



**Daffodil**  
*International*  
**University**

## **Faculty of Engineering**

**Department of Textile Engineering**

**Topic: Comparative analysis of Tech-pack for T-shirt.**

**Course Title: Project (Thesis), Course Code: TE 4214**

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**This Report Presented in Partial Fulfillment of the Requirements for the  
degree of Bachelor of Science in Textile Engineering**

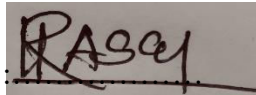
**Advance in Apparel Manufacturing Technology**

**Fall 2022**

## Author's Declaration

We declare that we are the sole authors of this project. It is the actual copy of the project that was accepted by our advisor(s) including any necessary revisions. We also grant Daffodil International University permission to reproduce and distribute electronic or paper copies of this project.

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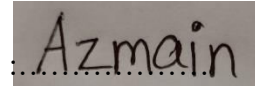


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## ACKNOWLEDGEMENTS

First of all, we express our appreciativeness to our almighty Allah for his virtuous blessing makes us give the ability to complete this Project successfully.

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We would like to express our heart-full thanks to **Md. Mominur Rahman**, Head (In-Charge), Department of Textile Engineering, Faculty of Engineering, Daffodil International University for his kind help to finish our Project report.

Finally, we would like to express our gratitude to our beloved parents for their internal support, strength, and backing throughout the project report.

## **DEDICATION**

Dedicated to my parents, who have always been my sources of inspiration, support, and encouragement. Their unwavering love and belief in me have given me the strength to pursue my dreams and reach for the stars. I am forever grateful for everything they have done for me and for being my rock through the ups and downs of life. This thesis is a testament to their love and a celebration of their hard work and sacrifice.

## **ABSTRACT**

One of the economies that is expanding globally is Bangladesh. The rise of the economy is greatly aided by the integrated primary sector and the high-capacity clothing industry. In actuality, Bangladesh has transformed into a sort of worldwide hub for clothing. Bangladesh has gained from the "made in Bangladesh" badge, which has improved the reputation of the nation as a brand on a global scale. The next hot spot after China, according to a McKinsey analysis, is Bangladesh. In order to retain the splendor, it is crucial to start with the buyer's criterion correctly. Buyers provide a technical package that contains their specifications. In this study, 159 technical packages were evaluated to identify the various parts that might be easily understood to establish the order. Each and every of the requirements for preparing a sample were discovered to be clearly described in technical packages.

## LETTER OF APPROVAL

Date: 04/03/2023

To

The Department Head

Department of Textile Engineering,

Daffodil Smart City, Ashulia, Savar, Dhaka.

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

Dear Sir,

We are just writing to let you know that this project report titled as “**Comparative analysis of Tech-pack for T-shirt**” has been prepared by the student bearing ID 191-23-661, 191-23- 674 are completed for final evaluation. The whole report is prepared based on the proper investigation and interruption through critical analysis of empirical data with required belongings. These 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,



.....

Mst. Murshida Khatun

Assistant Professor,

Department of Textile Engineering,

Daffodil International University

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## CHAPTER -1: INTRODUCTION

### 1.1. Introduction:

The textile industry is a global industry involved in the production of fabrics, yarns, and finished textile products. It is one of the oldest and largest industries in the world and has played a crucial role in the economic development of many countries. The industry encompasses various sub-sectors, including cotton, wool, silk, synthetic fibers, and technical textiles, and involves various stages of production, from spinning and weaving to dyeing and finishing. The industry faces various challenges, such as environmental concerns, changing consumer preferences, and intense global competition, but it continues to evolve and adapt through innovation, sustainable practices, and collaboration across the value chain.

Tech-pack, short for "technical package," is a set of documents that provides detailed instructions for the manufacturing of a product. In the textile industry, a tech-pack typically includes detailed information on the design, materials, measurements, construction, and packaging of a garment or textile product. It is used by manufacturers to produce products to the exact specifications of the designer or brand. Tech-packs are essential for ensuring consistency in production and maintaining quality control throughout the manufacturing process. They also help to minimize errors and reduce costs by providing clear and precise instructions for the manufacturing process.

## **1.2. Objective:**

The primary objectives of a tech pack in the textile industry are:

- **Clear Communication:** The tech pack serves as a communication tool between the designer and the manufacturer. It provides detailed instructions on the materials, measurements, construction, and packaging of the product, ensuring that the manufacturer produces the product according to the designer's specifications.
- **Quality Control:** The tech pack is an essential tool for maintaining quality control throughout the manufacturing process. By providing clear and precise instructions, it minimizes errors and reduces the risk of defects in the final product.
- **Cost Control:** The tech pack helps to minimize costs by providing detailed information on the materials and construction methods required for the product. This information enables the manufacturer to source the necessary materials and plan the production process effectively, reducing waste and optimizing efficiency.
- **Consistency:** The tech pack helps to ensure consistency in production, enabling the manufacturer to reproduce the same product accurately and efficiently over time.
- **Legal Protection:** The tech pack can serve as legal protection for the designer or brand by documenting the specifications and requirements for the product. In case of any dispute or issue, the tech pack serves as evidence of the agreed-upon specifications and can be used to resolve the dispute.

## **1.3. Outcomes:**

The outcomes of a tech pack in the textile industry can be summarized as follows:

- **Accurate and Consistent Manufacturing:** A tech pack provides detailed information on the design, materials, measurements, and construction methods required for a product. This information ensures that the product is manufactured accurately and consistently, meeting the designer or brand's specifications.

- **Improved Quality Control:** The use of a tech pack throughout the manufacturing process helps to maintain quality control, minimizing errors and defects in the final product. This results in a high-quality product that meets the expectations of the designer or brand and the end consumer.
- **Cost Optimization:** By providing clear and precise instructions, a tech pack helps to optimize costs by minimizing waste and maximizing efficiency. This results in a product that is both high-quality and cost-effective.
- **Efficient Communication:** A tech pack serves as a communication tool between the designer and the manufacturer, ensuring that everyone involved in the production process has a clear understanding of the product's specifications and requirements. This results in efficient and effective communication, reducing the risk of misunderstandings or mistakes.
- **Legal Protection:** A tech pack can provide legal protection for the designer or brand by documenting the specifications and requirements for the product. This ensures that the manufacturer produces the product according to the agreed-upon specifications, reducing the risk of disputes or legal issues.

## **1.4. Limitations:**

While tech packs are a valuable tool for the textile industry, there are some limitations to their use. Some of these limitations include:

1)**Lack of Flexibility:** Tech packs provide detailed instructions on the materials, measurements, and construction methods required for a product. However, they may not allow for changes or modifications during the manufacturing process, limiting the manufacturer's flexibility in responding to production issues or changing market demands.

2)**Language and Cultural Barriers:** Tech packs may be written in a language that the manufacturer does not understand or in a cultural context that is unfamiliar to them. This can lead to misunderstandings or misinterpretations of the instructions, affecting the quality and consistency of the final product.

---

## **CHAPTER-2: LITERATURE REVIEW**

### **2.1. Indication:**

The clothing industry, also known as the fashion industry, is a vast and diverse sector that encompasses the production, design, marketing, and sales of clothing and accessories. It includes everything from high-end designer fashion to budget-friendly fast fashion, and everything in between.

The clothing industry is a major contributor to the global economy, generating billions of dollars in revenue and providing employment to millions of people worldwide. The industry is also a significant cultural force, shaping the way we express ourselves through clothing and influencing trends and styles around the world. The clothing industry has undergone significant changes over the years, with advancements in technology and globalization leading to increased competition and greater consumer demand for affordable and trendy clothing. However, the industry has also faced criticism for its impact on the environment and social issues such as labor practices and worker rights.

As a result, there has been a growing movement towards sustainable and ethical fashion, with companies and consumers alike seeking to minimize the environmental impact of clothing production and ensure fair labor practices throughout the supply chain. Despite these challenges, the clothing industry remains a vibrant and dynamic sector, driving innovation and creativity in fashion and design.

### **2.2. Process of Manufacturing of Garment:**

The process of manufacturing a garment involves several steps, which are outlined below:

- **Design and Conceptualization:** The first step is to create a design for the garment. This can be done by sketching or using computer-aided design (CAD) software. The design is then turned into a pattern, which is used to create a sample garment.
- **Fabric Selection:** Once the design is finalized, the appropriate fabric is selected based on its properties and suitability for the design. Factors like color, weight, and texture are considered during this stage.
- **Cutting:** The fabric is then cut into the desired shape and size based on the pattern. This is usually done using a cutting machine or by hand.

- **Stitching:** The cut fabric pieces are then assembled using a sewing machine or by hand stitching. This involves joining the pieces together to create the final garment.
- **Finishing:** Once the garment is stitched, it undergoes finishing processes such as pressing, trimming, and hemming to ensure that it looks neat and professional. The garment is then inspected for quality control before being packaged and shipped to retailers or customers.

Overall, the process of manufacturing a garment requires careful planning, attention to detail, and skilled labor to create high-quality, functional and fashionable clothing that meets the demands of consumers.

### 2.3. Flowchart of Garments Manufacturing:

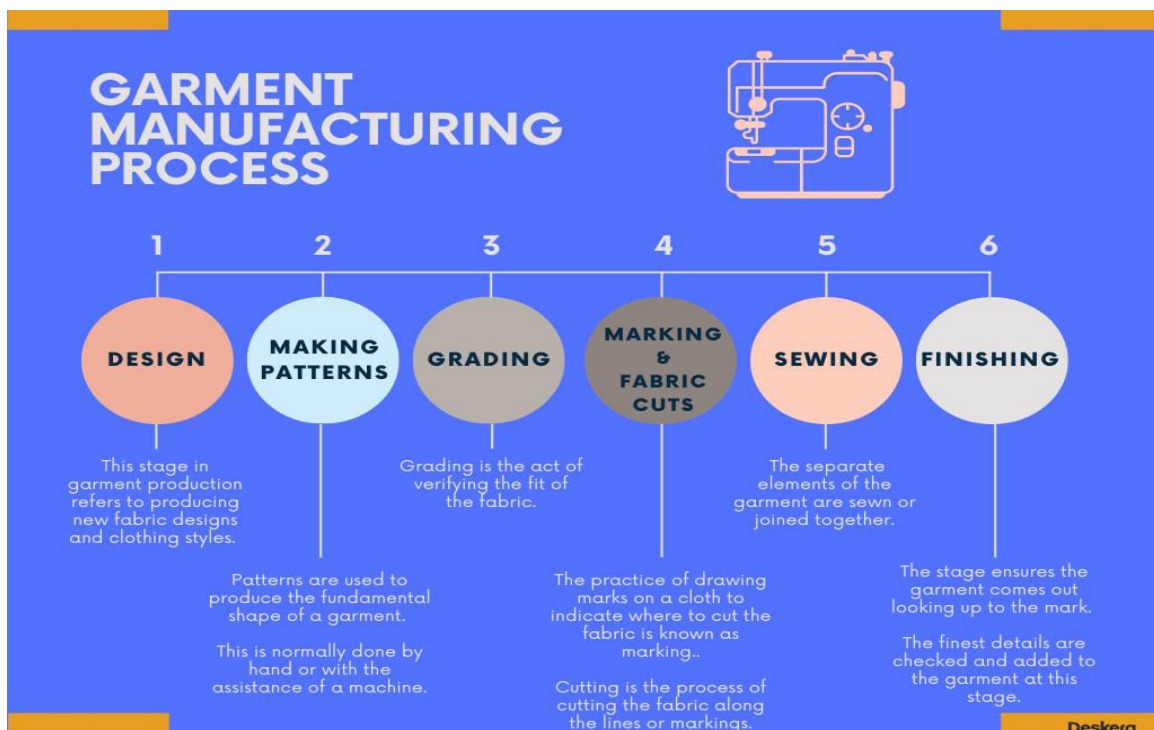


Fig 2.3. Flowchart of Garments Manufacturing:

## **2.4. Sampling:**

In the garment industry, sampling refers to the process of creating a small batch of garments to test their design, fit, and quality before producing the final product in bulk. Sampling is an essential part of the garment manufacturing process because it helps to ensure that the final product meets the desired specifications and meets the needs of the customer.

Sampling involves creating a sample garment based on a design or specification provided by the client or designer. The sample garment is then used to test the fit, comfort, and functionality of the design. It is also used to identify any potential issues with the garment's construction, such as stitching quality or fabric durability. Once the sample garment is completed, it is typically reviewed by the client or designer for approval or feedback. Based on the feedback, adjustments may be made to the design or construction of the garment. Additional samples may be created until the final design is approved.

Sampling can be a time-consuming and costly process, but it is an important step in ensuring that the final product meets the requirements of the client and the end-user.

Sample is the reference garments corresponds to

- The artwork done by designer/ developer
- Particular PO
- Any revision to the style work
- Conform with any particular requirement, etc

## 2.5. Process flow chart of Sampling:

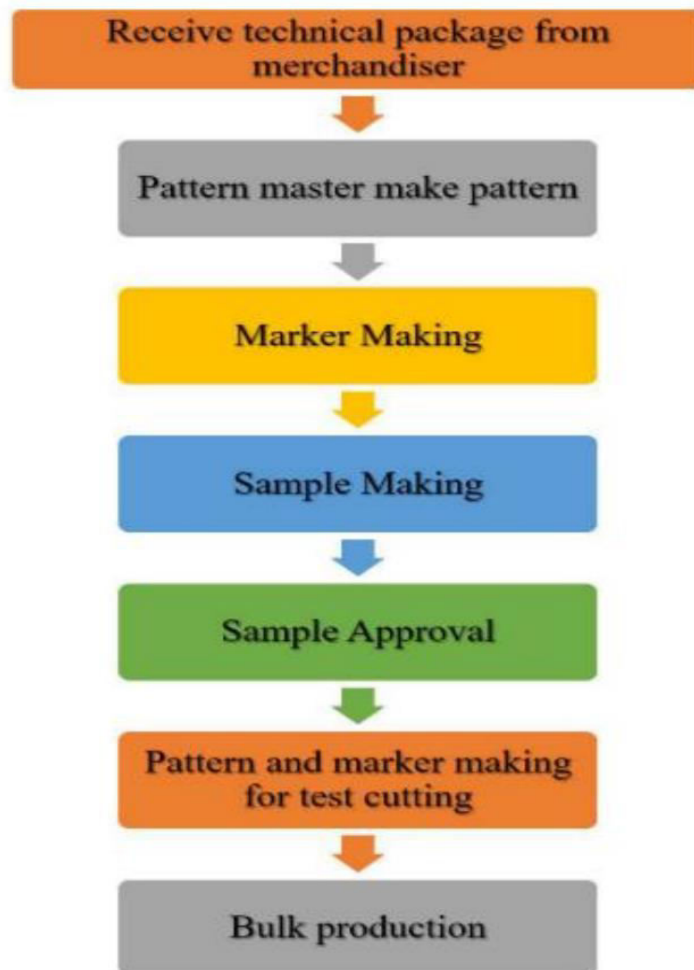


Fig-2.5: Process flow chart of Sampling



## 2.6. Order of Sampling:

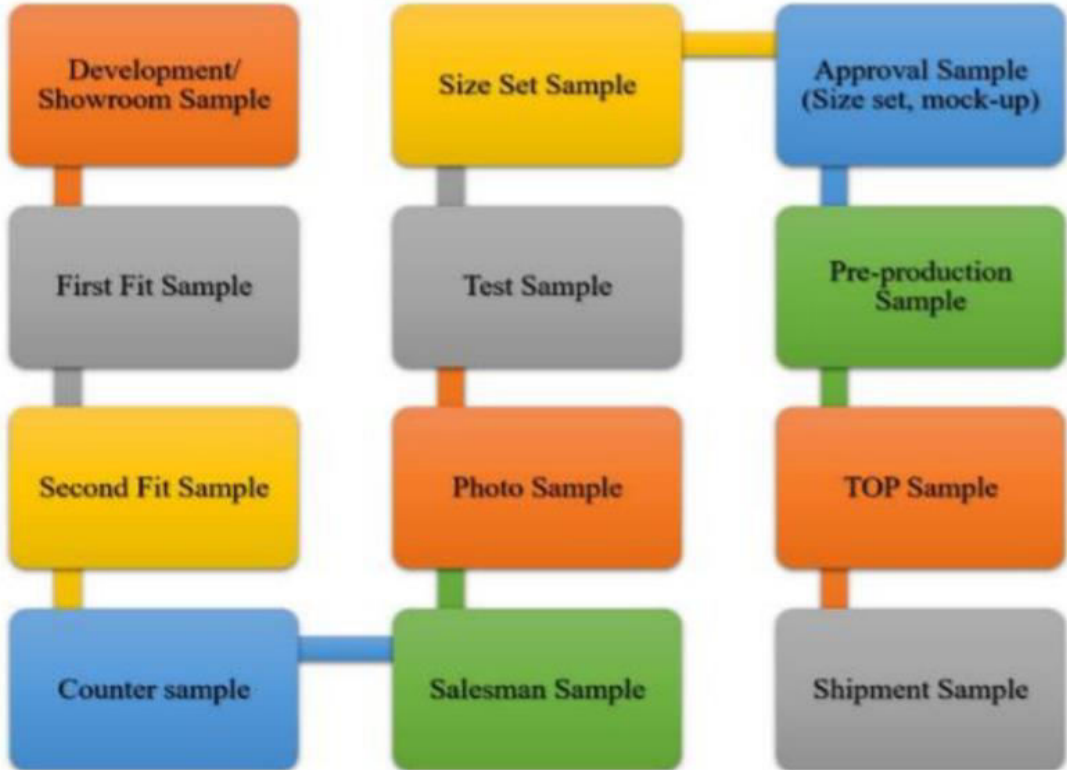


Fig 2.6: Order of Sampling

## 2.7. Definition of Technical Package:

A tech pack is typically created by the designer or product development team and serves as a communication tool between the manufacturer and the designer. It ensures that the manufacturer has all the information necessary to produce the garment according to the designer's specifications, and helps to minimize errors and misunderstandings during the production process.

A typical tech pack for a garment might include a detailed sketch or rendering of the garment, along with measurements and material specifications for each component of the garment. It may also include information about the stitching and construction techniques to be used, as well as any branding or labeling requirements. Overall, the tech pack serves as a comprehensive guide for the manufacturer, helping to ensure that the final product meets the designer's vision and quality standards.

## 2.8 Uses of A Technical Package:

Here are the uses of a technical package in the textile industry:

- **Standardizing Production:** A technical package helps standardize the production process in the textile industry by providing clear and concise instructions for each step of the production process. It ensures that each product is manufactured to the same specifications, regardless of who is producing it.
- **Facilitating Communication:** A technical package serves as a communication tool between designers, manufacturers, and suppliers in the textile industry. It provides a clear and concise set of instructions and specifications for each product, ensuring that everyone involved in the production process has a common understanding of the requirements.
- **Reducing Errors and Waste:** A technical package can help reduce errors and waste in the textile industry by providing detailed instructions for each step of the production process. This helps minimize the likelihood of mistakes and ensures that materials are used efficiently.
- **Enhancing Quality Control:** A technical package serves as a reference for quality control in the textile industry, allowing manufacturers to check that each product meets the required specifications and standards. This helps reduce the likelihood of defects or errors in the final product.
- **Increasing Efficiency:** A technical package can help increase efficiency in the textile industry by providing a detailed plan of action for each step of the production process. This helps reduce the time and resources required for sample making, prototyping, and final production.

Overall, a technical package is a valuable tool for ensuring consistency, efficiency, and quality in the textile industry. It helps streamline the production process, reduce waste, and ensure that each product is manufactured to the same high standards.

## CHAPTER-3: METHODOLOGY

### 3.1 Initiative:

A tech pack, short for "technical package", is a detailed set of instructions and specifications that provide all the necessary information to manufacture a product. It is commonly used in industries such as fashion, textile, and manufacturing, where products require precise specifications and details to ensure consistency, quality, and efficient production.

A tech pack typically includes information such as design sketches, measurements, materials, construction details, colorways, and labeling instructions. It serves as a communication tool between designers, manufacturers, and suppliers, ensuring that everyone involved in the production process has a clear understanding of the requirements for the product.

Creating a tech pack involves a collaborative effort between designers, pattern makers, and manufacturers, who work together to ensure that the product is designed and produced to the highest standards. It helps to minimize errors and misunderstandings, reduce waste, and ensure that the product is produced to the desired specifications and standards.

Overall, a tech pack is an essential tool for any industry that requires precise and detailed instructions for product manufacturing. It helps to streamline the production process, ensure consistency and quality, and reduce costs and waste, making it an invaluable resource for businesses looking to improve their manufacturing efficiency and product quality.

In essence, we have done our project with **KIABI** and **Carrefour**. Carrefour is a French multinational retail and wholesaling corporation headquartered in Massy, France. The logo of **Carrefour** and **KIABI** is given below:



### 3.2 Process Flow Chart of Design of a Technical Package:

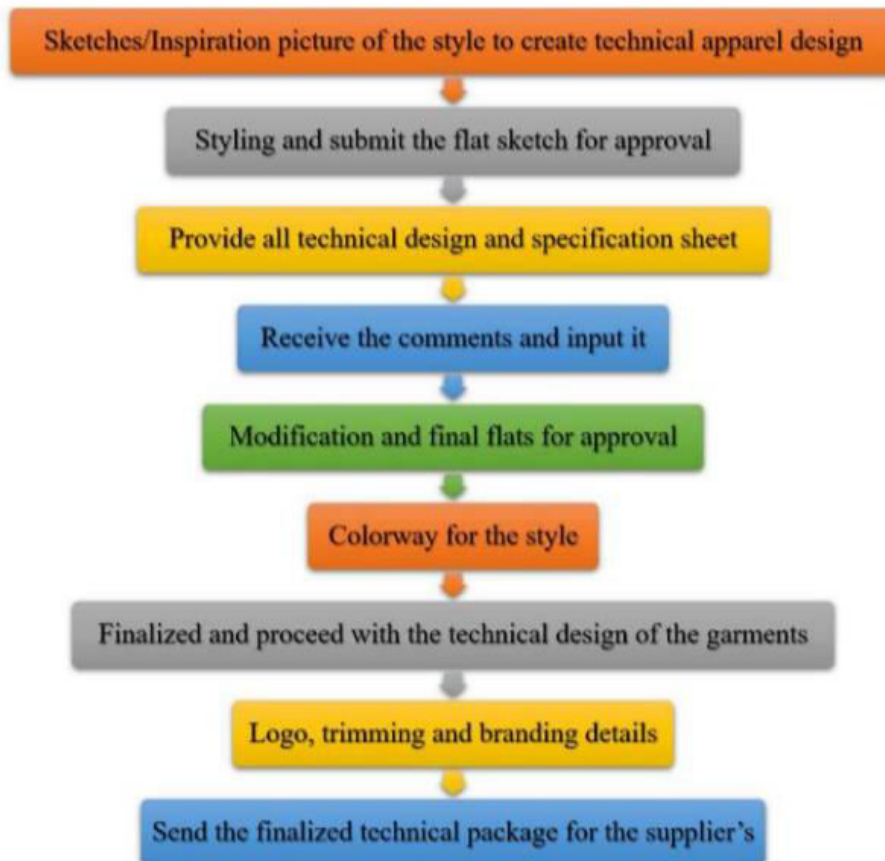



Fig-3.2: Process Flow Chart of Design of a Technical Package

You must first sketch a garment product with a specific style number before you can start building a technical package. Once the style with the sketch has been submitted, a special specification sheet or a Point of Measurement (POM) sheet will be made for that particular style if it has been accepted. The technical package was needed to include the Bill of Material (BOM), which provided information on the product's fabric specifications, trims, and accessories. After receiving comments on the specification and bill of materials sheet, keeping them to alter, approve the flats. The "PANTONE BOOK" will then be used as a benchmark to compare the colorway of the style to. Fill up the blanks in the following form using the information from the book.

### 3.3.1 Product Overview:

A product overview is a summary of a product's features and specifications. A good product overview should be concise, easy to understand, and highlight the key selling points of the product. In the first page of Carrefour's tech-pack given the style number of the Techpack which is 1233255. Besides this is a Mens item which we understand by mentioning "Product Folders Seasonal" code. The code is '64 Men'. The Carrefour uses some codes to determine items like they uses 62 code for Baby item, 63 uses for Ladies item , 64 uses for Mens item and 65 is uses for Home Furnishing item. Here 64 code is uses so this product is a Mens items. In this page the season is mentions which is Winter 2022. This product is made for winter season 2022. The name of the brand is "TEX". The fabric description is 100% Cotton and it have to be 160 GSM Single Jersey .The Buyer name is CABRERO Beatriz and Pattern maker MORATO SORIANO Cristina. The designer of the product is PEREZ FERNENDEZ Marco. The color of the product are WHITE1,BLACK1,GREY C and NAVY. In the first page two sketches are drawn which indicates the ribs constructions.Lastly we have know from this page this design is made by Gerber Technology and printed by Robot Global sourcing at 18<sup>th</sup> September 2021 at 3:44 AM.


I233255
Textile International

T-SHIRT SHORT SLEEVES ROUND NECK PLAIN

Product Folders Seasonal	64 Men	<b>Buyer</b>	CABRERO Beatriz	<b>Quality Manager</b>	IGLESIAS Virginia
<b>Season</b>	Winter 2022	<b>Pattern Maker</b>	MORATO SORIANO Cristina	<b>Technical Supervisor</b>	MORATO SORIANO Cristina
<b>Brand</b>	TEX	<b>Designer</b>	PEREZ FERNANDEZ Marco	<b>Finishing</b>	
<b>Generation</b>	V2 in progress	<b>Colors</b>	WHITE 1, BLACK 1, GREY C., NAVY		
<b>Fabric Description</b>	100% COTTON 160 GSM SINGLE JERSEY				

REF: 233255  
MEN DEPARTMENT

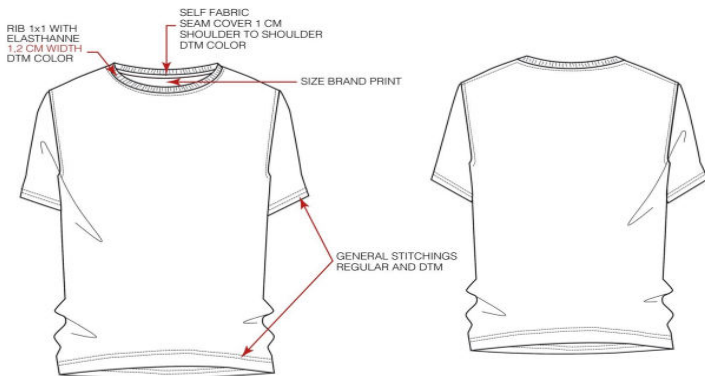
FRONT

4AW22

**Sourcing Office**  
NOT SELECTED

**Supplier**

**Supplier Address**



Labels in sketches:  
 RIB 1x1 WITH ELASTHANE 1.2 CM WIDTH DTM COLOR  
 SELF FABRIC SEAM COVER 1 CM SHOULDER TO SHOULDER DTM COLOR  
 SIZE BRAND PRINT  
 GENERAL STITCHINGS REGULAR AND DTM

Fig: 3.3.1 Product Overview of Carrefour

### 3.3.2 Product Overview Comparison:

Kiabi is one of the fast-growing French brands. Its slogan – "Fashion at low price" ("La mode à petits prix"). Kiabi revolutionised ready-to-wear clothing by inventing the first concept of affordable fashion for the whole family in France in 1978. Now an international fashion brand, Kiabi is present in 15 countries in worldwide. The Techpack of KIABI also more decorative like Carrefour. In this page the given information is mentioned , The TECHNICAL FILE name is : TRMW23TCOLO (ANE08) ,The Version is 1 and Page 1 / 6.The product is made for Season : HIVER 23 , The name of the Designer is CADET SYLVIE . Here the Market is mentioned as M STANDARD that means it is made for standard market. The Type of the product is T-SHIRT, Composition of the product is COTTON 100%. Collar rib will be 1\*1 and the T-shirt will be regular fit.

<b>KIABI</b>	TECHNICAL FILE : TRMW23TCOLO (ANE08)	GPM : CURPEN NATACHA	Version 1 - Page 1 / 6		
	Season : HIVER 23	Designer : CADET SYLVIE	22-12-2022 13:53		
Description : TS MC TROPIQUE FETES INTER THEMA MODE P6					
Technical description :					
Market : M STANDARD	Department : GRMEN	Class : MSTTSHIRSS	Category : ALL	Typology : STI	Type : T-SHIRT
Block Pattern : M-K-TS59					
Composition : Shell - All Colors : COTTON 100%					
<b>Sketch</b>					
FIT : REGULAR			FABRIC : JERSEY		

Fig: 3.3.2 Product Overview of KIABI

### 3.3.3 Artwork:

In the second page of Carrefour, we find Four artwork with colorwise. The first one is white color and the second one is Black then Grey and Navy respectively. For visual understanding of color these colored artwork has given here. To meet the color of the product according to buyer then note the given color name that mentioned in the artwork and then find out these required color from PANTONE BOOK. Besides other information is same as first page.



Fig: 3.3.3 Artwork of Carrefour

### 3.3.4 Artwork Comparison:

The artwork of the product is in the Third page in KIABI instead of second page like Carrefour. In Carrefour we found colorwise breakdown but in the Techpack of KIABI we don't find the artwork colorwise. In this picture it is clearly visible in shoulder sides reinforcement. In this artwork or product reinforcement is very important thing that's why it is clarified another two picture. In the other hand for Carrefour it is not mentioned how will be the shoulders reinforcement so it will be prepared as standard. For reinforcement additional fabric has to be used but in Carrefour it is not mandatory.



Fig: 3.3.4` Artwork of KIABI



### 3.3.5 Product making instruction by sketch:

The given artwork is in third page among seven page. Here rib making instruction is given which is 1\*1. Here neck binding will be shoulder to shoulder and the binding material have to be self-fabric that means same as body part fabric . The neck rib will be One or Two cm in width. Here Label instruction also given that is the Size label will be printed to the back neck. For Body hem and sleeve opening instruction is it will be general stitches and DTM. Here DTM means Dye to mate.

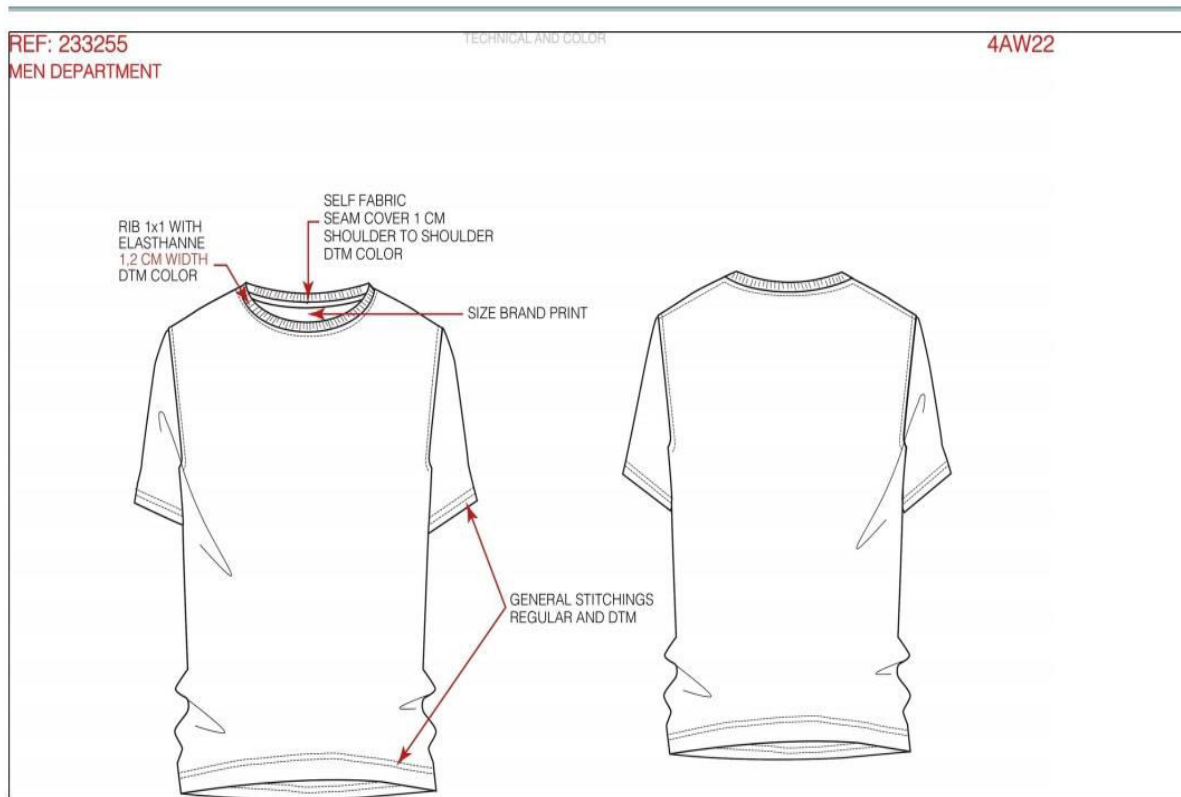


Fig-3.3.5: Carrefour sketch

### 3.3.6 Product making instruction by sketch Comparison:

The art work is KIABI's artwork and this is the second page among six page from the Techpack. Here some important information is given like stitch and neck binding. In the above Techpack that means Carrefour's Techpack we find body hemming and sleeve opening stitch as usual but in this Techpack hemming folding as well as sleeve opening folding is measured. In sleeve opening hemming and body hemming Two needle Flat lock machine have to be used then the two line stitch created. In this two line stitch 0.3 cm far from one stitch to another line stitch and from the end edge the first line 1.6 cm have to be far. In this T-shirt a Top stitch is given in the round area of neck rib. Besides neck hole finishing ,clean tape finishing as well as armhole/ under arm finishing instruction is clearly mentioned in the Techpack by sketching and real picture.

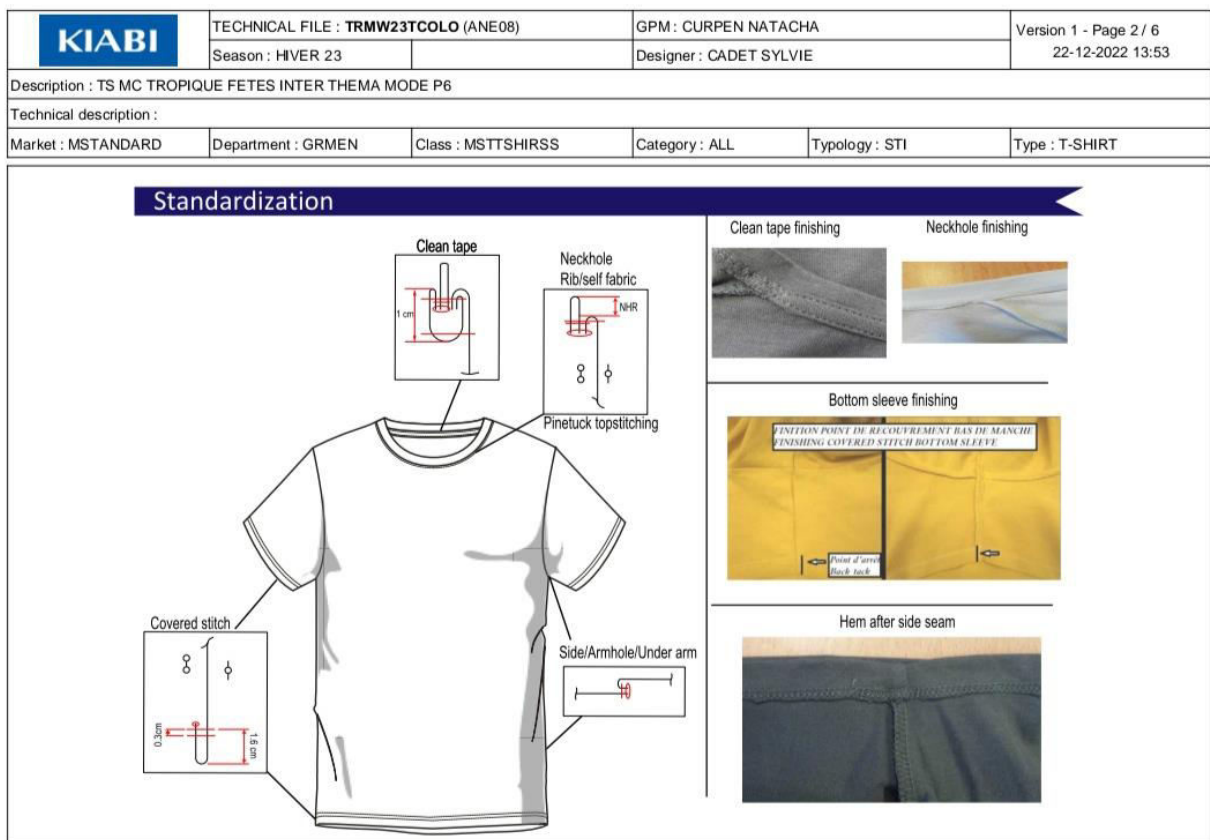


Fig-3.3.6: KIABI sketch

### 3.3.7 Measurement way:

In the Carrefour's Techpack there are two pictures given by indicating measurement point. One high point of shoulder to another is indicating by N2. P2 is the shoulder length. Sleeve length is noted by Q2. T2 indicates sleeve opening. Y2 indicates bottom hem of the T-shirt. By the point of H3 indicates length of the T-shirt which is from high point shoulder to bottom hem. The width of the T-shirt measured by half chest which indicates by W2. Lastly center back length is indicates by D3 in the second picture.

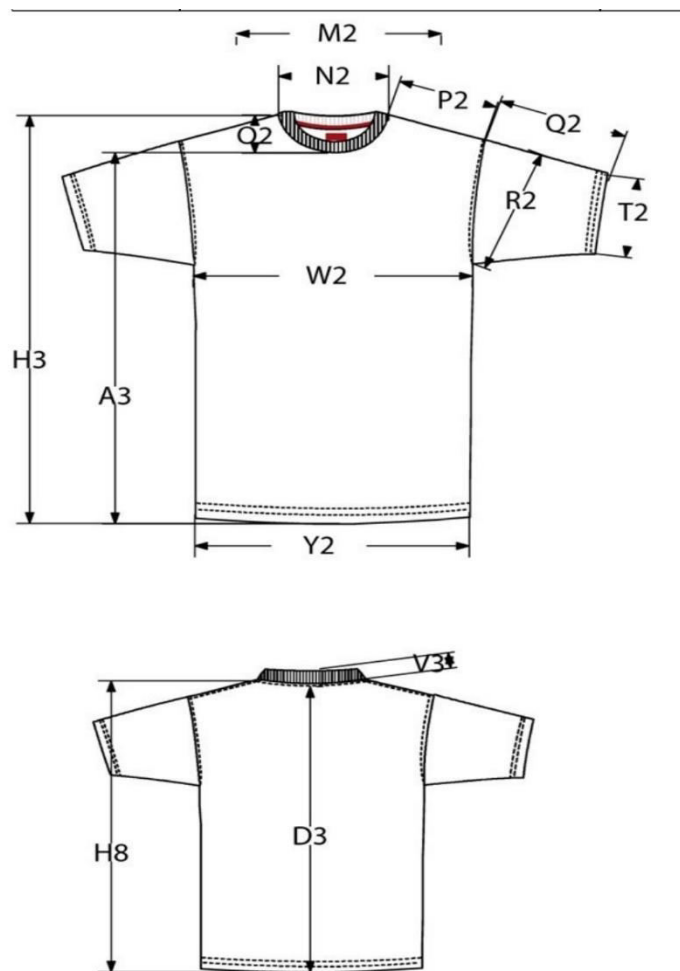


Fig-3.3.7 Measurement way by sketches in Carrefour

### 3.3.8 Measurement way Comparison:

In the KIABI's Techpack there are two picture are given by indicating measurement point. One high point of shoulder to another is indicating by ND but in Carrefour it indicates by N2. EA is the shoulder length where P2 was in Carrefour . Sleeve length is noted by SLS but in Carrefour it indicates by Q2 SWB indicates sleeve opening but in Carrefour it indicates by T2 .W indicates bottom hem of the T-shirt but in Carrefour it was indicates by Y2. By the point of HSB indicates length of the T-shirt which is from high point shoulder to bottom hem but in Carrefour it indicates by H3. The width of the T-shirt measured by half chest which indicates by CB in KIABI but in Carrefour it indicates by W2.

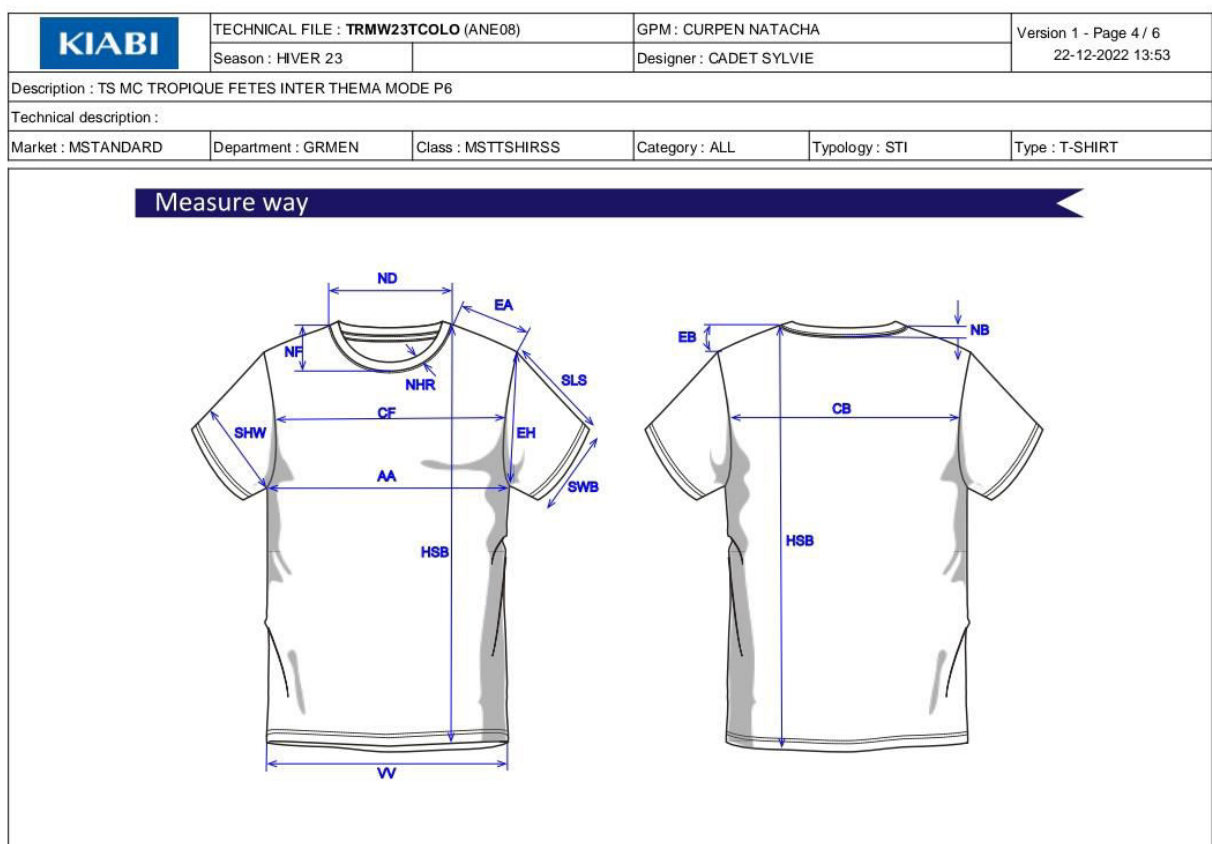


Fig-3.3.8 Measurement way by sketches in KIABI

### 3.3.9 Measurement Chart:

In the Techpack of Carrefour there are seven size which will be make and the sample size is “M” . The size range start from XS to XXXL . The sizes are XS, S, M, L,XL,XXL,XXXL. The tolerance level is mentioned in the chart .The measurement chart is given below:

POM	Description	C	+Tol	-Tol	1/XS	2/S	3/M	4/L	5XL	6/XXL	7/XXXL
N2	NECK WIDTH--STANDARD		0.50	-0.50	15.50	16.50	17.50	18.50	19.50	20.50	21.50
O2	NECK DROP--STANDARD		0.50	-0.50	9.50	10	10.50	11	11.50	12	12.50
V3	RIB COLLAR HEIGHT--STANDARD		0.50	-0.50	1.20	1.20	1.20	1.20	1.20	1.20	1.20
M2	MINIMUM NECK STRETCHED--STANDARD		0.50	-0.50	59	59	60	61	61	62	62
P2	SHOULDER SEAM LENGTH--EXTENSIBLE		0.50	-0.50	13	13.50	14.50	15	15.50	16.50	17
Q2	SLEEVE LENGTH--COURT		0.50	-0.50	20.50	21	21.50	22	22.50	23	23.50
R2	1/2 GIRTH TOP OF SLEEVE--GRADA 3		0.75	-0.50	19	20	21	22	23	24	25.50
T2	1/2 BOTTOM SLEEVE WIDTH--COURT		0.50	-0.50	15	16	17	18	19	20	21.50
W2	1/2 CHEST--GRADA 3		1	-1	46.50	49.50	52.50	55.50	58.50	61.50	64.50
Y2	1/2 BOTTOM--GRADA 3		1	-1	45.50	48.50	51.50	54.50	57.50	60.50	63.50
H3	FRONT LENGTH FROM SHOULDER		1	-1	68.50	70	71.50	73	74.50	76	77.50
A3	CENTER FRONT HEIGHT--STANDARD		1	-1	59	60	61	62	63	64	65
H8	BACK LENGTH FROM SHOULDER		1	-1	68.50	70	71.50	73	74.50	76	77.50
D3	CENTER BACK LENGTH--STANDARD		1	-1	67	68.50	70	71.50	73	74.50	76
	FITTING BLOCK: KNIT SRT		0	0	0	0	0	0	0	0	0

Fig: 3.3.9 Measurement Chart of Carrefour

### 3.3.10 Measurement Chart Comparison:

In the Techpack of KIABI there are five size which will be make but in Carrefour it was Seven sizes and the sample size is “M” in Carrefour the sample size also was M . The size range start from S to XXL . The sizes are S, M, L,XL,XXL. The tolerance level is mentioned in the chart like Carrefour.The measurement chart is given below:

<b>KIABI</b>		TECHNICAL FILE : TRMW23TCOLO (ANE08)		GPM : CURPEN NATACHA		Version 1 - Page 5 / 6				
		Season : HIVER 23		Designer : CADET SYLVIE		22-12-2022 13:53				
Description : TS MC TROPIQUE FETES INTER THEMA MODE P6										
Technical description :										
Market : MSTANDARD		Department : GRMEN		Class : MSTTSHIRSS		Category : ALL				
				Typology : STI		Type : T-SHIRT				
<b>Measurement chart &gt;&gt; T-SHIRT sans manches</b>										
Measure	Unit	Tol +	Tol -	S	M	L	XL	XXL	Comment	
HSB - Back from shoulder length	CM	X	1.0	1.0	72.0	74.0	76.0	78.0	80.0	
HSP - Front from shoulder length	CM	X	1.0	1.0	72.0	74.0	76.0	78.0	80.0	
AA - 1/2 Chest round-	CM	X	1.0	1.0	49.0	53.0	57.0	61.0	65.0	
VV - 1/2 Bottom round	CM		1.0	1.0	49.0	53.0	57.0	61.0	65.0	
EA - Shoulder length	CM		0.5	0.5	15.0	15.5	16.0	16.5	17.0	
EH - Armhole height	CM		0.5	0.5	21.0	22.0	23.0	24.0	25.0	
PDS - cut out position from shoulder	CM	X	0.0	0.0	23.0	24.0	25.0	26.0	27.0	
CF - Front breadth	CM	X	0.5	0.5	38.5	40.5	42.5	44.5	46.5	at 19 cm from top shoulder
CB - Back breadth	CM	X	0.5	0.5	40.5	42.5	44.5	46.5	48.5	at 18 cm from top shoulder
ND - Neck width	CM	X	0.5	0.5	18.0	18.5	19.0	19.5	20.0	
NF - Front neckhole depth	CM		0.5	0.5	8.5	9.0	9.5	10.0	10.5	Rounded neck
NB - Back neckhole depth	CM		0.0	0.0	2.5	2.5	2.5	2.5	2.5	
NHR - Neckhole height rib or binding	CM		0.0	0.0	2.0	2.0	2.0	2.0	2.0	
NH - Head passage	CM	X	1.0	1.0	30.0	30.0	30.0	30.0	30.0	
SLS - Sleeve length	CM	X	1.0	1.0	20.0	21.0	22.0	23.0	24.0	short sleeve

<b>KIABI</b>		TECHNICAL FILE : TRMW23TCOLO (ANE08)		GPM : CURPEN NATACHA		Version 1 - Page 6 / 6				
		Season : HIVER 23		Designer : CADET SYLVIE		22-12-2022 13:53				
Description : TS MC TROPIQUE FETES INTER THEMA MODE P6										
Technical description :										
Market : MSTANDARD		Department : GRMEN		Class : MSTTSHIRSS		Category : ALL				
				Typology : STI		Type : T-SHIRT				
<b>Measurement chart &gt;&gt; T-SHIRT sans manches</b>										
Measure	Unit	Tol +	Tol -	S	M	L	XL	XXL	Comment	
(short)										
SHW - 1/2 Upper sleeve width	CM		0.5	0.5	18.5	19.5	20.5	21.5	22.5	
SWB - 1/2 Bottom sleeve (short)	CM	X	0.5	0.5	16.5	17.5	18.5	19.5	20.5	short sleeve
EB - Shoulder incline degree	CM		0.1	0.1	22.0	22.0	22.0	22.0	22.0	

Fig: 3.3.10 Measurement Chart of KIABI

### 3.3.11 Care Instruction:

There are Five care instruction are given where the first one is washing label .By this label it indicates that this product should wash at 30 degree temperature . Second one is Bleaching symbol and by this symbol it is forbidden to do bleach.By the third symbol of Techpack it indicates to forbidden to do not trumble dry. Then Ironing care label is mentioned and the product should iron at medium temperature which will be 150 degree celcius. By the last label it indicates that the product can be clean by dry cleaning.

		I233255		Textile International	
		T-SHIRT SHORT SLEEVES ROUND NECK PLAIN		Care Product	
<b>Product Folders</b>	Seasonal 64 Men	<b>Buyer</b>	CABRERO Beatriz	<b>Quality Manager</b>	IGLESIAS Virginia
<b>Season</b>	Winter 2022	<b>Pattern Maker</b>	MORATO SORIANO Cristina	<b>Technical Supervisor</b>	MORATO SORIANO Cristina
<b>Brand</b>	TEX	<b>Designer</b>	PEREZ FERNANDEZ Marco	<b>Finishing</b>	
<b>Generation</b>	V2 in progress	<b>Colors</b>	WHITE 1, BLACK 1, GREY C., NAVY		
<b>Fabric Description</b>	100% COTTON 160 GSM SINGLE JERSEY				

<b>Washing</b> 30° delicate cycle	<b>Bleaching</b> Do not bleach.	<b>Dry</b> Do not tumble dry	<b>Ironing</b> 150°C (300 F) Medium	<b>Professional Care</b> Dry cleaning-Mid process P

<p>LAVIET REPASSER SUR ENVERS LAVAR Y PLANCHAR DEL REVES BRINNÖTTE RUTTEN WÄSSEN EN STRIJKEN LAVARE AL STRIKER A PROVEDO SE SPALAPE DOOS SE CALCA PE DOOS PRAC Z PRASOVANÍ PO LEVÉ STRONĚ WASH AND IRON INSIDE OUT</p> <p><b>Special mention</b> Wash and iron inside out</p>	<p>LAVIET AVEC COULEURS SIMILAIRES LAVAR CON COLORES SIMILARES WÄSSEN MET GELIJKKANDIGE KLEUREN LAVARE CON COLORI SIMILI COLORILE INCHISE SE SPALA SEPARAT PRAC Z PODOBNYMI KOLORAMI WASH WITH SIMILAR COLORS</p> <p><b>Special mention</b> Wash with similar colors</p>
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Fig-3.3.11 Care Instruction of Carrefour

### 3.3.12 Care Instruction comparison:

There are Five care instruction are given where the first one is washing label .By this label it indicates that this product should wash at 30 degree temperature and this instruction is fully same as Carrefour because we found same information from the techpack of Carrefour . Second one is Bleaching symbol and by this symbol it is forbidden to do bleach and this instruction is also same as Carrefour’s second symbol. By the third symbol of Techpack it indicates to forbidden to do not Bleaching , Bleaching is also forbidden to Carrefour’s Techpack. Then Ironing care label is mentioned and the product should iron at medium temperature which will be 150 degree celcius like Carrefour’s Techpack.

Care code >> T-SHIRT sans manches						
Colors	Washing	Bleaching	Drying		Ironing	Professional
			Machine	Natural		
All Colors						
Complementary instructions :						

Fig-3.3.11 Care Instruction of KIABI



## **CHAPTER- 4: DISCUSSION OF RESULTS**

### **4.1 Merchant's responsible after receiving Technical package:**

The merchant is largely accountable from the moment the tech pack is received until the moment the product is sent. The buyer's tech packets are initially delivered to the merchant. He then uses the tech packs to determine the kinds of items that ought to be created. That is, is it a knitted or woven item, and for men or women? the drawing. The tech pack examines style no., style name, product kind, product status, GSM, fabric content, rib content, color name, embroidery/print position, contrast, washing requirement, stitch arrangement, artworks, finishing requirement, trim content, label content, and other factors.

DPI, Style No., Style Description, Image, Contrast, Fabric Quality, Color, Fabric Booking Code, as well as a few buyer-recommended samples like Fabric Swatch and Thread/Embroidery/Print Mock Up.

Next, he ordered the fabric and accessories. The buyer also suggested using poly, stickers, hangtags, hangers, and other production-related items. In the interim, he obtains the L/C and shipment date from the buyer, and after doing so, he creates his TNA report. The pre-ordered fabric and accessories arrive after a few days, and he takes them to the sample room to create the ideal sample.

In the sample room, he starts by obtaining a development sample or an SRS sample. The customer receives them from him. Following approval, the retailer determines the cost of the goods and bargains with the customer about the price. When the costing is authorized, the sample room prepares the fit sample. The preparation of a second fit sample will take place if the buyer does not approve the fit. Each sample is used to establish a unique counter sample for the sample room and the merchant.

In the meantime, the seller constructs a mockup from the sample space and offers it to the customer. After that, the sample room produces a test sample for SGS to examine. Then they used the proper textiles to construct a prototype.

As a result, it is clear that a merchant is responsible for receiving the tech pack and delivering the product to the customer. And being trustworthy and on time is a merchant's key responsibility. That's all a merchant should do, and "Follow Up" is his most valuable Work.

## 4.2 Necessary of Technical Package for Merchant:

There are seven key benefits that convince buyers that using technological packages is essential when developing a fashion item.

1. Obtain samples that are free of errors:

The software will provide us instructions on how to put the sample together and what should be in our model maker or factory. The better, the more details. We shouldn't assume anything. Nothing should be left to chance. The possibility that our sample will match our original notion is increased by a complete and simple-to-understand technological bundle.

2. Obtain precise price quotes

The software package's increased thoroughness will enable your business to estimate how long and how much money the project will cost. To put it another way, your pricing estimate will be more accurate the smaller your tech kit is.

3. It ensures that your manufacturer is held accountable.

A reference contract for our technical package will be signed by us and our producer when our production begins. We may always consult the technical kit to figure out what went wrong and how to remedy it if, for instance, our plant starts up materials or trims and produces something that does not match our instructions.

4. It serves as a quality control reference point.

Our tech pack is the primary document used by our QA procedure. We'll compare the measurement points for each cycle of samples to the tolerances we've built into our engineering battery. If we go above our tolerance, our manufacturer must let us know what needs to be changed. The markings, design, materials, and other elements all have an impact.

5. It also keeps track of requests for changes.

No matter how reliable our tech pack is, it's likely that it will take several attempts to get our ideal sample. We will have to ask your maker for revisions during fit sample inspections. We need to keep track of both what has been completed and what has to be done. These adjustments must all be saved and kept in various tech package versions.

6. By employing it, we'll save time and money.

It takes time and effort to create an entire software kit. This is an investment that absolutely pays off given how much time, money, and hassles you save. Included are costs associated with development, waste from using the wrong samples, and logistics samples. The following methods can be used to avoid the issues at any point in the consumer producing process.

7. It makes working in teams easier.

our tech pack can be combined with a number of supply chain jobs. Working together to produce better products more quickly is achievable between designers, product producers, customers, and quality control planners in a collaborative setting or from a single report. A designer might not be completely aware, for instance.

### **4.3 Components of Technical Package:**

The specification sheet might be modified based on the comments received after the sample has been studied. Before the wardrobe is mass produced, feedback on the specification sheet is used to change the content, manufacturing, and specifics in the spec sheet. As a result, a spec sheet is a plan for a garment that includes all of the relevant elements, such as:

- Style no.
- Garment technical design or flat sketch
- Fabric specification
- Color specification
- Trim specification
- Artwork
- All Over Print in Body Fabric
- Print logo design & Placement
- Embroidery logo design & Placement

- Seam and stitch specification and placement
- 
- Label Specification
- 
- Folding & Packaging Specification
- 
- Testing methods
- 
- Point of measurement
- 
- Size Set Measurement sheet
- 
- Necessary technical data related to garment construction

In addition to the tech-pack buyer, the following things depend on purchaser and circumstances are provided:

- Sample of the garment developed by buyer for reference
- Scan copy of the printed fabric
- Trim sample
- Hard pattern
- Soft copy of pattern

## **4.4 Style Number of Technical Package:**

From the merchant's perspective, the Style No. is essential. The product's style number is unique and might be numeric or alpha-numeric. A product category or grouping that comprises the brand and the season is also indicated by the style number. One of the most prominent communication strategies in clothing merchandising is style no., which refers to the customer and sends it. The style no., season, year, year, color, and reference no. specify the precise style, season, year, year, and color. When sending emails or making phone calls, the fundamental significance of style no. is that the entire outfit is not expected to be explained every time. Only style number will satisfy the needs of both the buyer and the merchandiser.

The style number of Carrefour is '123255' and the style number of KIABI is 'TRMW23TCOLO (ANE08)'.

## **4.5 Fabric Specification:**

Fabric specifications provided by the production merchandiser are crucial. The buyer or the production seller may provide or suggest fabric parameters such as EPI, PPI, fiber content, mixing specifications, fabric design, GSM, and width with the support of the supplier and the sourcing department. If the buyer does not specify fabric size, the Merchandiser must respond to the buyer right away. The buyer will receive a light and shade card either independently or in conjunction with the light design software kit. The buyer can also scan the print structure according to the style and situation in addition to this information. A swatch of the fabric is available. The buyer will also specify how materials will be measured, such as speed and strength calculations. Now, in the section below, I'm going to show you some style.

## 4.6 Importance of a Technical Package:

Tech-pack is essential from the merchandiser's point of view because it is the key to processing orders without the help of a tech-pack merchant.

- Tech-pack provides instructions on how to create a particular style.
- The method is made more effective for both production and performance departments by Tech-Quality pack's Department guide for determining garment quality.
- The buyer is required to provide all manufacturing-related details, including stitch and seam specifications, clothing size and construction details, and graphic positioning. The innovation pack maker helps Tech-pack understand what the customer wants.
- Tech-pack is designed to solve a lot of problems before they happen.
- Since samples are produced in line with the tech-pack, the tech-pack will be used to assess the production capability.
- If information is not accurate or understandable in technical package, after that this leads to poor print or quality which directly affects buyer sales.
- Tech-pack includes processes, forms, authorization timetables, and obligations of the suppliers.
- Everyone along the fashion value chain will prosper if tech-pack is successfully utilised throughout.

## CHAPTER 5: CONCLUSION

The apparel sector competes with other industries through global trade. Globally, the industry is anticipated, estimated, and has produced a substantial quantity of income and employment. One of the industries in this sector that is in high demand right now is apparel manufacturing.

The technical package is one of the most crucial stages a company must take to properly create a product. Software packages are the most important and effective communication tool for textile manufacturers. Moving manufacturing is impossible without a tech pack. The buyer haggles over the software pack with the manufacturing merchant in order to get the desired outcome with the desired performance and aesthetics. A tech pack can be used to track the material's uniformity throughout the whole production cycle.

Tech-pack is the most crucial step in the export merchandising process. A detailed tech-pack is provided by the buyer, and the merchant is required to act on it. Tech-pack is a running style manual that offers all the essential guidelines. Moving forward is difficult without a tech-pack. If there is a question about the tech pack, the customer should be informed very away. The tech-pack, testing, production, design, fit, and measurement criteria will be carefully read by the merchandiser. It is advised that merchandisers understand tech-intricacies pack's and that tech-pack issues be clarified early in the ordering process.

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