## **Internship Report**

## On

# "QUALITY MANAGEMENT SYSTEM IN REGENT TEXTILE MILLS LTD."

## **Submitted by**

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Dhaka, Bangladesh.

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04 December, 2018.

To

Sumon Mozumder

Asst. professor

Department of Business Administration,

Daffodil International University.

Subject: Submission of Internship Report.

Dear Sir,

I am glad to declare that I have accomplished my Apprenticeship Program in the Regent Textile

Mills Ltd of "Quality Management System in Regent Textile Mills Ltd." for your kind

judgment. To prepare this report, I have given my determined attempt that would enhance the

apprentice announced.

This announce aim to describe my internship, this course study during learning. I made heartfelt

efforts to continue the survey related substance, paper and operational systems and examine

relevant records for preparation of the Internship paper as nearly all elements and providing

useful as possible within the just time permit for me. Due to different reason there may be some

error for which I beg your expression.

I would be pleased if you take the term paper and also requesting review, due to my limitations

with a soft view that i had made and oblige thereby.

Yours faithfully,

Md. Abidur Rahman

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Program: MBA

Textile & Apparel Management & Merchandising

Department of Business Administration.

Daffodil International University.

## LETTER OF APPROVAL

This Apprenticeship report prepared by Md. Abidur Rahman, bearing ID: 162-14-2105 is approved for partial Fulfillment of the requirement for the Degree of MASTERS IN BUSINESS ADMINISTRATION. The student has completed his three months internship program in of "Quality Management system in Regent Textile Mills Ltd". During the apprenticeship term under my supervision I found him Sincere, hardworking and enthusiastic.

SUMON MOZUMDER
ASSISTANT PROFESSOR
DAFFODIL INTERNATIONAL UNIVERSITY

## **PREFACE**

The Internship report is made on the topic "Management of Textile testing & Quality control in Regent Textile Mills Ltd". Now the business is competitive in the Bangladesh. So, in buyer Perspective we try to understand where need to improve the product quality control in this sector. Testing means checking, examine and verification of some items. On the other way we can define testing as; it is the flow which expresses to determine quality of a product. Sometimes we say the product quality is much better. Mean we produced this kind of product is good and accept by the buyer. This type of report helps the students to acquire knowledge about Textile testing & quality control how to manage. It will also help the producer like a Bangladeshi seller to continue business with better way. Different customers have their requirement is different. The main objects of Textile testing of Quality is to be fulfill buyer requirement.

My honorable apprenticeship supervisor **Mr. Sumon Mozumder,** Assistant Professor, Faculty of Business & Economics, Daffodil International University I would express to my deep sense of gratitude and sincere appreciation for his valuable guidance and special supervision during my work. He was very cooperative & helpful for me all through the time. Without his moral support, it was impossible for me to prepare this whole report paper. So, I want to thank his generosity.

I would like to express my gratitude to **Mr. Mehedi Hasan Roni**, Assistant Manager of Regent Textile Mills Ltd. in Marketing & Merchandising department for his valuable guidance, his interest and enthusiasm & also I would like to thank him for proving me the necessary information to make the report successful.

In fine, I would like to share my satisfaction of completing the report with my well-wishers and friends. I would appreciate any query regarding the report.

For this perspective I convey to The Almighty of Allah enabling me to prepare report with good health.

## **ABSTRACT**

As the level of acceptance of a goods or services quality depends on it. In every garments industries, product accepted value calculated in terms of better quality and standard of yarns fibers, construction, designs, color fastness, and the final finished garments. Bangladesh perspective, various RMG factory follow various quality control and management systems especially various inspection systems for fabric testing of the Quality. In this testing I would like to know you what quality is & how to take quality control in buyer perspective. I have collected the secondary data from 30 quality testing reports which are done by Quality Control (QC) in Regent Textile Mills Ltd and this report based on this year 2018 by different buyer. This study is ended with the following imperative findings. Woven fabric management quality average Accepted 70% and average unaccepted level 30%. Dimensional Stability to Washing (ISO 6330) Average accepted level is 77% & average unaccepted level is 23%. Color Fastness to washing (ISO 105-C06) average Accepted 73% level is and average unaccepted level is 27%. Color Fastness to Rubbing (ISO 105X12) average unaccepted level is 30% and average unaccepted level is 70%. This is the main key word in my work here to full fill buyer requirement as a satisfaction .In this testing report the main objective is Quality Control system in Regent Textile mills. What is management and what dose management do. What the acceptable quality level as per buyer requirement. Why order rejected by buyer in woven fabric. Also I want to describe specific objective to compare among the test results of various woven fabrics .To compare among the requirements of different buyer. To identify whether the products are accepted or rejected from buyers' perspective. Dimensional stability is a very common problem regarding the sustainability of Bangladeshi woven industries in respect to lead time management has been identified as a result of random estimation of raw materials while sourcing and an empirical solution has been approached for two basic woven structures. Quality Control (QC) in Regent Textile Mills Ltd. and this report based on this year 2018 by different buyer. All information is mention in a report like name of Buyer, types of fabric, Construction, design, size ratio.

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## INTRODUCTION

In this perspective, Bangladesh immediate goal is to the middle-earn country status by 2021. We are very determined & expect with is short time our dream will be stable and the garments industry will play a key in fulfill the dream. In 1971 after the independence, all over the world our country ranking was one of poorest countries. There was no more industries to developed in our future Bangladesh, When Bangladesh was known as East Pakistan, due to harmful attitude and police are of the gov.t of the then West Pakistan. As a reason in poor country there was resources is limited so too much difficult to fulfill our dream and changing our country also the biggest challenge for us.

Biggest export earning for Bangladesh is RMG industry which is now a key role in government revenue. Now well say for Bangladesh single biggest exporter is the readymade garment (RMG) industries. Day by day its increasing, its impressive one day we fulfill our dream. Now position is 81% of total export earning in Bangladesh. We just starting export earner in the fast jute industry – for started losing its golden days, it is possible and RMG Industries helps to replaced it, and then, few day later it was increase to overtake it. In 1980 the apparel industry of Bangladesh started its journey belong to and day by day is has come in this position recent days. The pioneer, Nurool Quader khan of the readymade garment industry in Bangladesh when he started his business this time is too much hard in Bangladesh situation. But his vision is of how to transform the Bangladesh in middle earner country. It was really very pleased to know that he sent 130 trainers to South Korea where they learn a lot of procedure how to make in Ready Made garments Businesses, in 1978.

In our Country mainly produces five items like T-shirts, sweaters, trousers, men's and women's shirts etc. We mainly dependent to business market in all over the world EU and America (North US and Canada). 2009-10 to 2013-14 fiscal year we aware our dependency on those 2 market from 93% top 85%, In recently we need to change diversify the target of our RMG industries and produces high quality concentrate product like lingerie, suits etc. also more product sustained growth now-a-days in Apparel Industries. As a result recent days this kind of product dominates

all over our economic growth. It's our responsibly to protect this kinds of organizations. If you cannot take aware it it's too much difficult to sustainable growth and competitive of this country.

For the development of our country RMG acts as the backbone of our economy and as a catalyst. In this sector we take pride because of lots of people doing job in this sector also we earning gov.t revenue in this sector. In the process of garment manufacturing quality control is a term which depends on buyer requirement, RMG manufacturer and trader is essential to post sales service, pricing and etc. Sometimes should not be over looked Curtain quality types problems. Buyer always want high quality product but they give price is low. But quality of the product depends on price. More price more quality assurance. Quality management ensures that what types of quality provide their company. High quality production of quality products assurance is management term. Management checking quality inspection report because quality is ensures what type of products they produce.

I conducted my internship is Regent Textile Mills Ltd. In this textile mill is one of the biggest mill in Bangladesh, here I have to teach lot of theme this type of theme first time seen in my whole life.

In woven fabric industries Regent Textile Mills Ltd. one of the most common name they produces 100% woven fabric as per buyer Requirement. Regent textile mills Ltd. Mainly produces woven & Home furnishing fabric export quality fabric. In full time basis they keep quality control specific process production quality also they have fully furnished laboratory by equipment. New area of textile industries Regent Textile Mills Ltd one of the most popular they produce 100% woven fabrics.

I have to hear in Regent Textile mills Limited trying make good relation with global buyer's as per compliance policy to satisfaction buyer and seller.

## **BACKGROUND OF STUDY**

When I started in this internship one of them managerial person said to me the first established of textile sector was 19th century. 1965-66 they first time exported men shirts for the EU market as per demand. In 1977-78 available in here nine export company. Riaz Garments, Jewel Garments and Paris Garments are the biggest garments in that time. In that time reaz garment is very old and most popular garments. By the first time of RMG sector, some are new entrepreneurs want to started their garments business in the Bangladesh. After that, garment manufacturing increasing day by day but never look back yet. Suffer lot of critical situation in this sector but never give up our entrepreneur. I have to learn one terms in garments industries that has child labor is not allowed in every garments.

When I have started to continue the internship "Quality Management System in Regent Textile Mills Itd." it was found that lot of new terms. This type of thesis made me ideal quality person I think so. Woven fabric here mostly common quality problem is everywhere as a reason Bangladesh Textile mills miss's lot of woven fabric order. So it's important to know that why buyer rejects our woven fabric which falls down .If every order fulfill buyer requirement I think buyer cannot refused our order. This .I have to collect 30 buyer requirement and its actual value which produced by Regent Textile Mills. This testing report helps Management to found why fabric rejected by buyer which types are fault in woven fabric.

## SCOPE OF THE STUDY

This study was carried out at the woven fabric area of the RMG industry to assess the quality control in management system. I started in this study In I conducted my thesis is Regent Textile Mills Ltd. In this textile mill is one of the biggest mill in Bangladesh, here I have to teach lot of theme this type of theme first time seen in my whole life.

In woven fabric industries Regent Textile Mills Ltd. one of the most common name they produces 100% woven fabric as per buyer Requirement. Regent textile mills Ltd. Mainly produces woven & Home furnishing fabric export quality fabric. In full time basis they keep quality control specific process production quality also they have fully furnished laboratory by equipment. Regent Textile Mills Ltd. one of them most popular company they produce 100% woven fabric. This testing is continued on different contractions of woven fabric product in Regent Textile Mills LTD. This testing report is continued mainly one factory in Regent Textile Mills LTD .If the survey was continued another RMG Industries of Bangladesh, then thesis result could be changed.

Although to continue the thesis I faced some problems, but below mentioned facility have found during the thesis.

- This internship is continued based on Regent Textile Mills LTD. at the requirement for management quality system and guideline for quality control department & Marketing Department.
- This internship result is found based on 30 final testing Quality reports.
- In Regent Textile management is too much co-operative also they are friendly as a reason I have to learn lot of also I completed my internship in just in time.
- I have to learn Management quality control system for buyer satisfaction.
- Every report is facilitated on the products between Buyer and Regent Textile Mills LTD.

## **OBJECTIVES OF THE STUDY**

In general, internship objectives describe what we expect to achieve by a project. A statement of internship objectives can serve to guide the activities of research. Here the Objective of the study is classified into two categories as below.

The **board objective** of this study is given below-

To study on Quality Management System in Regent Textile Mills Ltd.

The specific objectives of this study work are given below-

This paper work aimed to find out some outcome regarding the Woven Fabric as like

- To compare among the test results of various woven fabric.
- To compare among the requirements of different buyers.
- To identify whether the products are accepted or rejected from buyers' perspective.

## **METHODOLOGY**

The main objective of assessing Quality Management system in Regent Textile Mills Ltd let me an extensive literature review this internship is I'm conducted with the objective of assessing For the purpose of assessing the level of various satisfaction issues. I have collected the secondary data from 30 quality testing reports which are done by Quality Control (QC) in Regent Textile Mills Ltd. and this report based on this year 2018 by different buyer.

Normally, I have collected secondary data after quality testing report in the same day or day after. All information are mention in a report like name of Buyer, types of fabric ,Construction , design, size ratio, Dimensional Stability to washing , Color Fastness to washing , color fastness to rubbing. Also the quality control team checking another physically tests But, I had main focus on quality as I am making a report like this. After finishing the testing, I checked testing report and note down quality problem basis different issue. Every day I went testing report room of all woven fabric to identifying which fabric was accepted or rejected. I also follow why fabric is rejected by construction, design, buyer requirement, color fastness to washing or color fastness to rubbing.

Following factors were considered during the data collection process-

- Quality
- Status Symbol
- Fabric Colors
- Woven styling
- Type of fabric Construction
- Measurement
- Buyer satisfaction in percentage.
- Design & Dimensional Change
- Rubbing
- Washing.

## **LIMITATIONS**

To collect current testing report and to make a total report according to product to product facing understanding problem with the quality department. Although the entire product has almost same requirement. But I have faced some limitation here are mention below:

- ♣ The survey is limited to only 30 Quality testing reports.
- ♣ The worked has done on 30 Buyers complete fabrics quality testing but here not investigation faulty raw materials.
- ₩ When collect document I faced lot of problem as they delay to give data.
- ♣ Within the limitations of the study statistically significant dimensional changes were observed for all the three impression materials at three different time intervals but this change was not clinically significant.
- ♣ One set of warp and weft yarn based this testing 100% woven fabric. Treatment of finishing methods implement to the sample fabric like as desizing.
- ♣ In this internship, here used only three method for Dimensional stability to washing (ISO 6330), Color change to washing (ISO 105-C06:1997) & Change color by rubbing (ISO 105 X12 -2001) to finding but another method are not used.
- ♣ Data sources are so limited.
- ♣ Most of the organizations key personnel were too busy. So they did not give me enough time regarding this matter.

## **DISCUSSION, ANALYSIS & FINDINGS**

In garments manufacturing terms quality control pre-sales and posts sales service, delivery, pricing, etc. are helps for any garments producer, exporter and trader. Some problems is quality, over looked should never. Buyers want to get more quality products in economical price. But quality of the products depends on cost more price buyer get more well product. Management of quality aspect the overall quality policy that determines is implements. General conformity and out looking with description and sample received, aim garment of inspection is to visually treated inspect articles at random from a delivery.

## Management

Organized life and necessary to run all types of management depends on management. As like a good management is the backbone established in every organization. Management is it, who work but getting something doing by others. Management is as a key role in every organization without management there is nothing so organizations cannot long run.

In following categories management can be express by:

- A Process is management
- Activity as an Management
- Discipline is a Management
- As a Group Management.
- As a Science
- Also Management is an art.

## **Textile Testing**

When we put on clothing, we want it to feel good against your skin. And we don't want it to contain harmful substances. But how to we ensure textiles are safe. Textile companies and consumer agencies conduct many kinds of analyses to make sure our clothes and the fabrics we use in our homes won't harm us, will be comfortable and will stay colorful for a long time. These processes are called textile testing.

Textile testing is the term for a whole series of tests that examine the physical, mechanical and chemical properties of textiles. These tests are sometimes done before a textile goes into widespread use, or they're done on textiles arriving from other countries for sale in US markets. Countries like the United States have established standards for what should and should not be in textile products. Tests can show whether companies making textiles are in compliance or not. Why do such tests, they can ensure that a given textile is what a manufacturer or importer says it is. Sometimes, testing is done while textiles are being manufactured, to identify problems or faults in the machinery making them, and to double-check that materials being used for a specific textile are appropriate.

## **Methods of Textile Testing**

There are many textile tests. Some of them are physical tests, in which a sample of textile material is examined closely for feel and appearance. Such tests are done on individual fibers or strands of material and on yarns, threads made of several fibers twisted together. Textiles are also subjected to light and other elements to see how they react. Some of these tests are done in a weather-meter, a machine that tests for weathering and light fastness of textiles. It's basically an enclosed box. Textiles are placed inside and subjected to conditions replicated from the natural environment.

Mechanical tests are those in which textiles are subjected to different pressure and stressors, usually in specialized testing machines. These include tests to measure breaking strength, the force needed to break a fabric under tension. Such tests can ensure fabrics are strong enough to maintain integrity even when under great stress. Other tests gauge tearing strength, or the

strength required to make an already existing rip or tear worse. And abrasion tests determine how quickly a textile wears out when it's rubbed against another surface. Such tests make sure that fabrics used in products like parachutes and car seat belts won't break when needed most to keep the user safe.

Still other tests are chemical tests, in which a textile is analyzed through chemical means to determine what it contains. These tests are often done in laboratories, and they're important to determine whether textiles might have harmful substances in them like lead or other heavy metals, banned chemical dyes or pesticides that could possibly endanger the consumer. Specialized textile testing is also done to test for flammability, or how quickly a given textile burns. Various methods of performance testing are done on textiles that must possess special qualities, like be effectively bulletproof or provide a layer of filtering on construction projects. In short, there are as many ways to test textiles as there are uses for textile products in our world.

## **Importance of Textile Testing**

So, why is textile testing important? The most obvious reason is that it allows companies, consumer groups and the government to make sure textiles is safe, of good quality, and that the customer is getting what they are paying for. Textile products are made around the world, and sent to markets around the world. Testing ensures that something harmful or illegal isn't slipping through the regulatory cracks.

## **Quality Control**

Quality control is a way to process eliminate errors this kind of errors made by employers in every quality control department work as management by eliminating that. Management and employees strive to protection by quality control. By training personnel and creating benchmarks for product high quality, and testing products to ensure for various products. The main role of quality control is that established controls. Standardize production and reactions to ensure quality issues these controls help.

Each and every manufacturing process they depends on quality control without quality there is nothing. Because of quality based and depends on buyer requirement. The main theme as a supplier to meet buyer requirement as per quality maintain quality control.

## **Quality Control Measures Depend on the Product**

The business depends on high quality product. In Every aspects of product like food and drug manufacturing, quality control provide ensure the product does not make a consumer sick, so the production line company may performs checking chemicals and other related substances. Consumer perception affects appearance of the product quality is good, as a visual directions manufacturer made the product as per requirement.

## **Dimensional Stability to Washing**

Washing and drying procedures determine the dimensional change of fabrics / garments when subjected to an appropriate.

#### **Test Method**

The test method is ISO 6330

In this test method is calculated for the resolve of dimensional changes in knit and woven garments/ fabrics, when valued to duplicate automatic washing method mostly used at our home.

Dimensional loose of textile specimen put thought to washing are uniform using pair of marks of bench before washing put in an application to the fabric.

### Marking of Sample

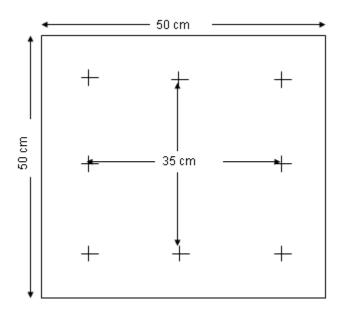


Figure-7.1 locations of bench mark are important for different garments.

**Woven Shirt** – Sleeve Lengths, Collar Band, collar Cuffs, width at chest and Body Lengths.

**Knit Trousers** – Seat, waist, Front rise, Inseams, out seams, and Back rise.

Women Blouse – Chest, waist, Lengths, Shoulders, and Sleeve Lengths.

Girl Skirt – Hip, hem, Lengths &Waist.

## **Apparatus**

Marker of simple

71S FOM wascator & programmer cards, or

71MP FOM wascator & programmer ROM cassettes,

Home slid dryer, load 5kg = facility with a cool-down

Weighing Balance capable 150 = 200g & correct to 0.1g weighing Balance capable up to 2.0kg correct to 1.0g. -5.0g

Make weights British Standard

Drying line & Mesh drying rack.

% Shrinkage & Stability template

indelible marker pen

**Specimen Preparation** 

**Fabrics** 

50 x 50cm at least size for a stability square. Testing on little pieces is not allowable. Lay the

fabric to consider for 4 hours on a bench in climate terms so that it is soft and tightness free.

Within 5cm of the edge do not use the woven fabric. Place the design on the fabric with the side

of the design parallel to the extent (warp) direction.

Mark the 3 wideness & extent marks in pairs 35cm apart, art around the border of the design, do

not round off the area.

Art and bolt surface the quantification zone, to denote the extent (warp) supervision previous to

cutting from the main part.

**Woven Fabrics:** 

Use a one layer of fabric. Use the slots in the template to art the fabric with a mercury pen.

**Seaming:** 

**Woven Fabrics**: Seaming all corners.

**Garments:** 

Refer to the garment layout a general rule stated in buyer, for any product that is not express

please refer to the buyer Fabric specialist for advice.

**Procedure of tests loading:** 

Protect no more than ½ of the load are test piece, most of the load being made up of London

Standard make weights.

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**Powder:** Must use ECE detergent powder & Sodium Perorate.

Wash schedule:

a) Identifying the right schedule for the wash need turn on the type of machine which used. Set

reversal, water levels and pull out right knobs uses a wascator FOM 71S.

b) Locations makeweights then the test part in the washing machine. Dismiss the powder in a

beaker some number of hot water.

c) Begin the machine. Flush down by rinsing the beaker out with an extra number of hot water.

d) On realization of the performer eliminate the wash load.

**Re-Calculate system Woven and Knitted Fabrics:** 

Re-calculate after four hours modification.

Move the plant onto a work out side in the same place. Do not transfer the plant about whilst re-

calculate.

Use mostly uses common procedure for re calculating:

Using the addition % ruler and belonging it at a 45° position, read off the % change in extent for

the 3 length (warp) and 3 width (weft) extents.

Or

For calculation taken with a hardware ruler, use the following method:

% extent Change = (Real length 350m.m – Examine length mm) x 100

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	Tal	ble 1:Din	nensional Sta	ability to W	Vashing ( ISC	0 6330)	
Serial No	Buyer name	Types of Fabric	Construction	Design	Dimensional Stability to Washing Length%/ Width%	Buyer Requiermen t	Status
1	Saget	100% Cotton Sheeting	30 X 30/76X68	Comme Uni Plume(Black) color: Multi	Length= -4.50% Width=-5.00%	± 5%	Accepted
2	Saget	100% Cotton Sheeting	30 X 30/76X68	Coup D'Eclat Color:Multi	Length=-4.75% Width=-5.00%	± 5%	Accepted
3	Princes	100% Cotton Sheeting	20X20/60X60	Plan Dyed Color:Cream	Length= -4.25% Width=-5.00%	± 5%	Unaccepted
4	Laredoute	100% Cotton Sheeting	30 X 30/76X68	Scenario Cotton Color:Navy Blue	Length= -4.00% Width=-5.00%	± 5%	Accepted
5	Laredoute	100% Cotton Sheeting	30 X 30/76X68	Milk way ( Front) Color: Multi	Length= -4.25% Width=-5.00%	± 5%	Accepted
6	Laredoute	100% Cotton Sheeting	30 X 30/76X68	Milk way ( Back) Color: Multi	Length= -4.25% Width=-5.00%	± 5%	Accepted
7	Laredoute	100% Cotton Sheeting	30 X 30/76X68	Tiebele( Front) Color: Multi	Length=-4.75% Width=-5.00%	± 5%	Accepted
8	Laredoute	100% Cotton Sheeting	30X30/76X56	Miss China(Back) Color:Canard Blue	Length= -4.25% Width=-5.00%	± 5%	Accepted
9	Kid	Cotton Flannel	20X10/40X36	Hvitetind Color: Gray	Length= -5.00% Width=-5.00%	± 5%	Accepted
10	Kid	Cotton Flannel	20X10/40X36	Skartind Color: Gray	Length= -5.00% Width=-4.50%	± 5%	Accepted
11	KSL	Cotton Twill	7X7/72X42	Color: Black	Length= -2.00% Width=-3.0%	≤3%	Unaccepted
12	Bonprix	Cotton Sheeting	30X30/76X52	TD Nizza Color: Taupe/Blue	Length= -3.00% Width=-3.0%	± 3%	Accepted
13	Bonprix	Cotton Sheeting	30X30/76X52	TD Ornament Color: Grey	Length= -3.00% Width=-3.0%	± 3%	Accepted
14	Bonprix	Cotton Flannel	20X10/40X38	Seestern Color: Lt.Blue	Length= -3.00% Width=-3.0%	± 3%	Accepted
15	Bonprix	Cotton Flannel	20X10/40X38	Punktchen Color: Blue	Length= -3.00% Width=-3.0%	± 3%	Accepted
16	Princes	Cotton Flannel	20X10/40X36	Julio Color: Red/white	Length= -4.00% Width=-4.50%	± 5%	Unaccepted
17	Casino	Cotton Flannel	20X10/40X42	DH Flannel Color: Grey	Length= -3.00% Width=-3.0%	≤3%	Accepted
18	Princess	Cotton Flannel	20X10/40X36	Zack Color: Blue	Length= -4.50% Width=-5.00%	± 5%	Accepted

19	Princess	Cotton Flannel	20X10/40X36	Zack Color: Green	Length= -4.75% Width=-5.00%	± 5%	Accepted
20	Laredoute	100% Cotton Sheeting	30X30/76X56	Miss China(Front) Color:Canard Blue	Length= -4.50% Width=-5.00%	± 5%	Accepted
21	Kid	100% Cotton Sheeting	20X10/40X36	Hvitetind Color: Cream	Length= -4.50% Width=-4.25%	± 5%	Unaccepted
22	Bonprix	Cotton Flannel	20X10/40X3 8	BW Katze Color: Taupe	Length= -3.00% Width=-3.0%	± 3%	Accepted
23	Casino	Cotton Sheeting	30X30/76X6 8	Love Plum Color: Multi	Length= -3.00% Width=-3.0%	≤3%	Accepted
24	Saget	100% Cotton Sheeting	20X10/40X4 2	Skartind Color: Blue	Length= -3.00% Width=-2.50%	≤3%	Unaccepted
25	KSL	Cotton Flannel	20X10/40X3 6	Miss China(Front) Color:Black	Length= -4.75% Width=-5.00%	± 5%	Accepted
26	Princess	Cotton Sheeting	30X30/76X5 6	Lilac Color: Rainbow (Unicon)	Length= -4.25% Width=-4.50%	± 5%	Unaccepted
27	Casino	Cotton Flannel	20X10/40X4 2	DH Flannel Color: White	Length= -3.00% Width=-3.0%	≤3%	Accepted
28	Kid	Cotton Sheeting	20X10/76X5 6	Zack Color: Blue	Length= -4.00% Width=-4.25%	± 4%	Accepted
29	Laredoute	Cotton Flannel	20X10/40X3 8	BW Katze Color: Black	Length= -4.75% Width=-5.00%	± 5%	Accepted
30	KSL	Cotton Twill	7X7/72X38	Color: Black	Length= -2.00% Width=-3.0%	≤3%	Unaccepted

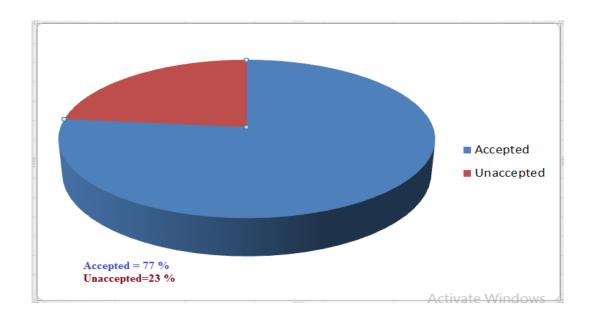


Figure-7.2 Pie Diagram in dimensional stability to washing accepted & unaccepted percentage.

- -Clean and dry the trail three times for AATCC & only one for ISO as per the formula described before.
- -order the trail. After trailing is each test procedure without tension on a flat plane outside. Calculate & write down extend between each pair of benchmarks.
- -Measure extend between the before & after wash calculate & survey in %.

$$100 (B - A) / A = DC$$

Dimensional Change =DC, Original Dimension= A, Dimension after Laundering = B

## **Calculate Color Fastness to washing:**

Color fatness to washing express, a plant of the textile, in touching with 1 Or 2 state adjacent fabrics, is automatic agitated under report order of time and reversal in a soap mixture, then rinsed and dried. The change in color of the plant & the discolor fabric are judge with the grey scales.

In my perception is, in case of fastness trail Color fastness to washing is the 1<sup>st</sup> & most valuable need of buyers. There is a large part of ISO trail for color fastness to washing. In this thesis I just

uses 1 part of ISO test in this reason I can explained ISO 105 C06. In Color Fastness to washing ISO 105 C06 trail in fast choice of a large number of Buyers.

### **ISO 105 C06 Tools**;

- 1. Gyro-wash,
- 2. Still Ball stainless,
- 3. fiber fabric (Multi),
- 4. Sewing Device,
- 5. Thermo-meter,
- 6. Cabinet Color equal
- 7. Grey Scales

## **System of working:**

Conditioning for 04.30 to 06 hours & collecting the sample from bulk

04 & 10 cm in size make a plant of.

Sewing plant with various fabrics same size at 1 side.

Create the dismissal of 4gm in per liter ECE detergent & liter/1 gm. sodium perorate,

set the plant with various fiber fabrics into the dismissal in Rot a wash m/c

washing with warm water separate.

Press with cold water of the test is done).

Drying is done at a reversal in the air not over 60OC

The Seaming is then burst out excluding on one of the al last.

Calculating discolor and color change by grey scale and make a survey report.

### ISO 105 C06 A2S procedure:

- 1. 150 ml total solution is changeable if needed.
- 2. 10 stainless still ball for hitting.
- 3. 40 min of Time
- 4. 40°C of Temperature.

**Table 2: Color Fastness to Washing (ISO 105- C 06)** Color Serial Buyer Types of Buyer Construction Design Fastness to **Status** Requierment No name **Fabric** Washing Color Change=4 Color Staining to Acetate= 4-5 Comme Uni Color 100% Cotton= 4-5 Plume(Blac Change=4 1 30 X 30/76X68 Saget Cotton Accepted Nylon = 4-5Color k) color: Sheeting Polyester= 4-5 Staining = 4Multi Acrylic=4-5 Wool=4-5 Color Change=4 Color Staining to Acetate= 4-5 Color 100% Coup Cotton= 4-5 Change=4 2 Nylon = 4-5Saget Cotton 30 X 30/76X68 D'Eclat Accepted Color Polyester= 4-5 Sheeting Color:Multi Staining = 4Acrylic=4-5 Wool=4-5 Color Change=4 Color Staining Color to Acetate= 4-5 Change=3 Miss Cotton = 4-5100% -4 China(Front) Nvlon = 4-53 Laredoute Cotton 30X30/76X56 Accepted Color:Canard Color Polyester= 4-5 Sheeting Blue Acrylic=4-5 Staining= Wool=4-5 4-5 Color Change=3-4 Color Color Staining Change=4 to Acetate= 4-5 Cotton **KSL** 4 7X7/72X42 Color: Black Cotton = 4-5Color Unaccepted Twill Nylon = 4-5Staining= Polyester= 4-5 4-5 Acrylic=4-5 Wool=4-5 Color Change=4 Color Staining to Acetate= 4-5 Color Cotton = 4-5Change=3 100% Milk way ( Nylon = 4-5-4 5 Laredoute Cotton 30X30/76X68 Front) Color: Polyester= 4-5 Accepted Color Multi Sheeting Acrylic=4-5 Staining= Wool=4-5 4-5

6	Laredoute	100% Cotton Sheeting	30X30/76X6 8	Milk way ( Back) Color: Multi	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=3 -4 Color Staining= 4-5	Accepted
7	Laredoute	100% Cotton Sheeting	30 X 30/76X68	Tiebele( Front) Color: Multi	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=3 -4 Color Staining= 4-5	Accepted
8	Laredoute	100% Cotton Sheeting	30X30/76X5 6	Miss China(Red) Color:Canard Blue	Color Change=3 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=4 Color Staining= 5	Unaccepted
9	Kid	Cotton Flannel	20X10/40X3 6	Hvitetind Color: Gray	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=4 Color Staining=	Accepted
10	Kid	Cotton Flannel	20X10/40X3 6	Skartind Color: Gray	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=4 Color Staining= 4	Accepted

11	Bonprix	Cotton Flannel	20X10/40X3 8	BW Katze Color: Navy Blue	Color Change=3-4 Color Staining to Acetate= 3-5 Cotton= 4-5 Nylon = 3-4 Polyester= 4-5 Acrylic=3-4 Wool=3-4	Color Change= 4-5 Color Staining = 4-5	Unaccepted
12	Bonprix	Cotton Sheeting	30X30/76X5 2	TD Nizza Color: Taupe/Blue	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= 4 Color Staining = 4	Accepted
13	Bonprix	Cotton Sheeting	30X30/76X5 2	TD Ornament Color: Grey	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= 4 Color Staining = 4	Accepted
14	Bonprix	100 % Cotton Flannel	20X10/76X3 8	Seestern Color: .Blue	Color Change=3 Color Staining to Acetate= 4 Cotton= 4-5 Nylon = 4 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= 4 Color Staining = 4	Unaccepted
15	Bonprix	Cotton Flannel	20X10/40X3 8	Punktchen Color: Blue	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= 4 Color Staining = 4	Accepted

16	Casino	Cotton Sheeting	30X30/76X68	Love Plum Color: Multi	Color Change=3- 4, Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 3-4 Polyester= 4-5 Acrylic=4 Wool=4	Color Change= ≥4 Color Staining= ≥4	Unaccepted
17	Casino	Cotton Flannel	20X10/40X42	DH Flannel Color: Grey	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= ≥4 Color Staining= ≥4	Accepted
18	Princess	Cotton Flannel	20X10/40X36	Zack Color: Blue	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=3 -4 Color Staining= 4	Accepted
19	Princess	Cotton Flannel	20X10/40X36	Zack Color: Green	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=3 -4 Color Staining= 4	Accepted
20	Laredout e	100% Cotton Sheeting	30 X 30/76X68	Scenario Cotton Color:Navy Blue	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=3 -4 Color Staining= 4-5	Accepted
21	Kid	Cotton Flannel	20X10/40X38	Zack Color: Blue	Color Change=2.50-3, Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5	Color Change= 3-4 Color Staining = 4-5	Unaccepted

					Wool=4-5		
22	Bonprix	Cotton Flannel	20X10/40X38	Seestern Color: Lt.Blue	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= 4 Color Staining = 4	Accepted
23	Casino	Cotton Sheeding	30X30/76X68	Love Plum Color: Multi	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= ≥4 Color Staining= ≥4	Accepted
24	KSL	100% Cotton Sheeting	30 X 30/76X68	Zack Color: Red	Color Change=4 Color Staining to Acetate= 3-4 Cotton= 4-5 Nylon = 4 Polyester= 3-4 Acrylic=4-5 Wool=4-5	Color Change= ≥5 Color Staining= ≥4	Unaccepted
25	Princes	100 % Cotton Flannel	30 X 30/42X68	DH Flannel Color: Grey	Color Change=4 Color Staining to Acetate= 3-4 Cotton= 4-5 Nylon = 4 Polyester= 3-4 Acrylic=4-5 Wool=4-5	Color Change= ≥5 Color Staining= ≥4	Unaccepted

26	Kid	100 % Cotton Sheeting	20X10/76X3 8	Seestern Color: Lt.Blue	Color Change=4 Color Staining to Acetate= 4-4 Cotton= 4-5 Nylon = 4 Polyester= 4-4 Acrylic=4-5 Wool=4-5	Color Change=3- 4 Color Staining= 4-5	Accepted
27	Laredoute	Cotton Sheeting	30X30/76X5 6	Miss China(Back) Color:Canard Blue	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=3- 4 Color Staining= 4-5	Accepted
28	Bonprix	Cotton Flannel	20X10/40X38	BW Katze Color: Taupe	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change=4 Color Staining= 4	Accepted
29	KSL	100% Cotton Sheeting	30 X 30/76X48	Zack Color: Grey	Color Change=4 Color Staining to Acetate= 4 Cotton= 4-5 Nylon = 4 Polyester= 4 Acrylic=4-5 Wool=4-5	Color Change= ≥4 Color Staining= ≥4	Accepted
30	Casino	Cotton Flannel	20X10/40X42	DH Flannel Color: White	Color Change=4 Color Staining to Acetate= 4-5 Cotton= 4-5 Nylon = 4-5 Polyester= 4-5 Acrylic=4-5 Wool=4-5	Color Change= ≥4 Color Staining= ≥4	Accepted

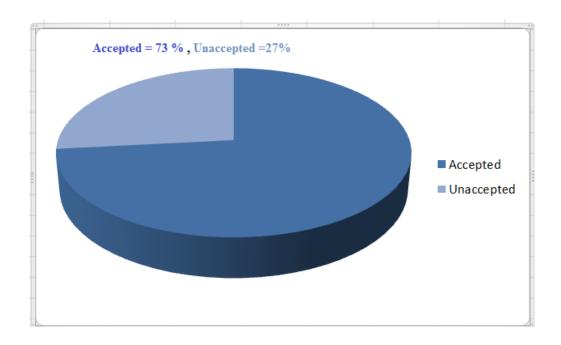


Figure-7.3 Pie Diagram in Color Fastness to washing accepted & unaccepted percentage.

## **Color Fastness to Rubbing**

ISO 105X12 define a procedure for control the opposition to of the color of textiles various kinds, inside textile part casing and other pile fabrics, to rubbing off and discolor other tools .The procedure is expect to textiles made from various kinds fibers form of yarn or fabric, inside textile part inclusive, whether printed .2 procedure may be made, 1 with a wet rubbing cloth and 1 with a dry rubbing cloth.

#### In brief test Procedure:

### **Materials & Appratus:**

- forth along a stright line track of 100 mm on the specimen, Crockmeter, a downward force of 9N when moving back consisting of; and a round rubbing outside finger calculate 16 mm in diameter exerting.
- 100 % Cotton rubbing fabric; sizing materials or any finish ,The rubbing fabric ISO 195-F section F09 the fabric must not carryFluorescent brightness.
- 0.01g. Balance is accurate.
- Staining Scales in Grey.

- Matching cabinet in color.
- Only For wet rubbing, Grade three Water (BS EN ISO.. 3696:1995).

#### Plant of the test:

Performance is ended on fabric, typically in warp and weft directions is not to-gather. A large number buyer's demand requires that the worst of these is ability and detail. For a plain dyed fabric, contrast in the 2 is not seen. However, when a placement dyed fabric the color change is often various. It is must need to note that a lab is expected to survey the worst reading and average is not. This is due to the main fact that lab report is expected value to bring any customer complements of the result.

Materials, the rubbing section makes a lot of difference by each other. If rubbed along Mark-off the stripe it could be very unlike. Buyers can have very unlike views of this report so a lab should follows the buyer all of requirements. For example, in a stripy fabric, most of buyers often need rubbing to be done diagonally conducted the stripy.

In the occasion of yarn, 140X 50mm is very common testing in fabric as per buyer requirements.

#### **Procedure of the test:**

## **Rubbing Dry Fabric:**

- Use the belonging clamp to mount the plant on the molding of the crock meter. The long section of the plant is straight to the track of rubbing. It should be sure ether plant lays flat on the molding.
- 2 report are carry out, 1 along the supervision of the weft / width & warp/ length.
- Scale a dry rubbing Fabric flat over the end on the crock meter and hold it is taught by express of the spring clip on this condition. It should be sure the rubbing fabric is not placed on the diagonal in the supervision that the peg is move every side.
- Most of the finger on the plant, It should be sure that the spring clip is not in connect with the test plant.
- Rub the plant back and 4th over a direct track 8mm long  $\pm$  100 mm for 100 rest cycles.

It may be important to stretch some cloth on the middle of the crock meter, to stop the cloth from rucking up.

Serial No	Buy nai		Types (		Constructi	ion	Design	Color Fastness t Rubbing	<b>Keaulermen</b>	Status
1	Sag	get	100% Cotton Sheetin	n	30 X 30/762	ζ68	Comme Uni Plume(Black) color: Multi	Dry=4-5 Wet=4	Dry=4 Wet=3-4	Accepted
2	Sag	get	Cotto: Sheetin		30 X30/76X6	58	Coup D'Eclat Color:Multi	Dry=3-4 Wet=4	Dry=4 Wet=3-4	Unaccepted
3	Lared	loute	100% Cottor Sheetin	n	30X30/76X	X56	Miss China(Front) Color:Canard Blue		Dry=4 Wet=3	Accepted
4	Lared	loute	100% Cottoi Sheetir	n	30 X 30/42X6	8	Scenario Cotton Color: Blue	Dry=4-5 Wet=3	Dry=4 Wet=4	Unaccepted
5	Lared	loute	100% Cottoi Sheetir	n	30 X 30/76X68		Milk way ( Front) Color: Multi	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
6	KS	SL	Cottoi Flanne		30 X 30/76X5	8	Milk way ( Back) Color: Black	Dry=3 Wet=3	Dry=4 Wet=3	Unaccepted
7	Lared	loute	100% Cottor Sheetin	n	30 X 30/76X6	8	Tiebele( Front) Color Multi	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
8	Lared	loute	100% Cottoi Sheetir	n	30X30/76X	X56	Miss China(Back) Color:Canard Blue	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
9	Ki	id	Cottoi Flanne		20X10/40X	X36	Hvitetind Color: Gray	Dry=4 Wet=3-4	Dry=4 Wet=3-4	Accepted
10	Ki	id	Cotto: Flanne		30X10/40X	X36	Skartind Color: nevy blue	Dry=4 Wet=3	Dry=4 Wet=4	Unaccepted
11	Bon	prix	Cotto: Flanne	n	20X10/40X	X38	BW Katze Color: Taupe	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
12	Bon	prix	Cotto		30X30/76X52		TD Nizza Color: Taupe/Blue	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
13	Bon	prix	100% Cotton Sheetin	n	30X20/76X	X52	TD Ornament Color: Grey	Dry=4 Wet=4	Dry=5 Wet=3	Unaccepted
14 Bon	prix		tton nnel		X10/40X3 8		Seestern lor: Lt.Blue	Dry=4 Wet=3	Dry=4 Wet=4	Unaccepted

15	Bonprix	Cotton Flannel	20X10/40X3 8	Punktchen Color: Blue	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
16	Casino	Cotton Sheeting	30X30/76X6 8	Love Plum Color: Multi	Dry=4 Wet=4	Dry=≥4 Wet=≥4	Accepted
17	Casino	Cotton Flannel	20X10/40X4 2	DH Flannel Color: Grey	Dry=4 Wet=4	Dry=≥4 Wet=≥4	Accepted
18	Princess	Cotton Flannel	20X10/40X3 6	Zack Color: Blue	Dry=4 Wet=3-4	Dry=4 Wet=3-4	Accepted
19	Princess	Cotton Flannel	20X10/40X3 6	Zack Color: Green	Dry=4 Wet=3-4	Dry=4 Wet=3-4	Accepted
20	Saget	100% Cotton Sheeting	30 X30/76X68	Coup D'Eclat Color:Multi	Dry=4-5 Wet=4	Dry=4 Wet=3-4	Accepted
21	Laredout e	100% Cotton Sheeting	30 X 30/76X68	Scenario Cotton Color:Navy Blue	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
22	KSL	100% Cotton Sheeting	30 X 30/76X68	Milk way ( Back) Color: Multi	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
23	Kid	Cotton Flannel	20X10/40X3 6	Skartind Color: Red	Dry=4 Wet=3-4	Dry=4 Wet=3-4	Accepted
24	Casino	Cotton Sheeting	48X30/76X6 8	Love Plum Color:Grey	Dry=4 Wet=4	Dry=≥5 Wet=≥4	Unaccepted
25	Kid	Cotton Flannel	30X10/40X3 6	Hvitetind Color: Green	Dry=4 Wet=3-4	Dry=4 Wet=3-4	Accepted
26	Princess	Cotton Flannel	20X10/40X3 6	Zack Color: Blue	Dry=4 Wet=3-4	Dry=4 Wet=3-4	Accepted

27	Saget	100% Cotton Sheeting	30 X 30/76X68	Uni Plume(Black) color: Multi	Dry=4-5 Wet=4	Dry=4 Wet=3-4	Accepted
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28	KSL	100% Cotton Sheeting	20 X 30/76X48	Milk way ( Back) Color: Blue	Dry=4 Wet=3	Dry=4 Wet=3	Accepted
29	Laredoute	Cotton Sheeting	20X200/48X56	Miss China(Back) Color:Canard Blue	Dry=4 Wet=3	Dry=5 Wet=4	Unaccepted
30	Casino	Cotton Flannel	20X10/40X42	DH Flannel Color: Grey	Dry=3 Wet=4	Dry=≥4 Wet=≥4	Unaccepted

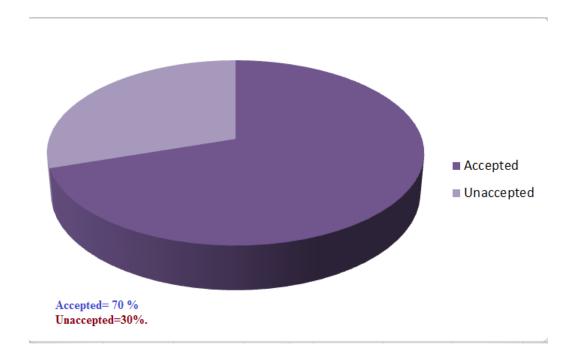


Figure-7.4 Pie Diagram in Color fastness to rubbing accepted & unaccepted percentage.

## CHAPTER-08 RECOMANDATION

Following recommendations are very important to consider for further study:

- Time limitation is too short if in this work involving more time which may be improved this thesis.
- Current result might have influence, if in this internship analysis of more quality testing report.
- This work considered only woven fabric but need to include other fabric to improve the results.
- One fabric was selected to conduct the research work whereas for more fabric may have different findings. So, it will be better to compare results among various fabric or Construction.
- The marketing department is always busy as a reason secondary quality testing data collection is tough. If anyone further wants to do it may more time need.
- Management Quality control is a secondary platform to know about quality as a reason here knowledge limit was poor. Further study need to do with quality team for knowing details.

## CHAPTER-09 CONCLUSION

This internship is carried out on 30 quality testing reports of different type of Construction woven fabric. This study is ended with the following imperative findings:

- ♣ Woven fabric management quality average Accepted 70% and average unaccepted level 30%.
- ♣ Dimensional Stability to Washing (ISO 6330) Average accepted level is 77% & average unaccepted level is 23%.
- ♣ Color Fastness to washing (ISO 105-C06) average Accepted 73% level is and average unaccepted level is 27%.
- ♣ Color Fastness to Rubbing (ISO 105X12) average unaccepted level is 30% and average unaccepted level is 70%.

In our country every RMG producer should give 1<sup>st</sup> partiality to its valued buyers. Now-a-days customers are too much quality aware. If it becomes not quite impossible to keep a high Quality system of check strategy, the customers shall be inspire to place more orders in in our country. So, it is possible to set various latest quality strategy and quality Management ability in our country for the improvement of its Ready Made Garments sector.

## CHAPTER-10 APENDICES

REGENT textile mills ltd. esd Office:NG Tower, 1182, Jubilee Road, Chillagong-4000, Bangledesh el:85-031-2868204-7, 2868841-3, Fax:82-031-2868208 hake Office:Renge Arcade, Piol # 10A, House # 153/A (2° Floor), ulsban Avenue, Guishan-2, Dhaka-1212, Bangladesh, Tel:880-2-9883744.8826437,8819903, Fax:800-2-8020437 Buyer: Princess. Date: 19.07.18 Fabric : Cotton Flannel Construction: 20 X 10 / 40 X 36 Colour: Green Design: Zack Order No.: 18195. Dimensional Stability to Washing ( ISO 6330 - 2000 ) Requirement Length = -4.75%Width = -5.00%+1-5% Color Fastness to Washing ( ISO 105-C 06: 1997) Requirement Color Change 3-4 Color Staining to Acetate Cotton = 4-5 = 4-5 Nylon Polyester = 4-5 Acrylic = 4-5 Wool = 4-5 Color Fastness to Rubbing (ISO 105 X 12 - 2001) Requirement Dry = 4Wet = 3-4 3-4 Manager (Lab) GM(Production) Factory : East Kalurghat, Charkhidirpur,Bandar,Chittagong,Bangladesh.Phone # (031) 671170, 671439, Fax: 860-31-671000. E-mail: dci.hsi@regenttex.com Web Site:www.habibgroupbd.com



Construction: 30 X 30 / 76 X 68

Colour: Multi

Design: Comme Uni Plume (Back)

Order No.: 521429. Report No.: 141/07/2018.

Dimensional Stability to Washing ( ISO 6330 - 2000 )

Length = -4.50%Width = -5.00%

Color Fastness to Washing (ISO 105 - C 06: 1997)

Color Change Color Staining to Acetate = 4-5 Cotton

Nylon = 4-5Polyester = 4-5 Acrylic = 4-5 Wool = 4-5

Color Fastness to Rubbing (ISO 105 X 12 - 2001)

 $Dry = 4-5 \cdot Wet = 4$ 

G.S.M = 109

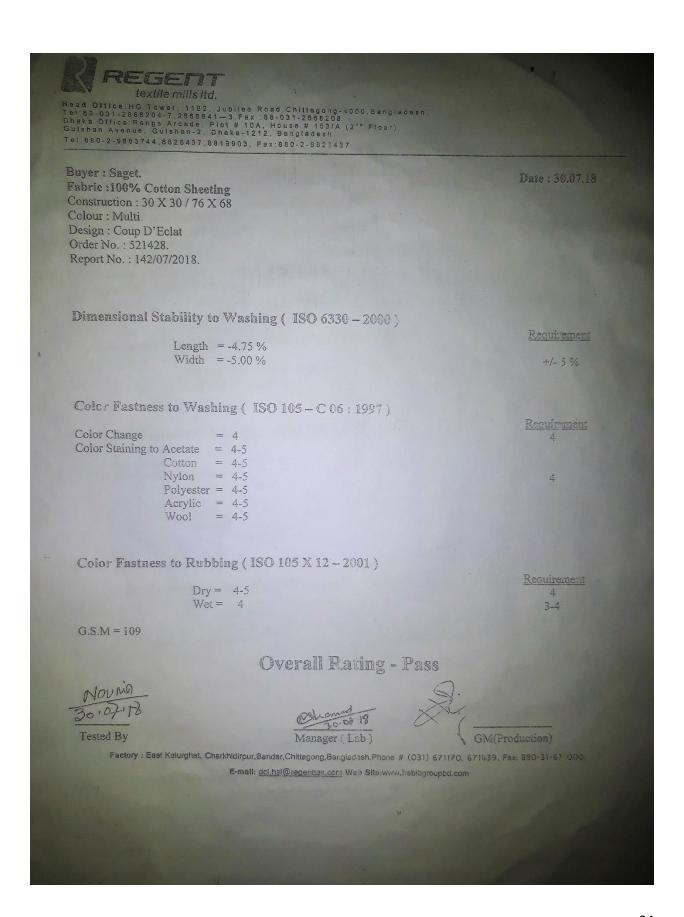
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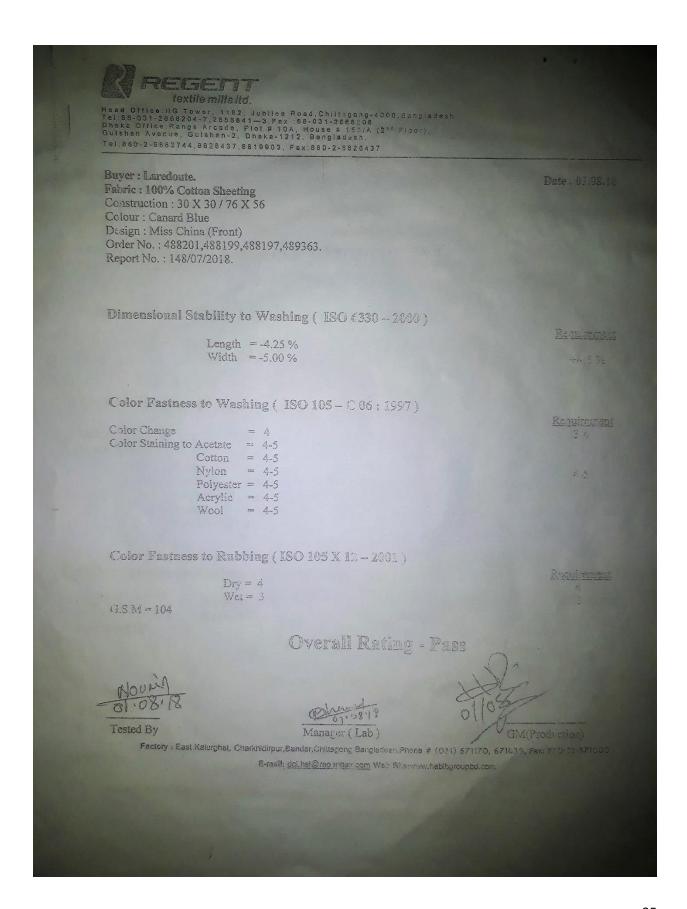
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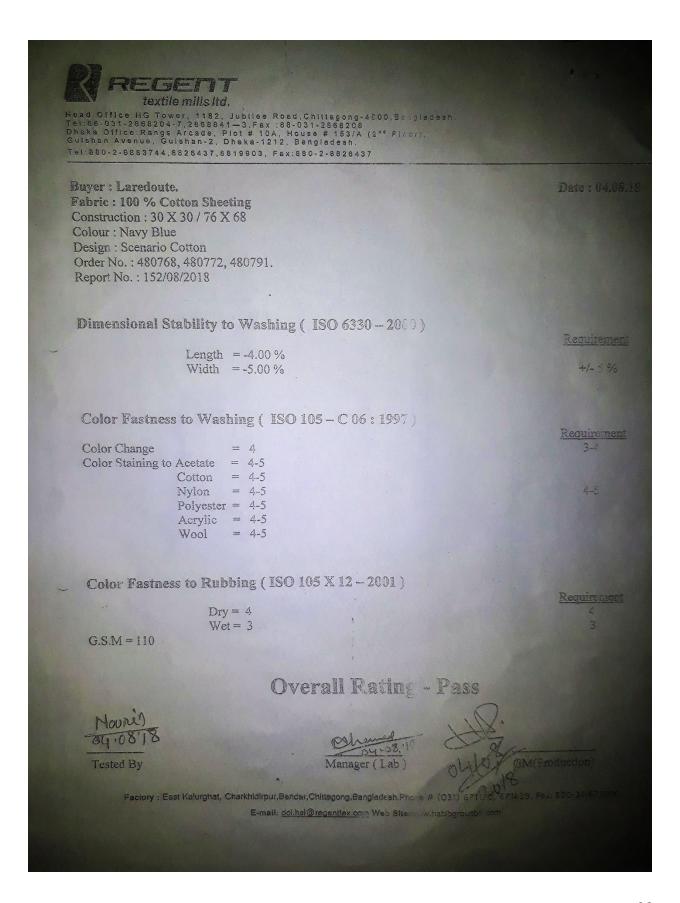
Tested By

+1-5%

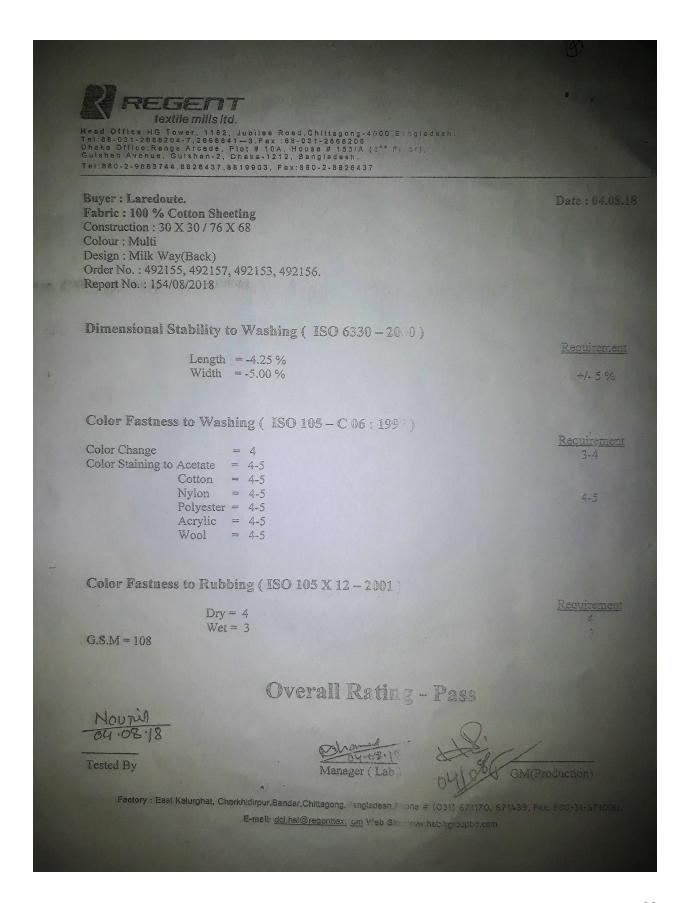
Factory: East Kalurghat, Charkhidirpur, Bandar, Chittagong, Bangladesh, Phone # (031) 671170, 671439, Fax: 880-31-571000. E-mail: dol.hsl@regenttex.com V/eb Site:wvw.habibgroupbd.com





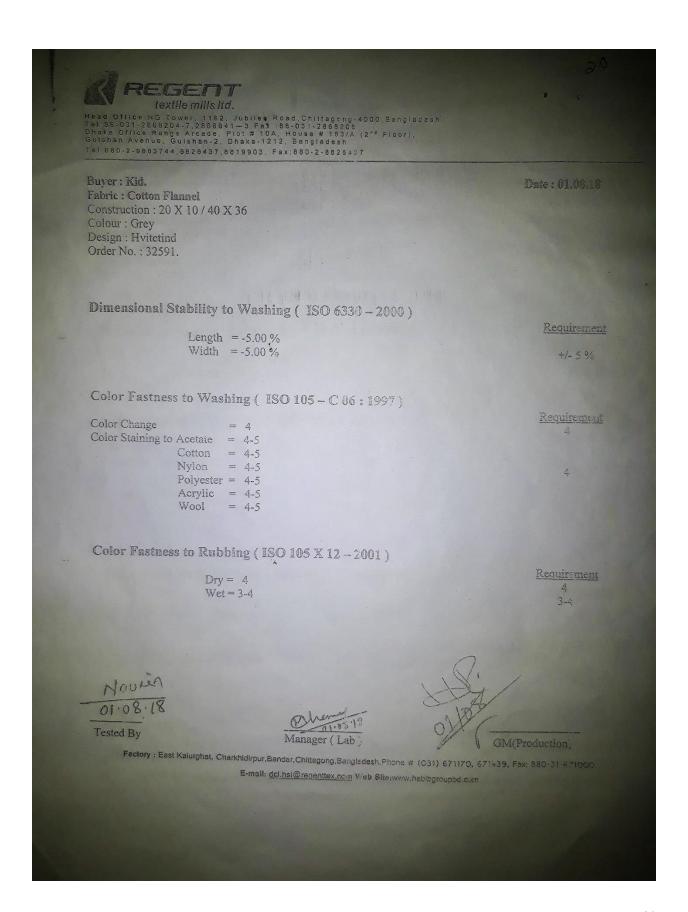


	yer: Laredoute.	Date : 64,08.18
Co Co De Or	bric: 100 % Cotton Sheeting enstruction: 30 X 30 / 76 X 68  blour: Multi esign: Milk Way(Front) der No.: 492155, 492157, 492153, 492156. eport No.: 153/08/2018	
D	imensional Stability to Washing (ISO 6330 - 2000)	
	Length = -4.25 % Width = -5.00 %	Requirement
C	olor Fastness to Washing (ISO 105 - C 06: 1997)	
	olor Change = 4 olor Staining to Acetate = 4-5	Requirement 3-4 4-5
C	olor Fastness to Rubbing (ISO 105 X 12 - 2001)	
	Dry = 4 Wet = 3	Requirement 4 3
	Overall Rating - Pass	
_	Nourin 04.08.18	
To	ested By  Manager (Lab)	Production)



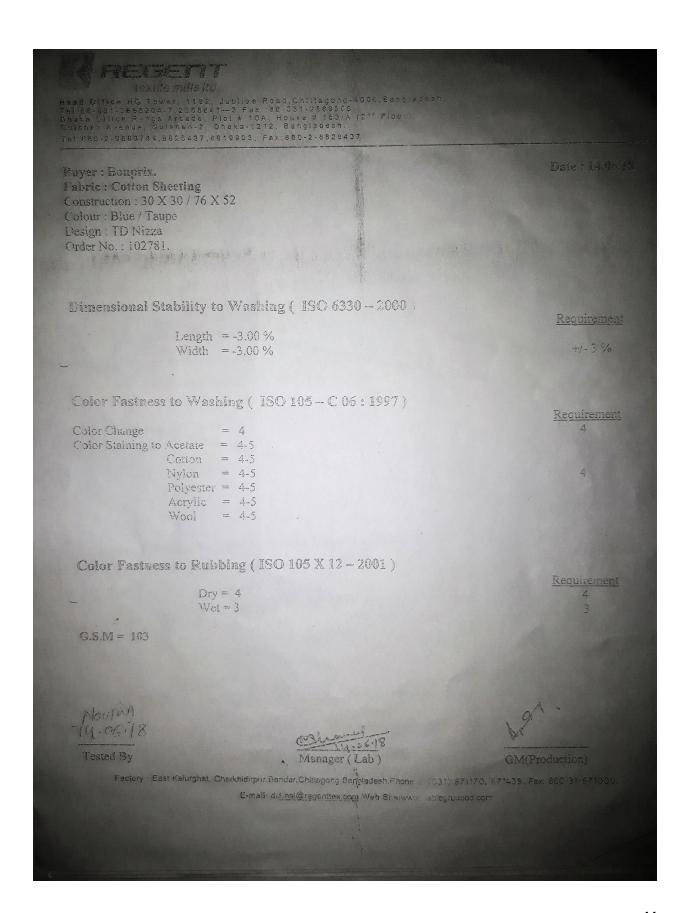
textile mills itd.  Head Office: HG Tower, 1182, Jubilee Road, Chittagong-4000, Bengladesh.  Tel. 88-031-2868204-7, 2868841—3, Fax: 88-031-2868208  Dhake Office: Range Arcade, Plot # 10A, House # 153/A (2nd Ficer),  Gulshan Avenue, Gulshan-2, Dhaka-1212, Bangladesh.  Tel: 880-2-9883744, 8826437, 8819903, Fax: 880-2-8826437	
Buyer: Laredoute. Fabric: 100 % Cotton Sheeting Construction: 30 X 30 / 76 X 68 Colour: Multi Design: Tiebele(Front) Order No.: 474681, 474683, 474679. Report No.: 155/08/2018	Date : 01.08.18
Dimensional Stability to Washing (ISO 6330 - 2000)  Length = -4.75 %  Width = -5.00 %	Requirement +/- 5 %
Color Fastness to Washing (ISO 105 - C 06: 1997)  Color Change = 4 Color Staining to Acetate = 4-5 Cotton = 4-5 Nylon = 4-5 Polyester = 4-5 Acrylic = 4-5 Wool = 4-5	Requirement 3-4 4-5
Color Fastness to Rubbing (ISO 105 X 12 - 2001)  Dry = 4  Wet = 3  G.S.M = 110	Requirement 4 3
Overall Rating - Pass	
Nouville Tested By Manager (Lab)	GM(Production)

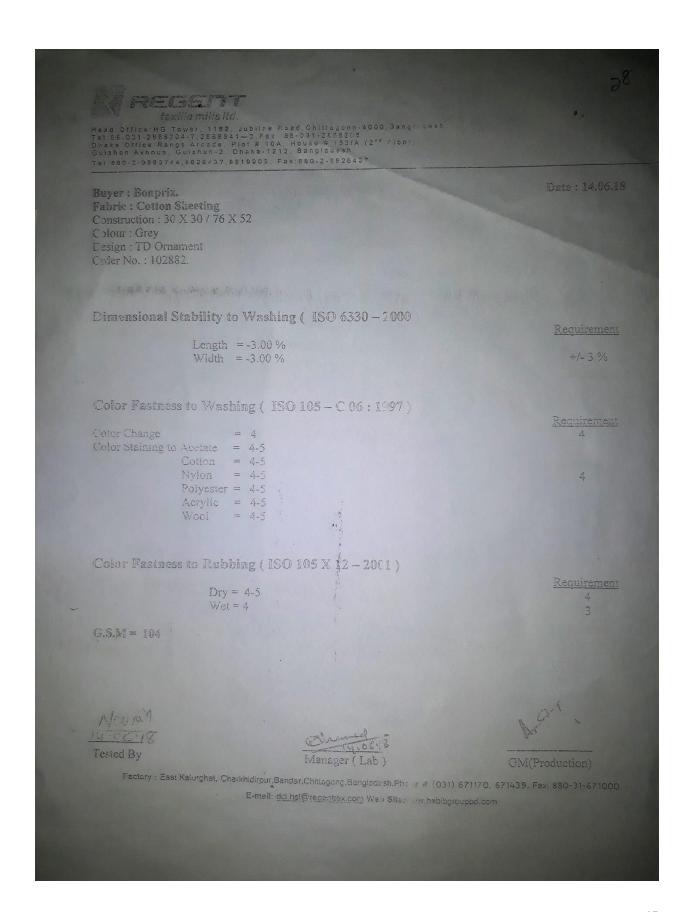
Buyer: Laredon	e.	Date: 01.08.1)
Faorie: 100% C Construction: 30 Cetour: Canard Design: Miss Cl	otten Sheeting  X 30 / 76 X 56  Blue  sina (Back)  01,488199,488197,489363.	
Dimensional	Stability to Washing (ISC 6330 – 2009)	Reminente
	Length = -4.25 % Width = -5.00 %	41.5%
Color Fastne	ss to Washing ( ISO 105 – C 06: 1997)	
Color Change Color Staining	= 4 o Acetate = 4-5 Cotton = 4-5	
	Nylon = 4-5 Poiyester = 4-5 Acrylic = 4-5 Wool = 4-5	4-5
Color Fastn	ess to Rubbing (ISO 105 X 12 - 2001)	
G.3.M = 101	Dry = 4 Wet = 3	Re juitement 4 3
	Overall Rating - Pa	389
Atournan		
Nova)		17/2,

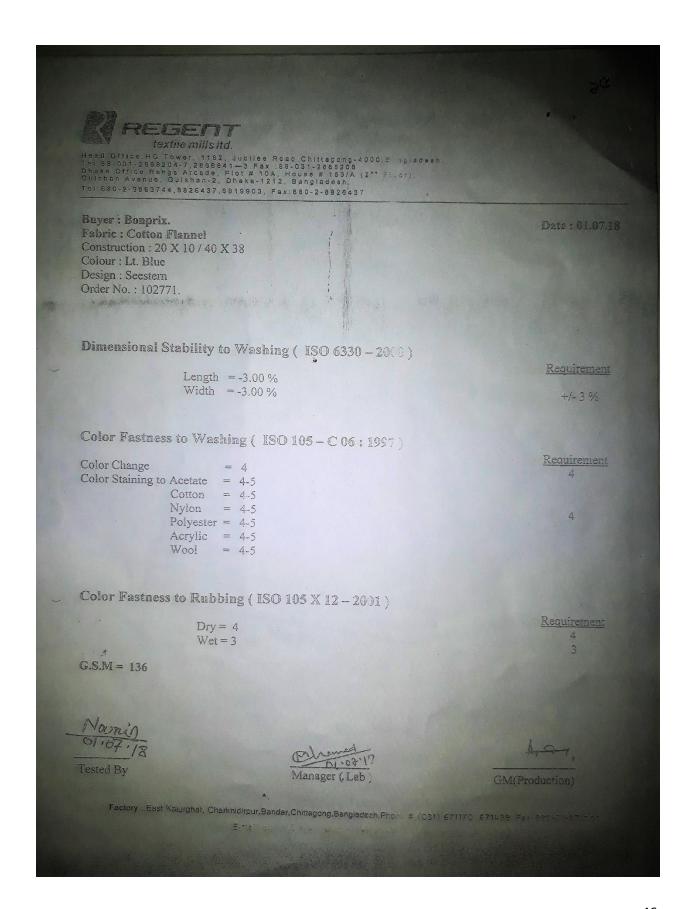


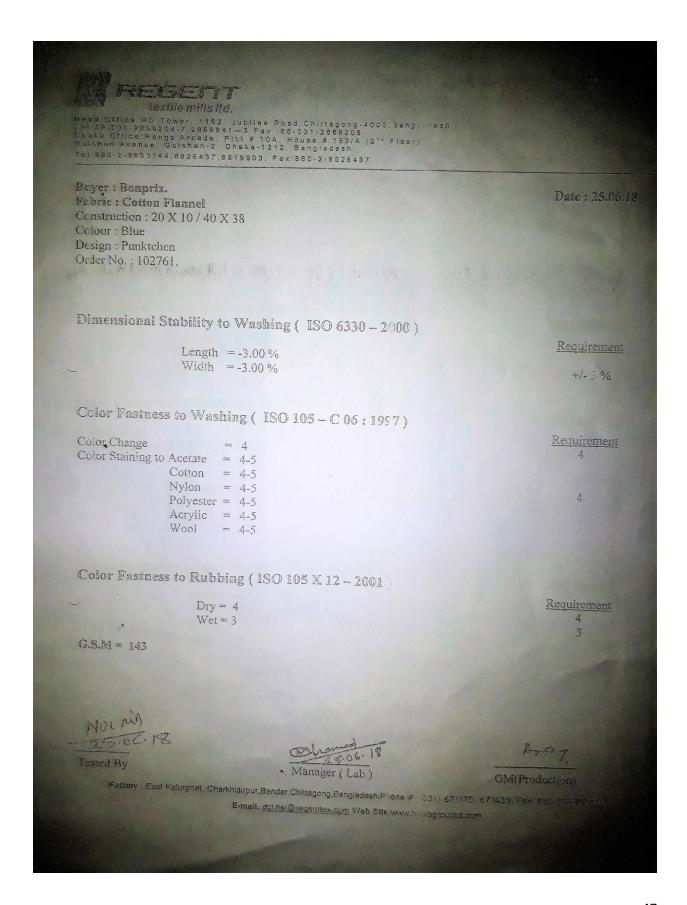
textile mills Itd. Head Office: HC Tower, 1182, Jubilee Road, Chittagong-4000, Bangladash Tel: 88-031-2868204-7, 2868241--3. Fax: 88-031-2868208 Dhaka Office: Rangs Arcade, Plot # 10A, House # 163/A (2°° Floor), Gulshan Avenue, Gulshan-2, Dhaka-1212, Bangladesh Tel: 880-2-9883744, 8826437, 8619903, Fax: 880-2-8826437 Buyer: Kid. Fabric: Cotton Flannel Construction: 20 X 10 / 40 X 36 Colour: Red Design: Skartind Order No.: 32595. Dimensional Stability to Washing (ISO 6330 - 2000) Length = -5.00%Width = -4.50%+1.5% Color Fastness to Washing (ISO 105 - C 06: 1997) Color Change Color Staining to Acetate = 4-5 Cotton = 4-5 Nylon = 4-5Polyester = 4-5 Acrylic = 4-5 Wool = 4-5 Color Fastness to Rubbing (ISO 105 X 12 - 2001) Dry = 4Wet = 3-4Nouvil 01.08.18 Tested By Manager (Lat) Factory : East Kalurghat, Charkhidirpur, Bandar, Chittagong, Bang ladesh. Phone # (031) 671170, 671439, Fax: 880-31 671000 E-mail: dcl.hsl@regenttex.com Web Site.hvv.v.habibgroupbd.com

Gulshan Avenue, Tel:880-2-988374	ower, 1182, Jubilee Road, Chitt 4-7, 2868841—3. Fax: 88-031-2: s Arcade, Plot # 10A, House # Gulshan-2, Dhake-1212, Bangia .8826437,8819903, Fax: 880-2-	868208 153/A (2 <sup>n4</sup> Floor), idesh. 8826437	
Buyer: Bonprix Fabric: Cotton Construction: 20 Colour: Taupe Design: BW Kat Order No.: 1029	Flannel X 10 / 40 X 38		Date : 02.07.1
Dimensional S	tability to Washing ( IS	O 6330 – 2000 )	
	Length = -3.00 %		Requirement
	Width = -3.00 %		+/- 3 %
Color Fastnes	s to Washing ( ISO 105-	- C 06:1997)	Requirement
Color Change Color Staining to	= 4 Acetate = 4-5 Cotton = 4-5 Nylon = 4-5 Polyester = 4-5 Acrylic = 4-5 Wool = 4-5		4
Color Fastne	s to Rubbing (ISO 105 X	(12 – 2001)	
G.S.M = 142	Dry = 4 Wet = 3		Requirement 4 3
Novies 02.07.18	and a	Aguard 18	Aray
Tested By	Mana	99er (Lah)	GM(Production)



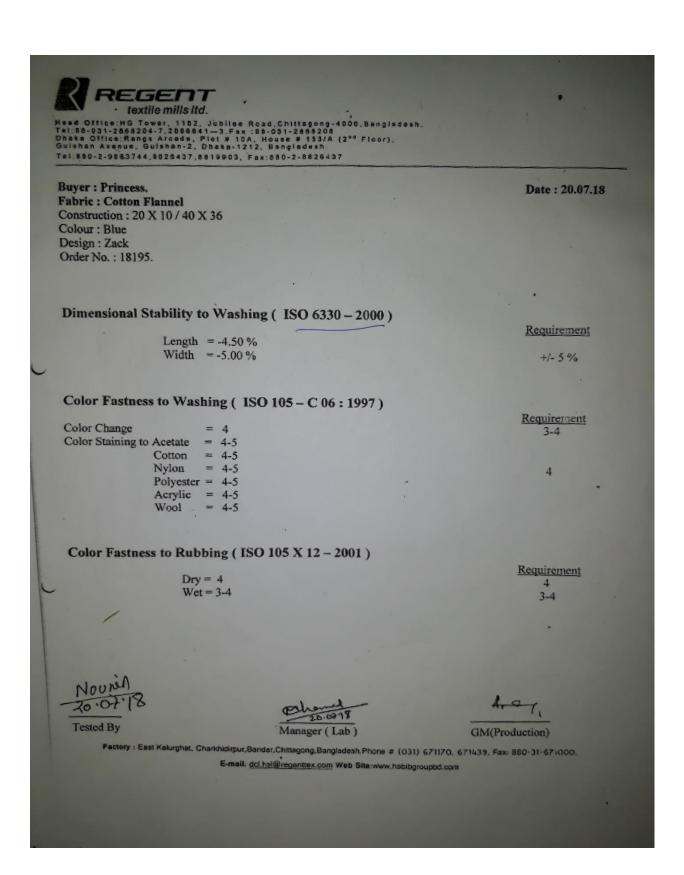


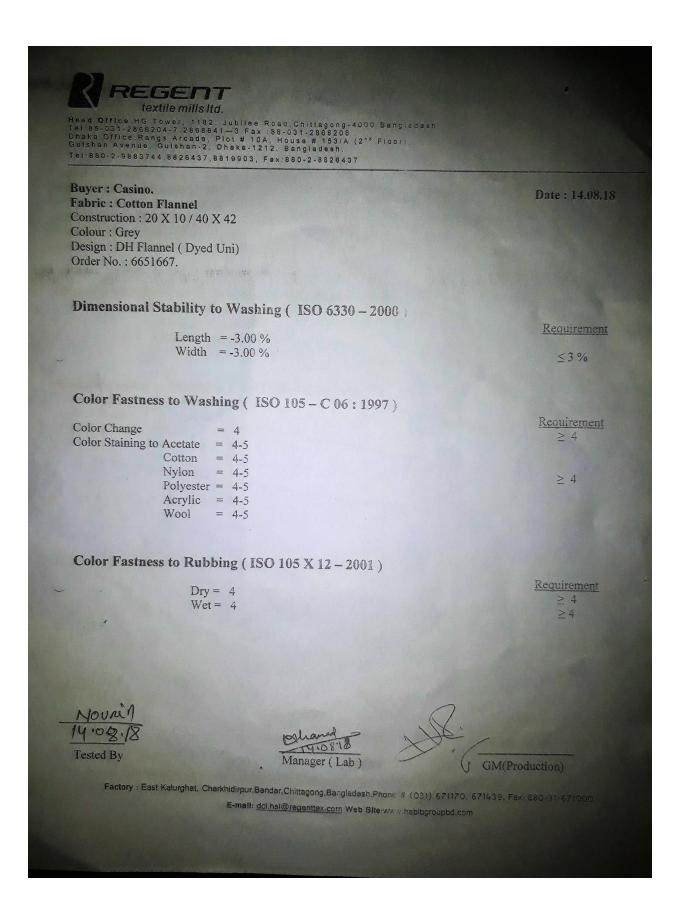


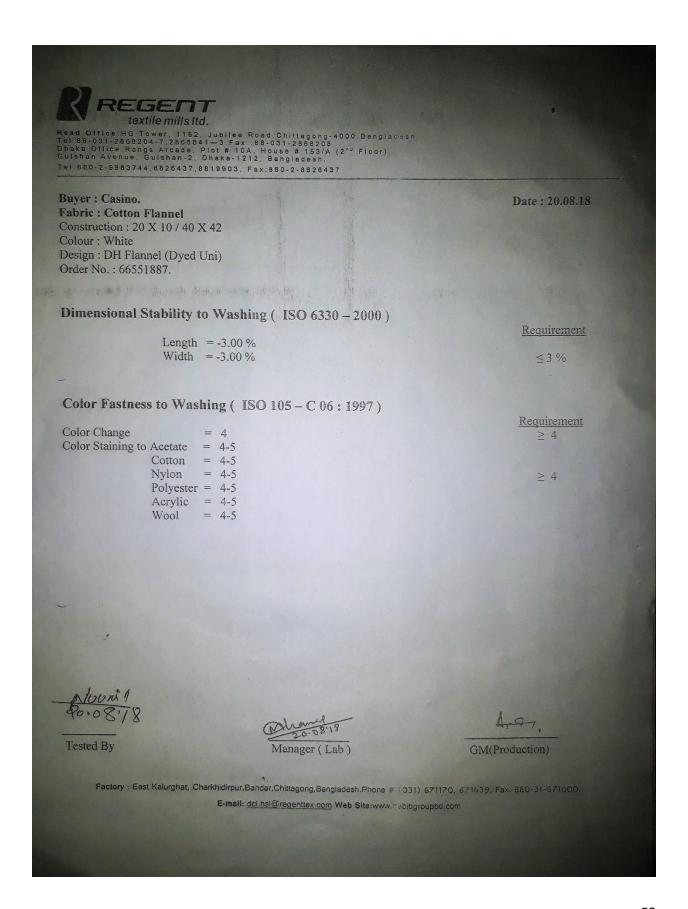


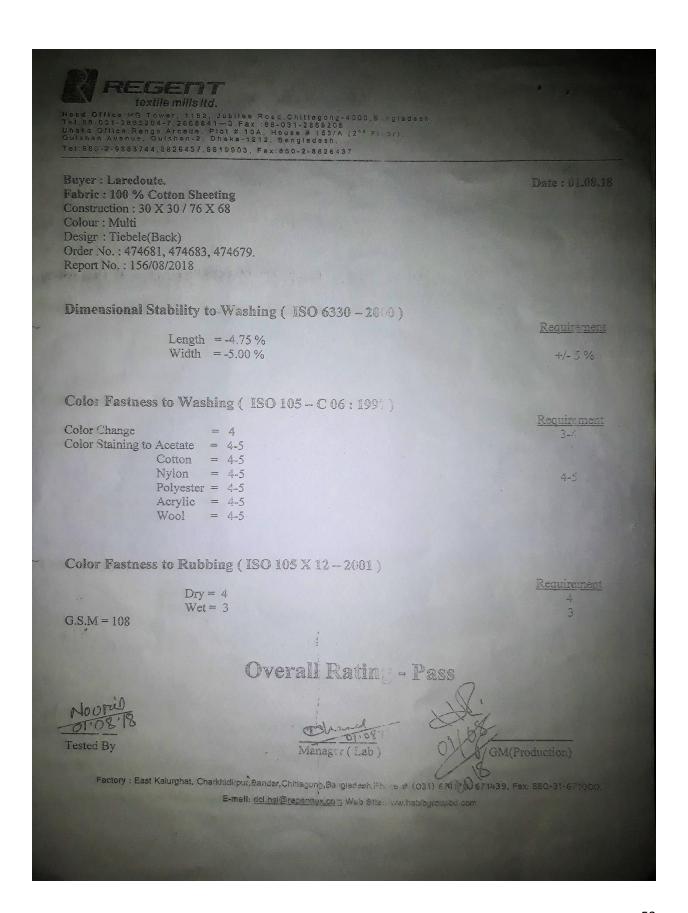
REGENT textile mills ltd. Head Office:HG Tower, 1182, Jubilee Road, Chittagong-4000, Bangladesh. Tel:88-031-2868204-7, 2868841—3, Fax:88-031-2868208 Dhaka Office:Rangs Arcade, Plot # 10A, House # 153/A (2<sup>nd</sup> Floor), Gutshan Avenue, Gulshan-2, Dhaka-1212, Bangladesh. Tel:880-2-9883744,8826437,8819903, Fax:880-2-8826437 Buyer: Casino. Date: 18.08.18 Fabric : Cotton Sheeting Construction: 30 X 30 / 76 X 68 Colour: Multi Design: Love Plum Order No.: 6651696. Dimensional Stability to Washing ( ISO 6330 - 2000 ) Requirement Length = -3.00%Width = -3.00%≤3% Color Fastness to Washing ( ISO 105 - C 06: 1997) Color Change  $\geq 4$ Color Staining to Acetate = 4-5 Cotton = 4-5Nylon = 4-5Polyester = 4-5 Acrylic = 4-5 Wool = 4-5Color Fastness to Rubbing (ISO 105 X 12 - 2001) Requirement Dry = 4≥ 4 Wet = 4Tested By Manager (Lab) GM(Production) Factory : East Kalurghat, Charkhidirpur, Bandar, Chittagong, Bangladesh. Phone # (031) 671170, 671439, Fax: 880-31-671000. E-mail: doi.hsi@regenttex.com Web Site:www.nsbibgroupbd.com

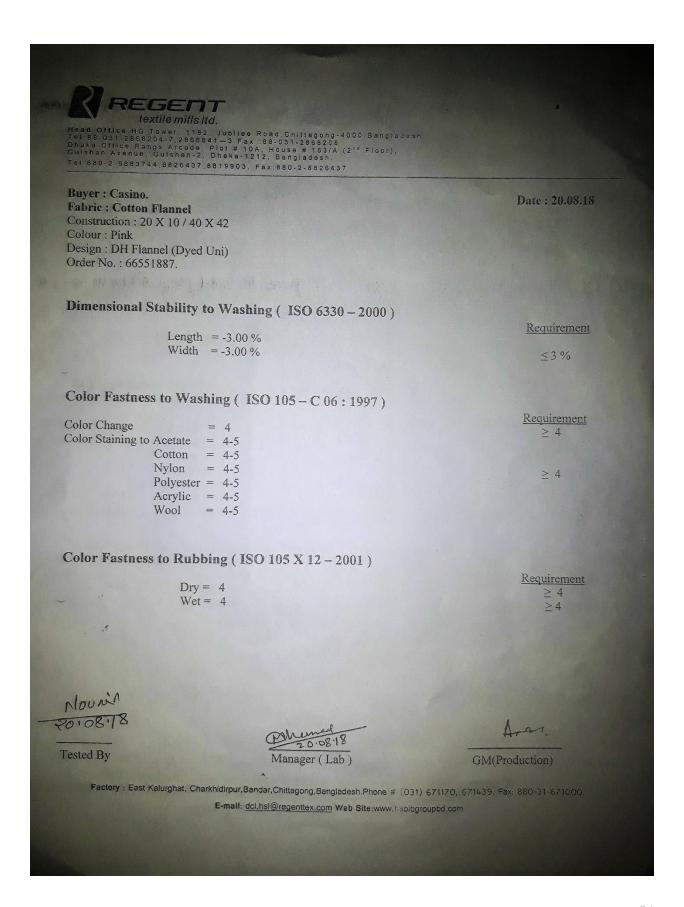
REGENT textile mills ltd. ead Office:HG Tower, 1182, Jubilee Road,Chittagong-4000,Bangiacesh. el:88-031-2868204-7,2868841—3.Fax:88-031-2868208 haka Office:Rangs Arcade, Plot # 10A, House # 163/A (2<sup>nd</sup> Floor). uishan Avenue, Guishan-2, Dhaka-1212, Bangladesh. Tel:880-2-9883744,8826437,8819903, Fax:680-2-8826437 Date: 20.08.18 Buyer: Casino. Fabric: Cotton Flannel Construction: 20 X 10 / 40 X 42 Colour: Grey Design: DH Flannel (Dyed Uni) Order No.: 66551887. Dimensional Stability to Washing (ISO 6330 - 2000) Requirement Length = -3.00%Width = -3.00%≤3% Color Fastness to Washing (ISO 105 - C 06: 1997) Requirement Color Change Color Staining to Acetate = 4-5 Cotton = 4-5Nylon = 4-5Polyester = 4-5Acrylic = 4-5 Wool = 4-5 Color Fastness to Rubbing (ISO 105 X 12 - 2001) Dry = 4≥ 4 Wet = 4≥4 Tested By Factory: East Kalurghat, Charkhidirpur, Bandar, Chittagong, Bangladesh. Phone # (031) 671170, 671439, Fax: 880-31-671000. E-mail: dcl.hsl@regenttex.com Web Site:www.abipgroupbd.com













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Tel:880-2-9883744,8826437,8819903, Fax:880-2-8826437

Buyer : Princess.

Fabric : Cotton Sheeting Construction : 20 X 20 / 60 X 60

Colour: Cream
Design: Plain Dyed
Order No.: 18432, 18433.

Dimensional Stability to Washing ( ISO 6330 – 2000 )

Length = -4.25 %Width = -5.00 % Requirement

Date: 13.10.18

+/- 5 %

13-10-18 Tested By

Manager (Lab)

GM(Production)

Factory: East Kalurghat, Charkhidirpur, Bandar, Chittagong, Bangladesh. Phone # (031) 671170, 671439, Fax: 880-31-671000.

E-mail: dcl.hsl@regenttex.com Web Site:www.habibgroupbd.com



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Dhaka Office: Rangs Arcade, Plot # 10A, House # 153/A (2nd Floor), Gulshan Avenue, Gulshan-2, Dhaka-1212, Bangladesh.
Tel: 880-2-9883744, 8826437, 8819903, Fax: 880-2-8826437

Buyer: KSI.

Fabric: Cotton Twill

Construction: 7 X 7 / 72 X 42

Colour : Black PI No. : 027

Olor Fastness to Washing ( ISO 105 - C 06: 1997)

Color Change = 4-5

Color Staining to Acetate = 4-5

Cotton = 4-5

Nylon = 4-5

Polyester = 4-5

Acrylic = 4-5

Wool = 4-5

G.S.M = 380 Yarn Count = 7 X 7 Irface Density = 72X42

Tear Strength (ISO 13937-1)

Warp = 48 NWeft = 44 N

Tested By

Manager (Lab)

Ar 91 06.06.18

Date: 06.06.18

GM(Production)

Factory: East Kalurghat, Charkhidirpur,Bandar,Chittagong,Bangladesh.Phone # (031) 671170, 671439, Fax: 880-31-671000.

E-mail: dcl.hsl@regenttex.com Web Site:www.habibgroupbd.com



Head Office: HG Tower, 1182, Jubilee Road, Chittagong-4000, Bangladesh. Tel: 88-031-2868204-7, 2868841-3. Fax: 88-031-2868208
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Gulshan Avenue, Gulshan-2, Dhaka-1212, Bangladesh.
Tel: 880-2-9883744, 8826437, 8819903, Fax: 880-2-8826437

Buyer: Princess.

Fabric : Cotton Flannel

Construction: 20 X 10 / 40 X 36

Colour: Red / White Design: Julio Order No.: 18323.

Dimensional Stability to Washing ( ISO 6330 - 2000 )

Length = -4.50 %Width = -5.00 % Requirement

Date: 06.10.18

+/- 5 %

Color Fastness to Washing ( ISO 105 - C 06: 1997)

 Color Change
 = 4

 Color Staining to Acetate
 = 4-5

 Cotton
 = 4-5

 Nylon
 = 4-5

 Polyester
 = 4-5

 Acrylic
 = 4-5

 Wool
 = 4-5

Requirement 3-4

4

Color Fastness to Rubbing (ISO 105 X 12 - 2001)

Dry = 4 Wet = 3-4

Requirement 4 3-4



igs Arcade, Plot # 10A, House # 153/A Gulshan-2, Dhaka-1212, Bangladesh. Tel:880-2-9883744,8826437,8819903, Fax:880-2-8826437

Date: 13.10.18 Buyer: Princess.

Fabric: Cotton Sheeting Construction: 30 X 30 / 76 X 56

Colour: Lilac

Design: Rainbow(Unicon)

Order No.: 18563.

Dimensional Stability to Washing ( ISO 6330 - 2000)

Requirement Length = -4.50 %Width = -5.00 %+/- 5%

Color Fastness to Washing (ISO 105 - C 06: 1997)

Requirement Color Change 3-4 Color Staining to Acetate Cotton Nylon

> Polyester = 4-5Acrylic = 4-5Wool = 4-5

Color Fastness to Rubbing (ISO 105 X 12 – 2001)

Requirement Dry = 4-5Wet = 4

Manager (Lab)

GM(Production)

439, Fax: 880-31-671000. Factory: East Kalurghat, Charkhidirpur, Bandar, Chittagong, Bangladesh. Phone # (031)

E-mail: dcl.hsl@regenttex.com Web Site:www.habibgrou

## **CHAPTER-11**

## REFERANCES

- [1] https://www.eujournal./org/index.php/esj/article/view.File/2998/2824 [Accessed Oct 30 2018]
- [2] http://www.textiletoday./com.bd/branding-of-bangladeshi.-clothing-are-we-ready [accessed Nov 01 2018]
- [3] http://www.isca..in/IJES/Archive/v2/i3/10 [accessed Nov 02 2018]
- [4] http://www.businessinsider.com/factories [Accessed Nov 03 2018]
- [5] http://www.sportswear-international.com/news/stories/Market-report-Bangladesh-[accessed Nov 04 2018].
- [6] (PDF) QUALITY MANAGEMENT IN GARMENT INDUSTRY OF BANGLADESH.
  [Accessed Nov 06 2018]
- [7] https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1478-4408x[accessed Nov 07 2018].
- [8] https://www.managementstudyhq.com/what-is-management.html [Accessed Nov 07 2018]
- [9] https://www.investopedia.com/terms/q/quality-control.asp [accessed Nov 08 2018].
- [10] https://www.iso.org/standard/65207.html [accessed Nov 08 2018].
- [11] https://study.com/academy/lesson/what-is-textile-testing-methods-importance.html [accessed Nov 09 2018].
- [12] http://www.businessinsider.com/big-brands-in-bangladesh-factories [Accessed Nov 10 2018]
- [13] https://www.researchgate.net/publication/301789034\_QUALITY\_MANAGEMENT\_I N\_GARMENT\_INDUSTRY\_OF\_BANGLADESH [accessed Nov 10 2018].
- [14] Apparel-makers-encouraged-to-develop-own-brands-13601 [accessed Nov 11 2018].
- [15] https://www.researchgate.net/publication/283546506\_Colour\_Fastness\_and\_Tensile\_S trength\_of\_Cotton\_Fabric\_Dyed\_with\_Natural\_Extracts\_of\_Alkanna\_tinctoria\_by\_Con tinuous\_Dyeing\_Technique. [Accessed Nov 11 2018].