydro
↓
Dryer
↓
Grinding
↓
PP Spry
↓
Rinse
↓
Neutralization
↓
Acid wash
↓
Neutralization
↓
Rinse
↓
Cleanup
↓
Rinse
↓
Tint

Fig3.6.3: Process flow chart of acid wash

2.14.2Stone Wash:

In stone wash two machine is need .One machine need for stone wash & another machine is need for Neutralization & tint. Firstly 5gm potassium permanganate mix with 1ltr water . Stone put into the machine and mixing pp disperse in stone and mixing them .After mixing a poly is put up. Then garments input the machine & run the machine .When required shade in come, garments out the machine and sand for neutralize ,clean up & tint.

2.14.3 Recipe of Stone wash

Style No:jack jersey

Types of garments : Denim jacket

Wash lot quantities Pcs :150pcs

Table 3.6.1.1 : Recipe of stone wash

Process							
Desize	Soda ash QDP Stone	1kg 300gm 4beg	500ltr	1:5		50	20
Rinse 2time with 600 ltr water							
Enzyme	Powder Enzyme-63 QDP 300L	600gm 400gm 400gm	400ltr	1:4		45	20
Rinse 2time with 600 ltr water							
For buyer requirement it sand for hydro» dryer» pp »Destroy» grinding							
Acid wash	Potassium permanganate Stone	5gm 12bag	1ltr				8
Quantity 150 pcs							
Neutral	Meta by sulphate H2O2 Detergent	3kg 1kg 500gm	500ltr	1:5		RT	10
Rinse 2time with 600 ltr water							
Clean Up	Soda Ash QDP	1kg 500gm	5ooltr	1:5		60	5
Rinse 2time with 600 ltr water							
	A.Acid	500gm	400	1:4		RT	5
Rinse 2time with 600 ltr water							
Tint	Brown GTL Red BWS G.Salt C.Acid Fixing SVN	5gm 700mg 2kg 1kg 500gm 500tm			4.5	RT	7

2.14.4 Towel Wash

Towel wash is one kind of acid wash. In this process Acid and potassium permanganate mixed with machine & then give towel in the a machine and run the machine,. After few minutes when acid & pp mix with towel then put the garments in the machine. Then run the machine. When required shade is done then garments put down the machine & neutral the a PP, Then garments sand for clean & tint.

2.14.5 Towel Wash: Recipe of stone wash

Style No:1445

Types of garments : Denim Shirt

Wash lot quantities Pcs : 100Pcs

Table 3.6.3.2: Recipe of towel wash

Process	**Chemical Name**	**Dozesin kg/ltr**	**Water in ltr**	**L:r**	**pH**	**Temp**	**Time**
Desize	H2O2 Detergent Anti crease	1kg 300gm 200gm	500	1:8		RT	15
Rinse 1time with 600 ltr water							
Enzyme	Powder enzyme -63 Detergent	200gm 200gm	400	1:6		RT	10
Rinse 2time with 600 ltr water							
Bleach	KCI bleach	15kg	600	1:10		60	5
Rinse 2time with 600 ltr water							
Neutral	Hypo	2kg	500	1:8		RT	10
Rinse 2time with 600 ltr water							
	A.Acid	400gm	400	1:6		RT	5
Rinse 2time with 600 ltr water							
Send for Hydro and dryer							
Acid wash	Potassium permanganate Phosphoric Acid Towel	8gm 2gm 1000pcs				RT	7
Neutral	Meta	3kg	500	1:8			10
Rinse 2time with 600 ltr water							
Clean	H2O2 Detergent Red brigtner	1kg 200gm 100gm	500	1:8		RT	7
Rinse 2time with 600 ltr water							
Tint	Browen gtl Black nf Red bws g.salt Denim kre C.acid		400	1:6	4.5	RT	10

Chapter 3

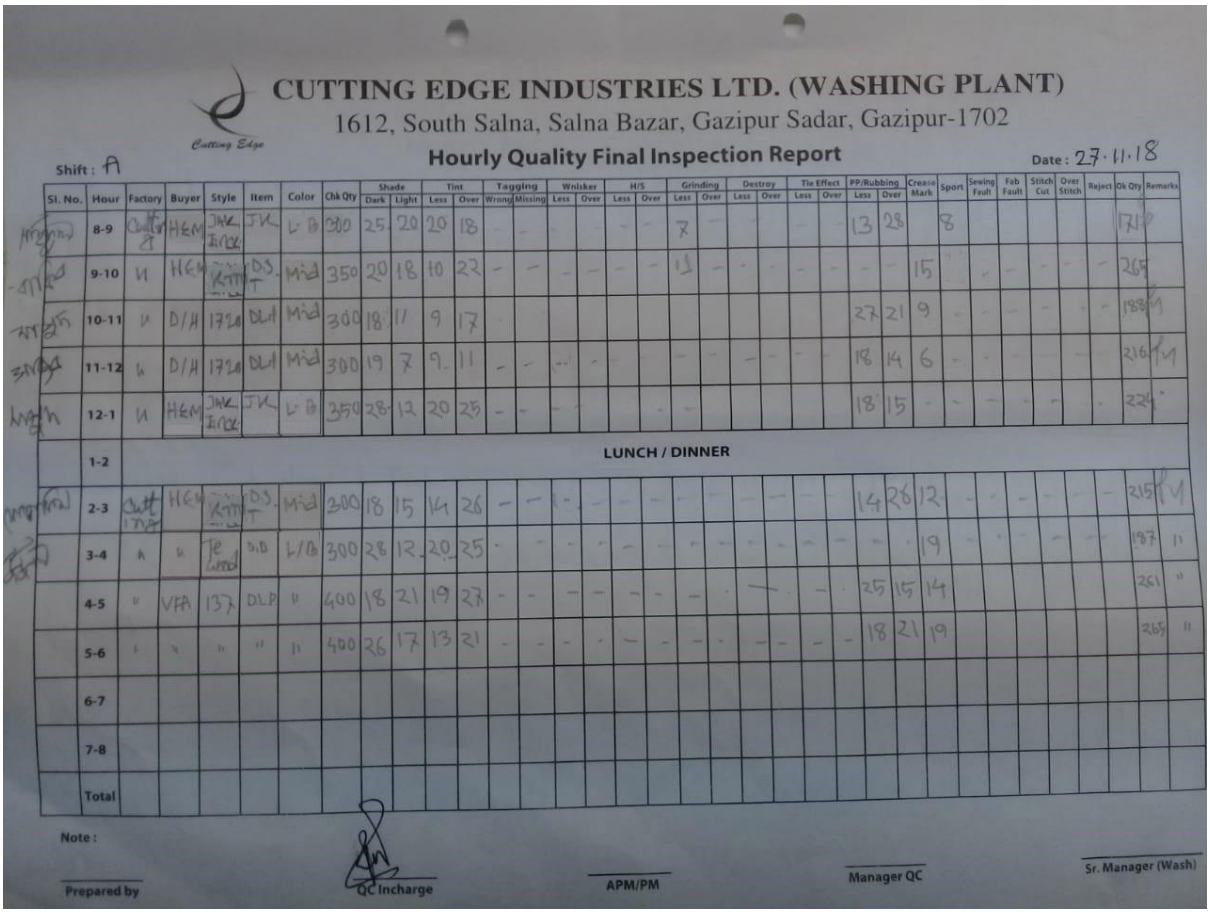
Experimental details

3.0 Experimental Details

We are collected this quality report sheet in Cutting Edge Washing plan, MBM Group. We collected data 28^{th} November 2018. We done our report by flow the several step wet & dry washing fault.

3.1 Operation Bulletin in Final Quality Report

Cutting Edge Washing Plant, MBM group



CUTTING EDGE INDUSTRIES LTD. (WASHING PLANT)

1612, South Salna, Salna Bazar, Gazipur Sadar, Gazipur-1702

Hourly Quality Final Inspection Report

Shift : A

Date : 27.11.18

Sl. No.	Hour	Factory	Buyer	Style	Item	Color	Chk Qty	Shade		Tint		Tagging		Whisker		H/S		Grinding		Destroy		Tie Effect		PP/Rubbing		Crease Mark	Sport	Sewing Fault	Fab Fault	Stitch Cut	Over Stitch	Reject	Ok Qty	Remarks
								Dark	Light	Less	Over	Wrong	Missing	Less	Over	Less	Over	Less	Over	Less	Over	Less	Over	Less	Over								
	8-9		HEM				300	25	20	20	18							7						13	28		8							
	9-10		HEM				350	20	18	10	22							13								15								
	10-11		D/H	1720			300	18	11	9	17													27	21	9								
	11-12		D/H	1720			300	19	7	9	11													18	14	6								
	12-1		HEM				350	28	12	20	25													18	15									
	1-2	LUNCH / DINNER																																
	2-3		HEM				300	18	15	14	26													14	28	12								
	3-4						300	28	12	20	25															19								
	4-5		VFA	137			400	18	21	19	27													25	15	14								
	5-6						400	26	17	13	21													18	21	19								
	6-7																																	
	7-8																																	
	Total																																	

Note :

Prepared by | QC Incharge | APM/PM | Manager QC | Sr. Manager (Wash)

3.1 Final wash report

3.1.1 Cutting Edge Washing Plant

Date:27-11-2018
Buyer Name: H&M
Style No. Jack jersey ,

Hrs	Bu-yer	Style	Clr	Item	Chek Qty	Ok Qty	Problem									
							Shade		Tint		PP		Crease mark	Grinding		Spot
							L	D	Less	More	less	More		less	more	
8-9	H&M	J.jers-ey	L/B	D. Jack-et	300	171	20	25	20	18	13	28			7	8
9-10	H&M	Kino	Mid	DSP	350	265	18	20	10	22			15			
12-1	H&M	j.jers-ey	L/B		350	224	15	28	18	22	18	15			5	5
2-3	H&M	Kino	Mid	DSP	300	215	15	18	14	26			12			
3-4	H&M	Tew-ood	L/B	DD	300	187	12	28	20	25			19			

Total Checked = 1600
Total defected = 538
Total passed = 1062

Description:

This operation sheet is a QC final report of cutting edge washing plant. In this sheet we see the buyer name, style name, item of the garments, article &this sheet contain the fault of article color, checked name. ok quantity, shade, tint ,pp, grinding, spot & crease mark.

Here 1st lot start 8am. Buyer name H&M & its style name jack jersey required shade is light blue. Total quantity of this lot is 300. After final wash we get 171 pcs ok & 129 pcs garments are not ok for the reason of various types of washing fault . This fault occurs during when garments are washed. In this style we see dry & wet both types of washing faults. The faults are shade light, shade dark, tint less, tint light, pp less ,pp more, grinding & spot

2nd lot start 9am. Buyer name H&M & its style name Kino required shade is light blue. Total quantity of this lot is 350. After final wash we get 265 pcs ok & 85 pcs garments are not ok for the reason of various types of washing fault . This fault occurs during when garments are washed. In this style we see dry & wet both types of washing faults. The faults are shade light, shade dark, tint less, tint light, pp less ,pp more & crease.
This operation sheet is a QC final report of cutting edge washing plant. In this sheet we see the buyer name, style name, item of the garments, article &this sheet contain the fault of article color, checked name. ok quantity, shade, tint ,pp, grinding, spot & crease mark.

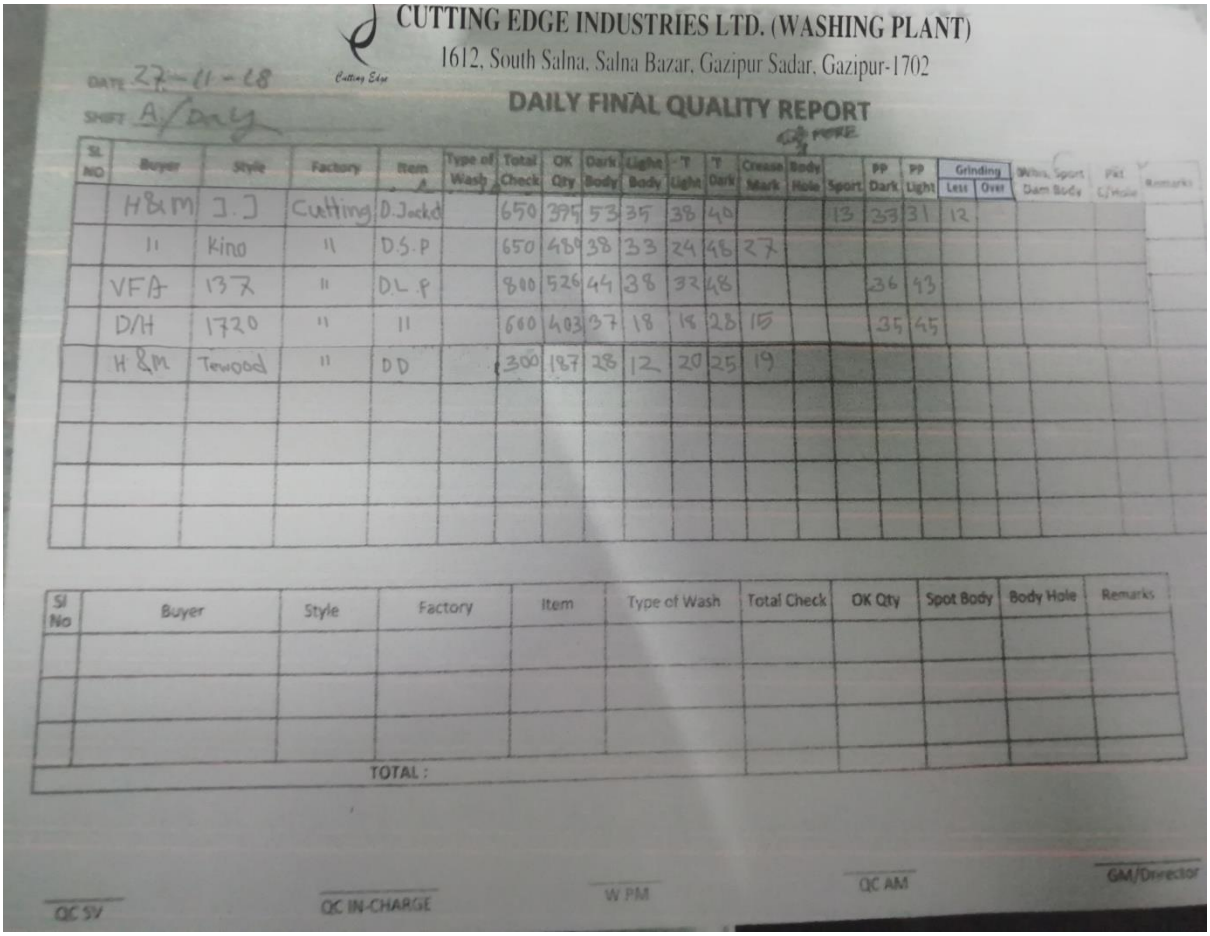
4th lot start 12pm. Buyer name H&M & its style name jack jersey required shade is light blue. Total quantity of this lot is 300. After final wash we get 224 pcs ok & 126 pcs garments are not ok for the reason of various types of washing fault . This fault occurs during when garments are washed. In this style we see dry & wet both types of washing faults. The faults are shade light, shade dark, tint less, tint light, pp less ,pp more, grinding & spot.

5th lot start 2pm. Buyer name H&M & its style name Kino required shade is light blue. Total quantity of this lot is 300. After final wash we get 215 pcs ok & 85 pcs garments are not ok for the reason of various types of washing fault . This fault occurs during when garments are washed. In this style we see dry & wet both types of washing faults. The faults are shade light, shade dark, tint less, tint light, pp less ,pp more & crease.

7th lot start 3am. Buyer name H&M & its style name tewood required shade is light blue. Total quantity of this lot is 300. After final wash we get 187 pcs ok & 113 pcs garments are not ok for the reason of various types of washing fault . This fault occurs during when garments are washed. In this style we see dry & wet both types of washing faults. The faults are shade light, shade dark, tint less, tint light, pp less, pp more & crease.

3.2 Operation Bulletin in final Quality Report

Cutting Edge Washing Plant, MBM group



CUTTING EDGE INDUSTRIES LTD. (WASHING PLANT)

1612, South Salna, Salna Bazar, Gazipur Sadar, Gazipur-1702

DAILY FINAL QUALITY REPORT

DATE 27-11-18 SHIFT A/Day

Sl NO	Buyer	Style	Factory	Item	Type of Wash	Total Check	OK Qty	Dark Body	Light Body	T Light	T Dark	Crease Mark	Body Hole	Sport	PP Dark	PP Light	Grinding Less	Grinding Over	Wkts. Sport Dam Body	Pkt C/Hole	Remarks
	H&M	J.J	Cutting	D.Jacket		650	375	53	35	38	40			13	33	31	12				
	11	Kino	11	D.S.P		650	489	38	33	24	48	27									
	VFA	137	11	D.L.P		800	526	44	38	32	48				36	93					
	D/H	1720	11	11		600	403	37	18	18	28	15			35	45					
	H&M	Tewood	11	DD		300	187	28	12	20	25	19									

Sl No	Buyer	Style	Factory	Item	Type of Wash	Total Check	OK Qty	Spot Body	Body Hole	Remarks
TOTAL :										

QC SV | QC IN-CHARGE | W PM | QC AM | GM/Director

3.2 Daily quality report

3.2.1 Cutting Edge Washing Plant

Date 27-11-18
Buyer Name: H&M, VAF D/H
Style No. Jack jersey, kino,Tewood, 137,1720

Buyer	Style	Item	Chek Qty	Ok Qty	Problem									
					Shade		Tint		PP		Crease mark	Grinding		Sport
					L	D	Less	More	less	More		less	more	
H&M	J.jersey	d.jec-ket	650	395	35	53	38	40	31	33		12		13
H&M	Kino	DSP	650	480	33	38	24	48			27			
VFA	137	DLP	800	526	38	44	32	48	43	36	33			
D/H	1720	DLP	600	403	18	37	18	28	45	35	15			
H&M	Tewood	DD	300	187	12	28	20	25			19			

Total Checked = 3000
Total passed = 1991
Total Defect = 1009

Description:

In this table we see the buyer name H&M,VFA &D/H and their Style name, D.jacket, Kino, Tewood, 137 &1720. Total 3000 pcs garments washed & chacked after final wash the garments. After quality checked in 3000 pic 1991 pcs we get passed garments. 1009 pcs garments we found various types of washing fault.

Chapter 4
Result & Discussion

4.1. Analysis of Quality report from 3.2

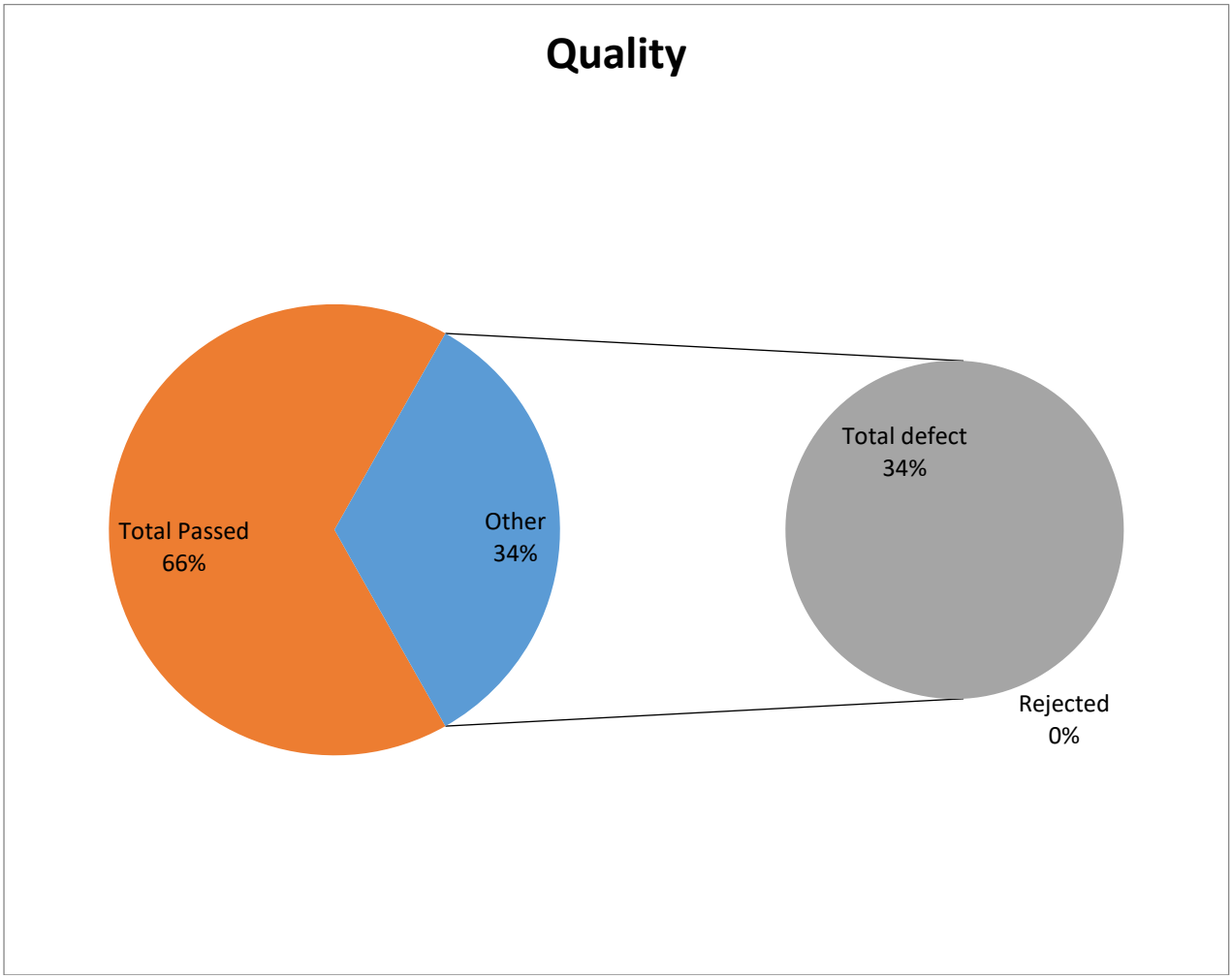
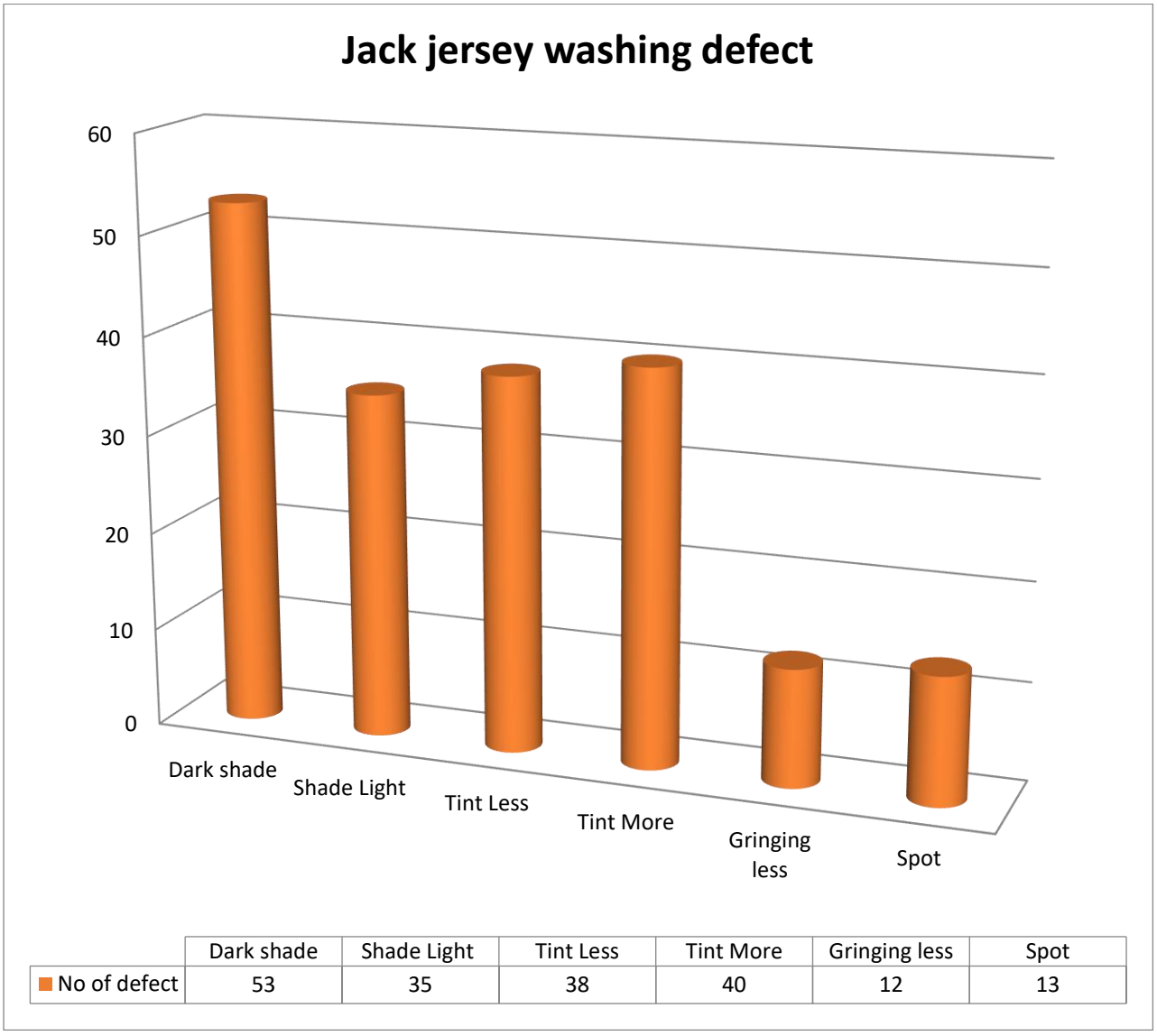


Chart :4.1 Analysis of quality report

Description:

In this chart we show total checked quantity is 1600 pieces of garments. After washing we get 1062 pieces of garments are okay & 538 pieces garments are not ok that means there are some defect take place.

4.1.2 Analysis of Defect Quantity from Report 3.1



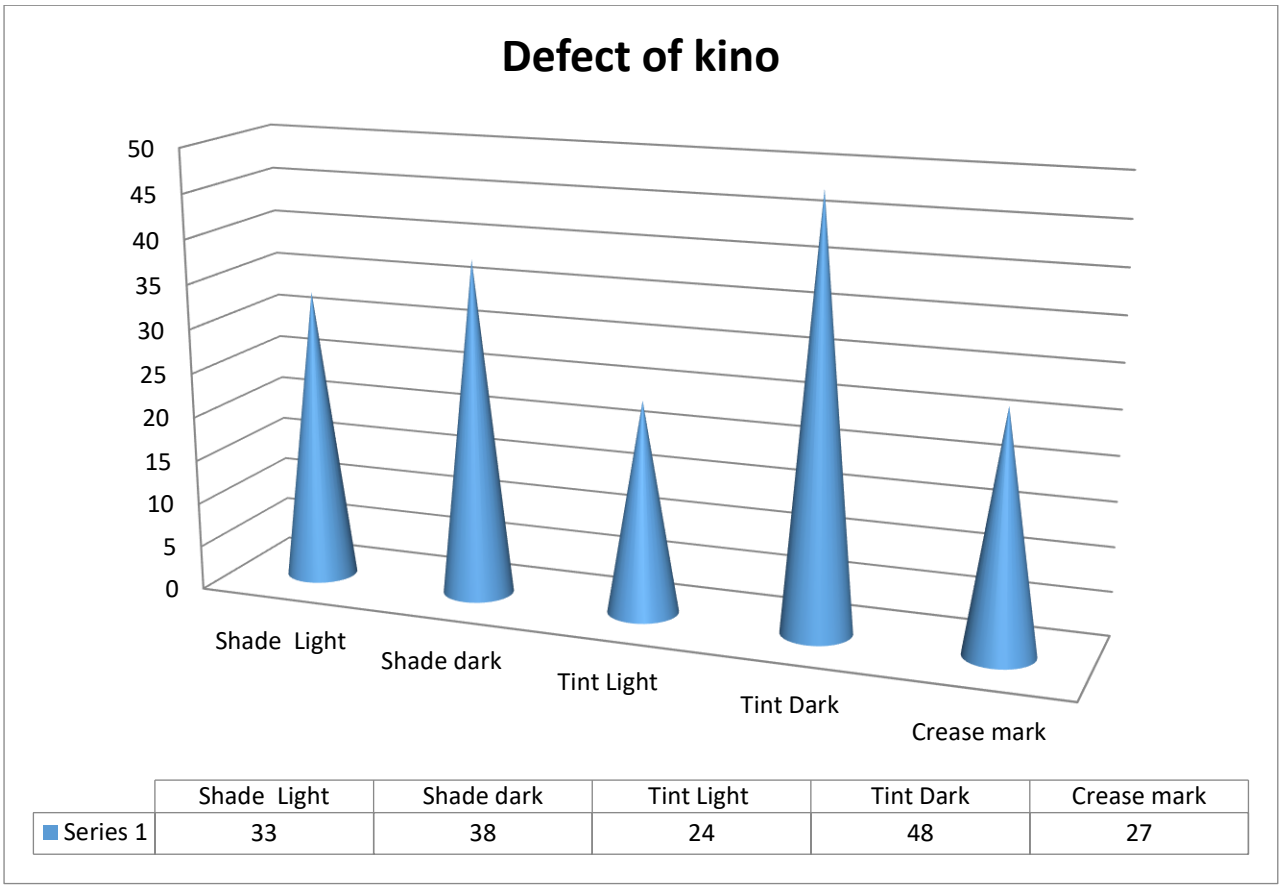
	Dark shade	Shade Light	Tint Less	Tint More	Gringing less	Spot
No of defect	53	35	38	40	12	13

Chart: 4.1.1 Analysis of defect quantity

Description:

In this chart we show defect quantity of washing of jack jersey. Here we see 53 shade light defect which is higher & 12 grinding less defect which is less defect. Without this two defect we saw 35 shade light , 38 tint less , 40 tint more & 13 spot defect in this style.

4.1.2Analysis Of defect Quantity from Report 3.1



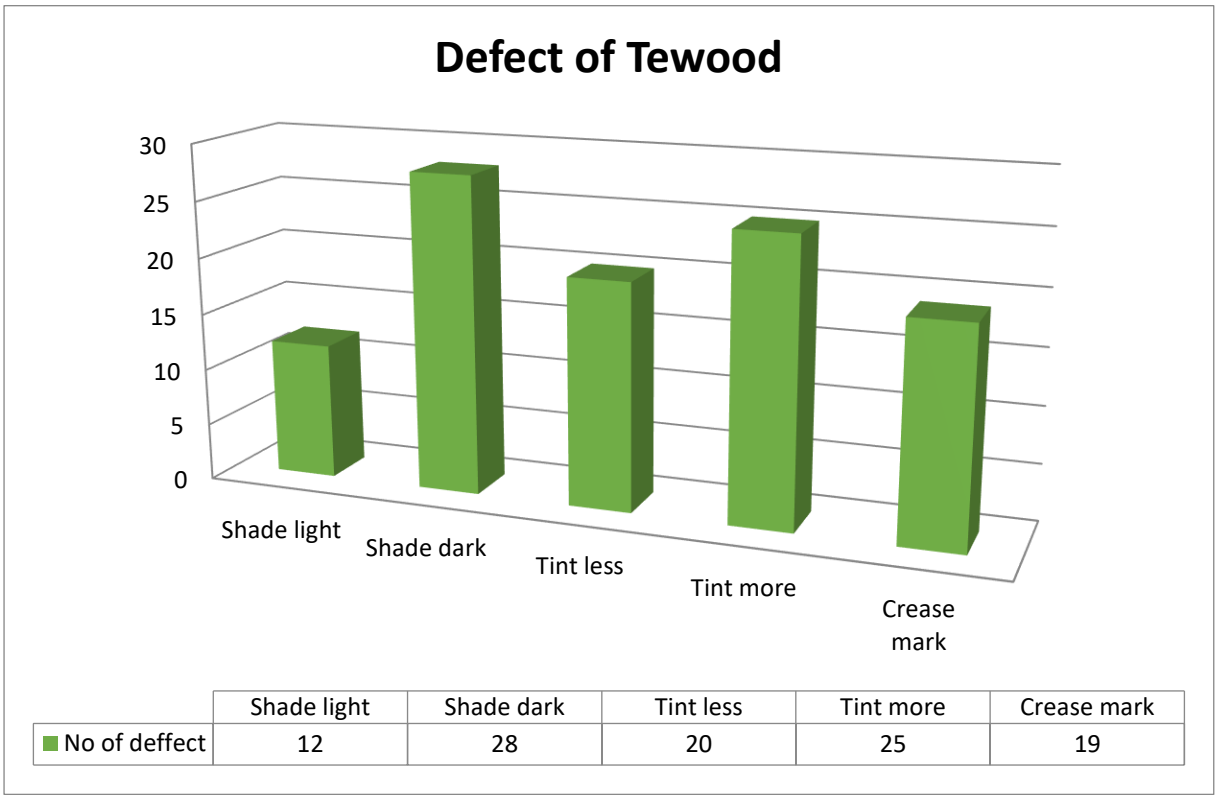
	Shade Light	Shade dark	Tint Light	Tint Dark	Crease mark
Series 1	33	38	24	48	27

Chart: 4.1.2 Analysis of defect quantity

Description:

In this chart we show defect quantity of washing of jack jersey. Here we see 48 tint dark defect which is higher & 24 tint light defect which is less defect. Without this two defect we saw 33 shade light , 38 shade dark, 24 crease mark defect in this style.

4.1.3 Analysis of Defect from chart 3.1



	Shade light	Shade dark	Tint less	Tint more	Crease mark
No of deffect	12	28	20	25	19

Chart:4.1.3 Analysis of Defect quantity

Description:

In this chart we show defect quantity of washing of jack jersey. Here we see 28 shade light defect which is higher & 12 shade light defect which is less defect. Without this two defect we saw 20 tint less , 35 tint more , 19 crease mark defect in this style.

4.2 Analysis of Defect Quantity From Report 3.2

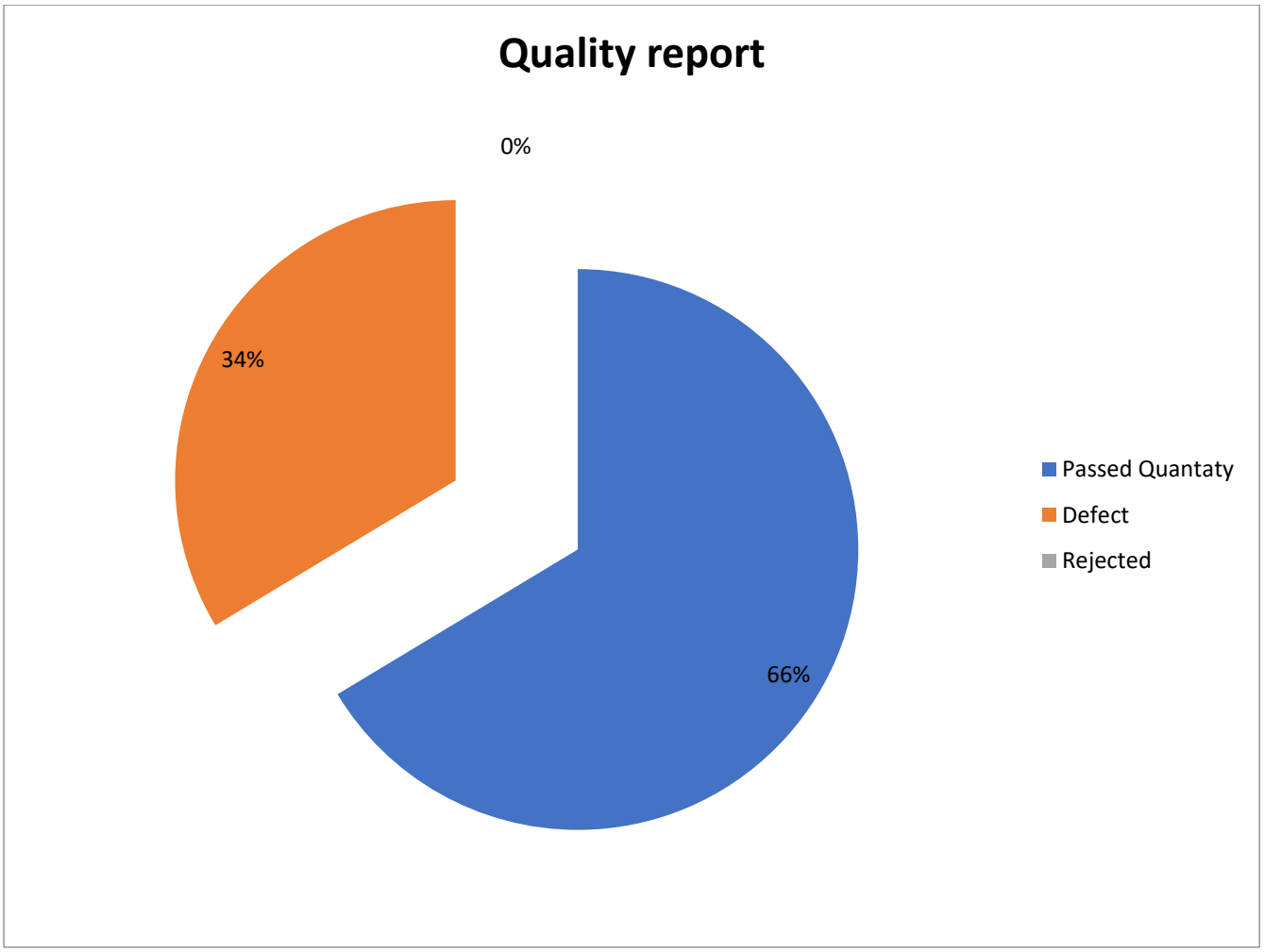


Chart: 4.2 Analysis of quality report

Description:

In this chart we show total checked quantity is 3000 pieces of garments. After washing we get 1991 pieces of garments are okay & 1009 pieces garments are not ok that means there are some defect take place.

4.2.2 Analysis Of Defect Quantity from Chart 3.2

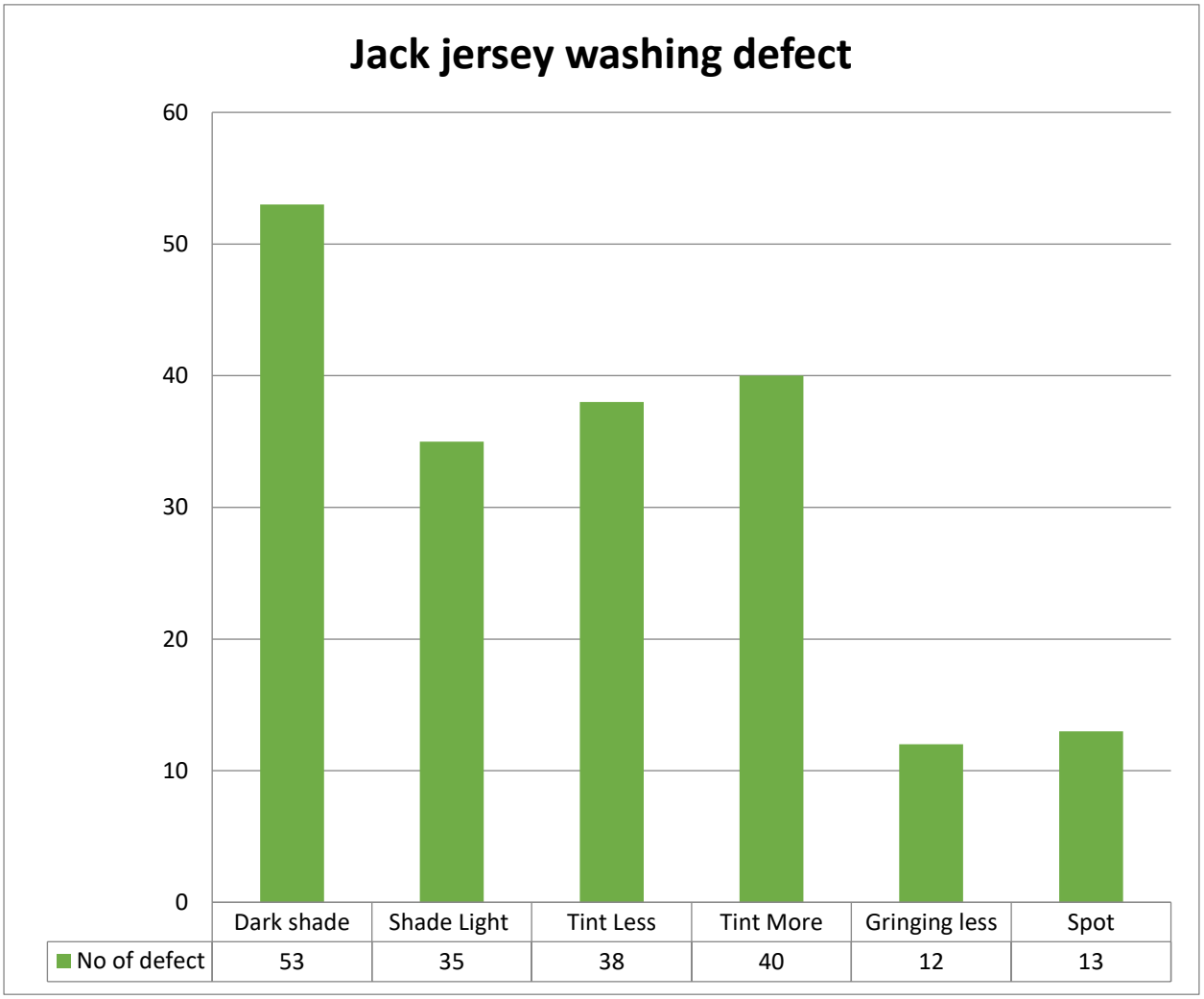
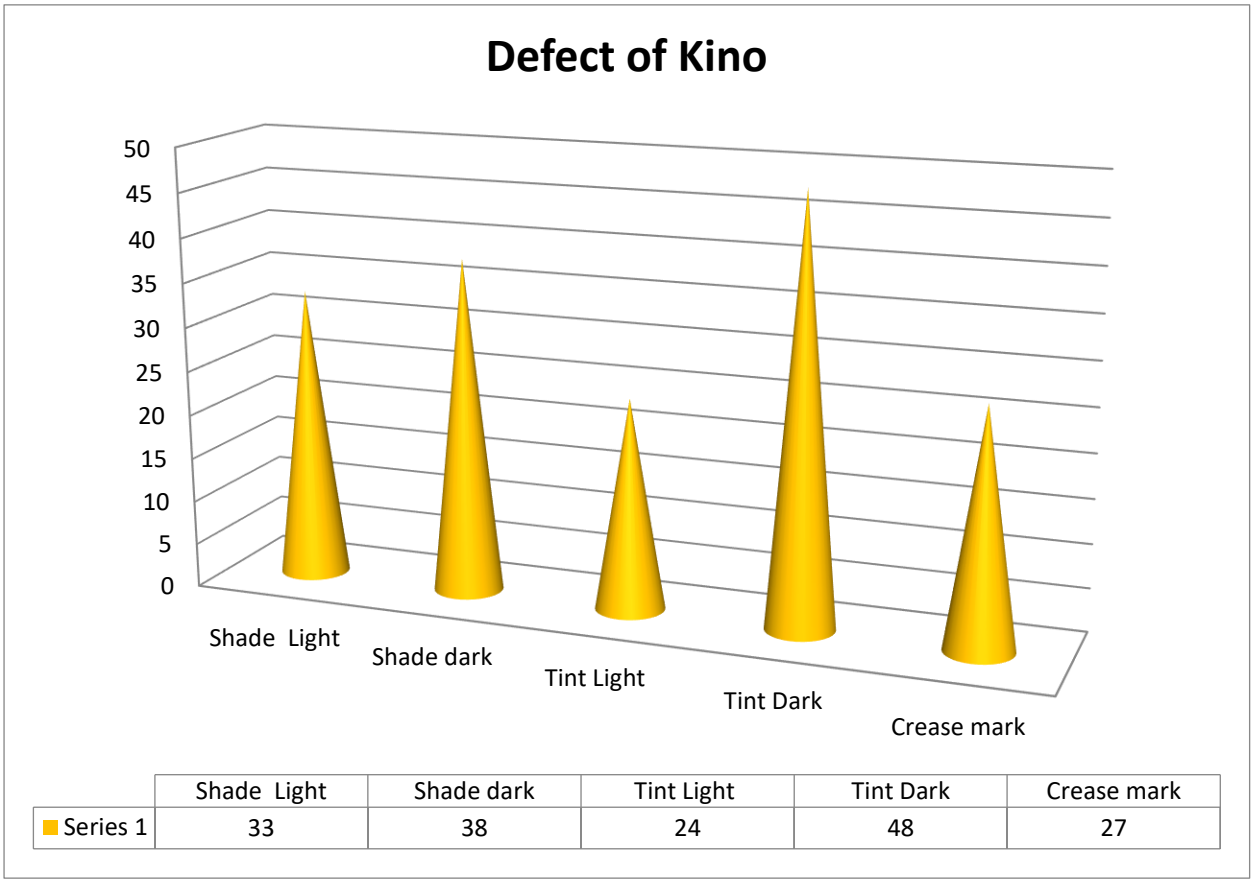


Chart: 4.2.1 Analysis defect of quality report

Description:

In this chart we show defect quantity of washing of jack jersey. Here we see 53 shade light defect which is higher & 12 grinding less defect which is less defect. Without this two defect we saw 35 shade light , 38 tint less , 40 tint more & 13 spot defect in this style.

4.2.2 Analysis of Defect Quantity from Chart 3.2



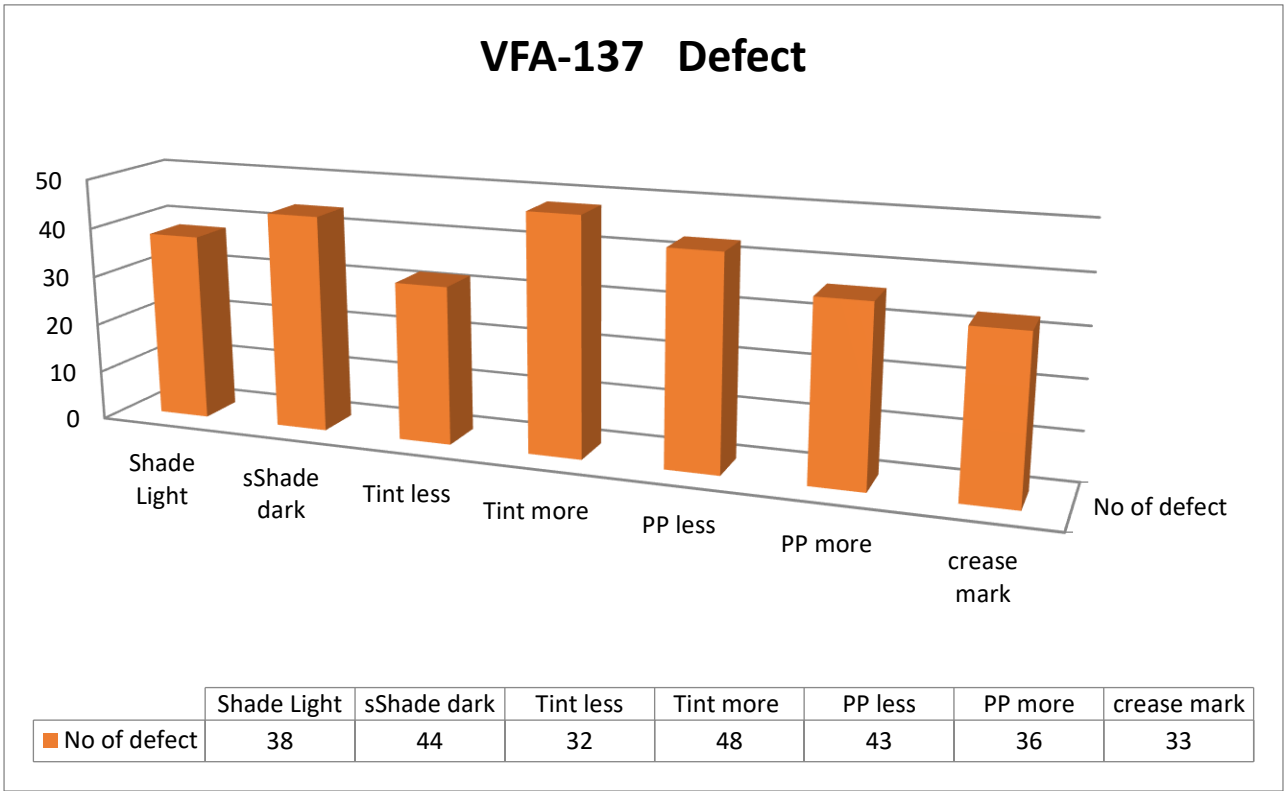
	Shade Light	Shade dark	Tint Light	Tint Dark	Crease mark
Series 1	33	38	24	48	27

Chart: 4.2.1 Analysis defect of quality report

Description:

In this chart we show defect quantity of washing of jack jersey. Here we see 48 tint dark defect which is higher & 24 tint light defect which is less defect. Without this two defect we saw 33 shade light , 38 shade dark, 24 crease mark defect in this style.

4.2.3 Analysis of Defect Quality from 3.2



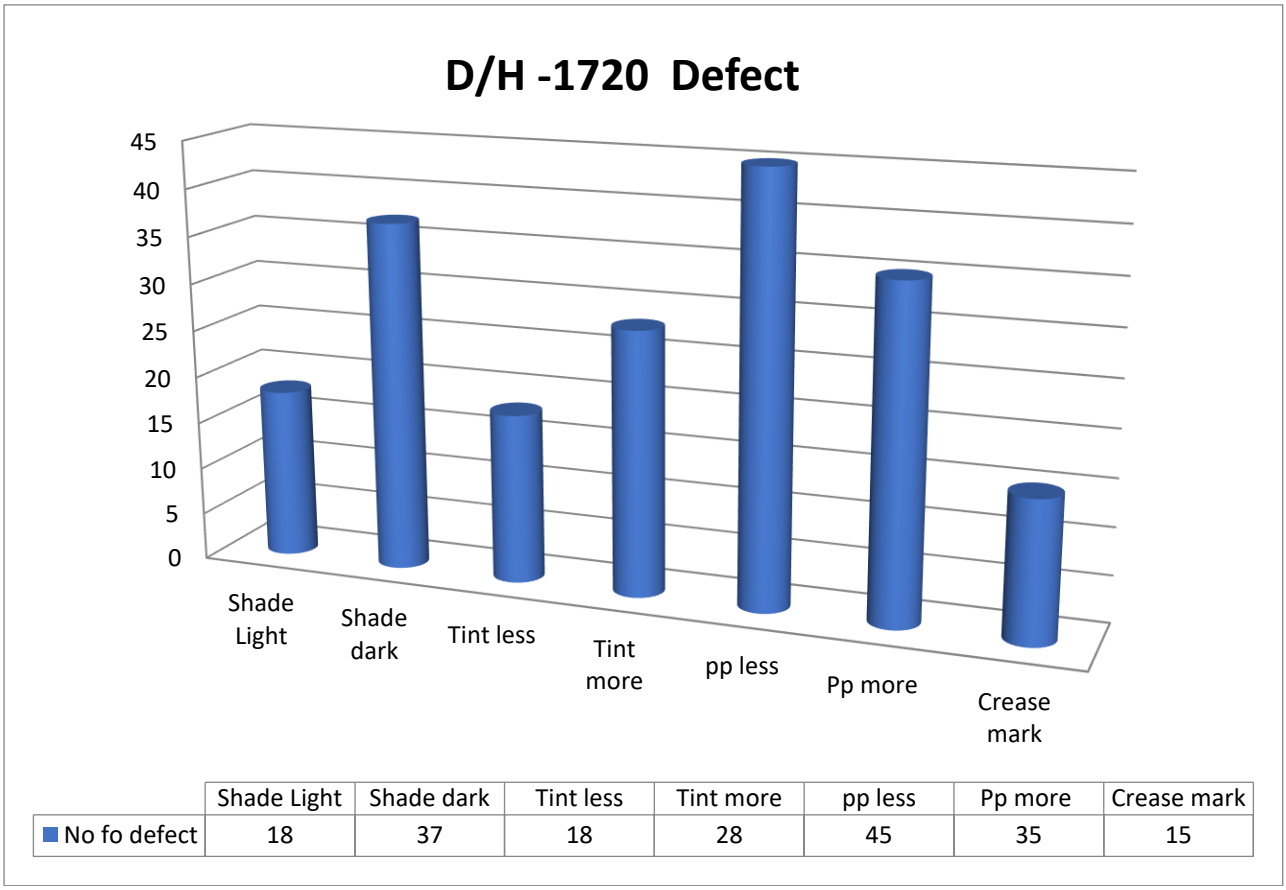
	Shade Light	sShade dark	Tint less	Tint more	PP less	PP more	crease mark
No of defect	38	44	32	48	43	36	33

Chart 4.2.3 Analysis of defect quality report

Description:

In this chart we show defect quantity of washing of style 137. Here we see 48 tint more defect which is higher & 32 tint less defect which is less defect. Without this two defect we saw 38 shade light , 44 shade dark, 43 pp less, 36 pp more & 33 crease mark defect in this style.

4.2.4 Analysis of defect Quality From 3.2



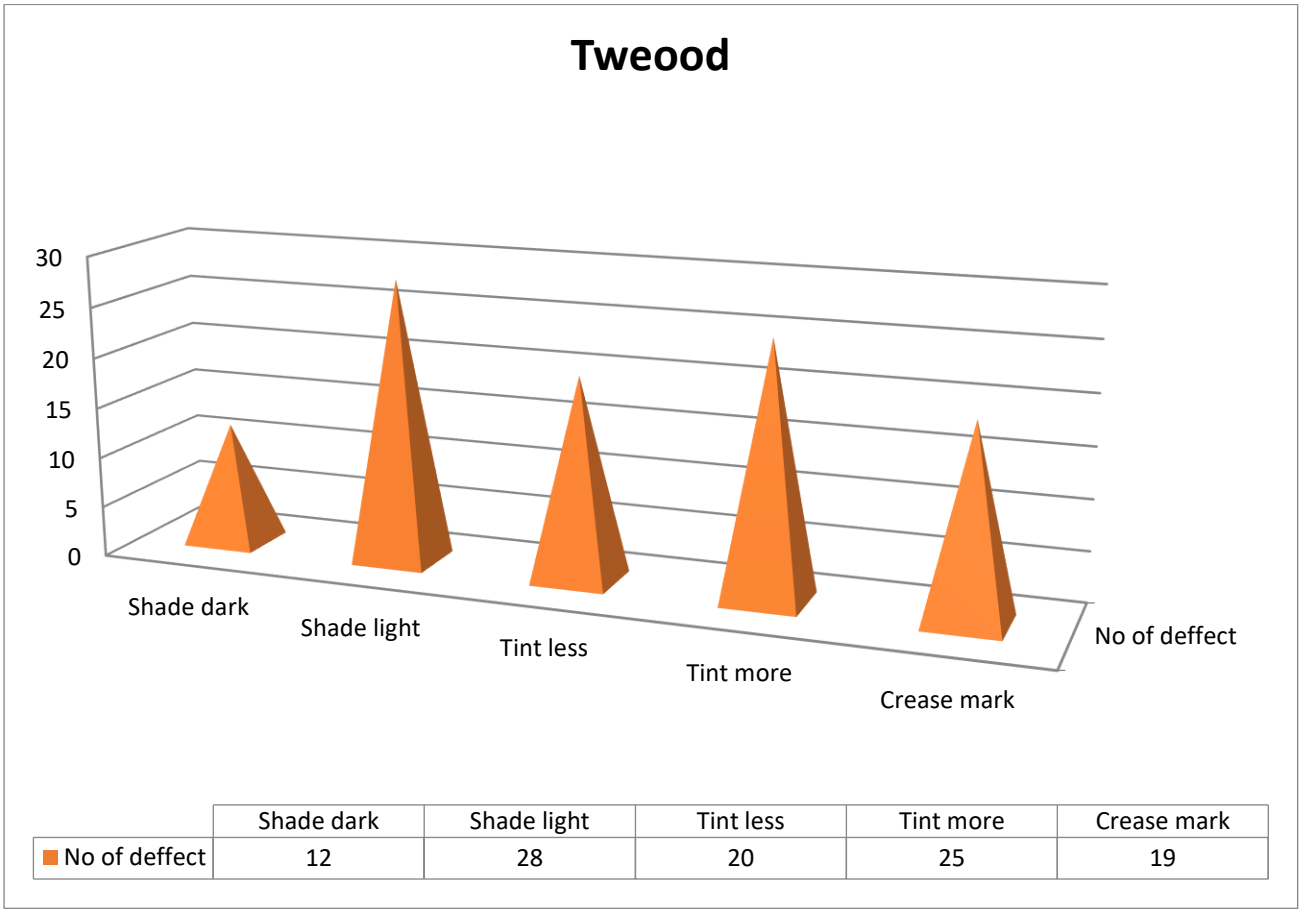
	Shade Light	Shade dark	Tint less	Tint more	pp less	Pp more	Crease mark
No fo defect	18	37	18	28	45	35	15

Chart 4.2.3 Analysis of defect quality report

Description:

In this chart we show defect quantity of washing of style 1720. Here we see 45 pp less defect which is higher & 15 crease mark defect which is less defect. Without this two defect we saw 18 shade light , 37 shade dark, 18 tint less, 28 tint more & 35 pp more defect in this style.

4.2.5 Analysis of Defect Quality From 3.2



	Shade dark	Shade light	Tint less	Tint more	Crease mark
No of deffect	12	28	20	25	19

Chart:4.2.3 Analysis of Defect quantity

Description:

In this chart we show defect quantity of washing of jack jersey. Here we see 28 shade light defect which is higher & 12 shade light defect which is less defect. Without this two defect we saw 20 tint less , 35 tint more , 19 crease mark defect in this style.

Chapter 5
Conclusion

5.1 Conclusion

We know that day by day garments washing are increase. In garments wash denim is most common. Garments washing is one of the most important process for change the outlook of garments and also improve garments quality. The quality of washing is depends on the whole process. And the process includes all the chemicals, machineries, operations and the skills of the operator. For that's why we found lots of defect in garments after wash. This defect we can remove by doing re wash the garments. We hope that our analysis is helpful for the readers.

Reference

1. https://textilestudycenter.com/garments-washing/
2. http://www.goldnfiber.com/2013/04/different-types-of-garments-wash.html
3. http://textilelearner.blogspot.com/2012/05/what-is-garment-wash-types-of-garment.html
4. http://textilelearner.blogspot.com/2012/08/washing-faultsdefects-of-fabric.html