



Faculty of Engineering
Department of Textile Engineering

REPORT ON
Different Types of Sewing Faults: A Study on Meghna
Knit Composite Ltd.

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

Advance in Apparel Manufacturing Technology

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LETTER OF APPROVAL

August 30, 2022

To

The Head

Department of Textile Engineering

Daffodil International University

Ashulia, Savar, Bangladesh

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

Dear Sir

I am just writing to let you know that this report titled as **“Different Types of Sewing Faults: A Study on Meghna Knit Composite Ltd.”** has been prepared by the student bearing ID 192-23-5680 and 193-23-5712 is completed for final evaluation. The whole report is prepared based on the factory data with required belongings. The students were directly involved in their industrial attachment 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 report and consider it for final evaluation.

Yours Sincerely



Md. Mominur Rahman

Assistant Professor

Department of Textile Engineering

Faculty of Engineering

Daffodil International University

DECLARATION

We hereby declare that the work which is being presented in this report entitled, “**Project (Thesis) Report**” is original work of our own, under the supervision of “**Md. Mominur Rahman**”. This report has not been presented for a degree of any other university and all the resource of materials uses for this thesis have been duly acknowledged.



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ABSTRACT

The core intention of this project is physical involvement in the Meghna Knit Composite Ltd. and work about “Different Types of Sewing Faults: A Study on Meghna Knit Composite Ltd.” Solving problems through practical knowledge acquisition. Progressing productivity is the major concern of apparel industries. There are many factors to increase productivity. The efficiency of workers, tactics, and sewing defects of production are interrelated to productivity. Entirely sewing faults are not possible to reduce, but it can improve to minimize the defects of productivity with the help of some technics. This paper considers the quality and productivity enhancement in a manufacturing process through practical study. An experimental investigation for the sewing faults are to collect sufficient data from industries. The outcome of this study is to find out the reasons, effects, and remedies for different types of sewing faults on Meghna Knit Composite Ltd.

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CHAPTER 01: INTRODUCTION

1.1 Background of the Study:

This thesis is perhaps very advantageous and beneficial to conduit between the theoretical wisdom and actual existence in the Textile Engineering route. This thesis file data has been collected through physical involvement and designed as such to have a realistic theoretical understand.

The thesis is important to all students, particularly for those students of clothing and fabric which allows them to recognize approximately the actual existing situation & how to solution. Through this purpose, a student can take the Thesis on the remaining degree of the B.Sc. The thesis is a part of the Bachelor's degree so this thesis has released a career with few realistic revels. This file is made to enjoy a requirement of each B.Sc. In this consideration, we published the thesis in Meghna knit Composite After finishing my B.Sc. In Textile Engineering route for one month length Thesis Period and we were recommended way of means of the honourable control to put up my realistic gaining knowledge of in writing from a special level. Being inspired means of this positive idea, we decide to do work with sewing fault as a thesis topic in Meghna knit Composite Ltd.

1.2 Objectives of the study:

To the analysis of five sewing lines in a weak on Meghna Knit Composite Ltd., we know about,

- Various types of sewing faults.
- Several types of operation faults.
- Total check garments and total Pass garments.
- Total defect Qty, alter, reject.
- Calculate DHU%

1.3 Limitations:

During the study, we faced the following limitation,

- Collected in the form of bunches of all the data due to some restrictions of timing.
- Not everything could be done as the swing floor is busy.
- Lack of some workers & staff cooperation.
- Pressure of workload.

CHAPTER 02: LITERATURE REVIEW

In the textile and Apparel Industry, sewing is one of the major & last processes that after that, we transmitted the buyer's required goods to the buyer hence this process is the ultimate process where we strictly maintain the quality of the goods, as well as timely delivery to the customers. So, it is important that all defects have to be avoided during sewing any apparel. In this documentary, various faults that can take place during sewing along with Who's mainly responsible for the garment's fault, the Operator or the Machine with different remedies or methods to solve defects discuss & some factor that depends on sewing faults.

2.1 Mainly 3 main reasons behind sewing defects:

- 1) Operator handling problem.
- 2) Machine problem.
- 3) Fabric damage along the seam line.

2.2 Some factor that depends on sewing:

1. Machine.
2. Needle.
3. Sewing thread.

2.3 Sewing Machine & their specifications:

A sewing machine is a mechanical or electromechanical machine equipped with a needle threaded at the point-end, which holes the cloth periodically as it moves under the needle.

Each stitch is created as the thread loops onto itself (chain stitch) it's done in flat lock m/c where the use of 3 needle thread & 1 looper thread is used.

On the other hand, locks are done by overlock m/c number needle thread can be 2,3,4 & looper thread is 2.

Kansai m/c multi-needle double chain stitch machines. This machine adopted a vertical movement looper system. Also, there is a variety of gauges, which are selectable according to the operation. This machine is for multi-purpose such as attaching the elastic, attaching waistband, stitch belt loop making.

The feed of the arm (double chain stitch m/c) 2,3 needle thread & 2 looper thread and join back neck tip join, in seam top stitch etc.

Plain m/c needle number is 1 & bobbin case is 1 join placket, pocket

leg opening ham etc.

Sewing machines are utilized in both the home and industry, yet are planned contrastingly for each setting.

2.4 Needle:

The needle is a mainly metallic body substance which very sharp as well as it is very durable but when it is broken it causes great damage. For knit fabric use a ballpoint needle for woven fabric uses a sharp point needle. These needles, have rounded points and slip between loops of knit fabrics rather than piercing the fabric, which leads to fabric damage or skipped stitches. Because these are made specifically for sewing on knits, choose a ballpoint needle when knowing the fabric is a knit. Because of the sharp point, they can pierce the fabric cleanly with minimal resistance. Choose this type of needle for tightly woven natural fabrics like silk or for very heavyweight woven.

2.5 Sewing Thread:

Sewing threads are special types of yarns that are manufactured and designed to pass through a sewing machine easily. They form efficient stitches without breakages or becoming distorted during the useful life of the product. The main function of a thread is to deliver aesthetics and performance in stitches and seams. Shell fabric and sewing thread should be of the same composition so that shrinkage and other types of faults can't occur.

2.6 Non-Sewing Defect:

Deformities may happen in the Clothing industry created on a mass scale. The deformities are noticed underneath:

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

2.7 Problems of sewing section:

1. Needle cut
2. Wrong position of heat seal.
3. Overlap.
4. Pleat.
5. Needle mark.
6. Loose thread.
7. Uneven stitch.
8. Skip stitch.
9. Broken stitch.

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10. Bar tack up down.
11. Hole.
12. Slanted.
13. Uneven shape.
14. Twisting.
15. Seam puckering.
16. Oil spot.
17. Contamination.
18. Uncut thread.
19. Loose stitch.
20. Dust spot.



Fig: 2.1 Different types of sewing defects

2.8 Defect type:

Mainly 3 types: -1. Major.

2.Minor.

3.Critical.

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- Defects which reduce the durability of the product, reduce the possibility of selling the product and return the product after the purchase are called major defects.
- Defects that affect the external appearance, which can reduce the price of the product or even lead to the return of the purchased product are called minor defects.
- Defects which are unacceptable, injurious to health and violate the quality control process are called critical defects.

In the major, minor & critical meantime major minor is recovered in the sewing section reason those defects can possibly recover open seam, needle cut, and pleat, uncut thread, uneven stitch, etc. Processes altering, re-sewing & following another process to recover. But critical defects are those which don't recover like holes, needle marks, Tie dye uneven design, etc.

1) Needle cut:

Wrong needle selection & use of the faulty needle are mainly accountable for the needle cut, sometimes causes by sharp things.



Fig: 2.2 Needle cut

Remedies:

- 1) Must have to be Installed correct size needle immediately.
- 2) The operator immediately changes the needle after knowing about the needle problem.
- 3) When using sharp things use Carefully.

2) Wrong position of heat seal:

Improper handling of heat seal Operator, lack of concentration on work is the main reason of that.



Fig: 2.3 Wrong position of heat seal

Remedies:

- 1) Do proper handling of heat seal Operator & checked by QC.
- 2) Operator counselling for proper concentration on the workplace.
- 3) Provide a proper working environment.

3) Overlap:

Overlap is the defect where a stitch goes through the other stitch part which is called overlap. It's done by improper handling & sometimes lack of concentration.



Fig: 2.4 Overlap

Remedies:

- 1) Do proper handling of the machine.
- 2) lack of concentration.
- 3) It's a kind of a waste of thread It cannot be allowed.

4) Pleat:

Pleat is a fault where an operator when working under pressure due to lack of attention it can occur.



Fig: 2.5 Pleat

Remedies:

- 1) Operators have to be given optimum pressure that they can handle.
- 2) Has to be given proper attention in the workplace.
- 3) A proper working environment has to be given.

5) Needle mark:

After sewing in the wrong place, the sewing mark exists in the garments which are needle marks.



Fig: 2.6 Needle mark

Remedies:

- 1) Pay attention to work during working hours.
- 2) It is a critical defect be careful & Work on it so it doesn't recur.
- 3) When getting these types of defects QC to keep its eyes open and avoid repetition.

6) Loose thread:

After sewing garments, there is some loose thread in the garments which has to be cut some thread is cut by a machine and some are cut by self.



Fig: 2.7 Loose thread

Remedies:

- 1) Cut as much loose thread as possible after sewing a garment.
- 2) It's a minor problem but the number of this type of problem is more on the sewing floor so surveillance should be increased.
- 3) Care should be taken while cutting the sewing thread so that it does not create any other effects & faults

7) Uneven stitch:

Uneven stitch occurs of operator bad handling in Machine or may possible to machine problem like the throat plate is the metal plate beneath a sewing machine's needle and presser foot. It is typically held in place with one or more screws. The throat plate screw doesn't lock properly for the throat plate can be displaced & presser foot is also caused by the same.



Fig: 2.8 Uneven stitch

Remedies:

- 1) Operator handling should be proper or the achieving target there will be disruption.
- 2) The machine should be maintained properly.
- 3) After maintaining the machine throat plate screw should lock properly the presser foot is also caused by the same.

8) Skip stitch:

Skip stitch is a type of machine problem when a needle & bobbin action shouldn't proper means missing the place stitch is called skip stitch.



Fig: 2.9 Skip stitch

Remedies:

- 1) After sewing, garments check properly if any kind of skip has happened.
- 2) Bobbin and needle reattachment.

9) Broken stitch:

Lack of skilled workers, improper setting, the timing between needle and loop or hook, used lower quality thread mainly reason of that.



Fig: 2.10 Broken stitch

Remedies:

- 1) Used higher quality thread.
- 2) The proper unwinding of thread from the package.

10) Bar tack up down:

Operator handling means not a proper position of garments and lack of attention is the main reason here.



Fig: 2.11 Bar tack up down

Remedies:

- 1) Proper position of garments in the Bar tack machine ensures & proper attention.

11) Hole:

The broken needle is the main reason here, it is a critical defect so not possible to recover.



Fig: 2.12 Hole

Remedies:

- 1) A broken needle should be checked.

12) Slanted:

Here label position is little bit curved is called slanted.



Fig: 2.13 Slanted

Remedies:

- 1) Improper handling & lack of concentration are mainly responsible for here.

13) Uneven shape:

If the measurement is more or less this problem will occur. Improper handling is mainly responsible for that.



Fig: 2.14 Uneven shape

Remedies:

- 1) Measurement should be accurate.
- 2) It is a critical defect, sometimes it's possible to recover sometimes not, measurement should be perfect.

14) Twisting:

In a garment Back, the Part, and the front part will be the same line if it doesn't it is called Twisting.



Fig: 2.15 Twisting

Remedies:

- 1) A garment's back and front measurements should be accurate.
- 2) The machine operator should be more concerned about measurement & handling.

15) Seam puckering:

The reason behind seam puckering is the improper handling of the machine operator & machine thread tension is mainly responsible, sometimes it depends on fabric construction.\



Fig: 2.16 Seam puckering

Remedies:

- 1) Use less tension to the thread.
- 2) Fabric & sewing thread shrinkage percentages should be equal.
- 3) The improved feed mechanism of the sewing machine.

16) Oil spot:

Here machines are mainly responsible for oil spots.



Fig: 2.17 Oil spot

Remedies:

- 1) Keep the machine clean.
- 2) If the stain sticks remove it with oil remover.
- 3) And be careful about oil stain.

17) Contamination:

Foreign fibre dust and dirt accumulate in layers of a garment is called Contamination.



Fig: 2.18 Contamination

Remedies:

- 1) At the QC table always, a person there to remove the contamination of the garments.

18) Uncut thread:

- 1) After Sewing garments there is always inside and outside thread visible, these are uncut thread. The uncut thread mostly gets the swing floor.



Fig: 2.19 Uncut thread

Remedies:

- 1) The operator has to remember to cut those threads.

19. Loose stitch:

Mainly the machine is responsible for that, low tension of the thread that occurs in loose stitch.



Fig: 2.20 Loose stitch

Remedies:

- 1) Proper tension of thread.
- 2) Check the machine and maintenance the machine regularly.

20) Dust spot:

This spot comes from the machine, operators, & sewing floor.



Fig: 2.21 Dust spot

Remedies:

- 1) Machine, operators, & sewing floor should be clean as much as possible.
- 2) Use spot remover for disappear the spot.

CHAPTER 03: EXPERIMENTAL DETAILS

We have studied around five types of garments where first is Hoodie, Full sleeve t-shirt, t-shirt, Max regular polo, Men's trouser. Where some are 100% cotton some are 95 % cotton, and 5 % Lycra knit & some are polyester mixed.

Sewing thread: Sewing thread applied 100% cotton spun yarn.

For data analysis must have to know about DHU%,

$$\text{DHU\%} = \frac{\text{Total defects} \times 100}{\text{Total inspection}}$$

3.1 In Line Operations Line A

3.1.1 Order Details:

Buyer Name: TESCO

Style No: 226401

Colour: GREY

Item: Hoodie

Fabrication: Terry

GSM: 340



Fig 3.1.1: Hoodie

3.1.2 One Week Audit Report:

Buyer: TESCO		Style No: 236401		AVE DHU:- 6.73%			
Floor: 5-1		Line No:06		Colour: GREY			
A) Skip Stitch B) Broken Stitch C) Contamination D) Down stitch E) Uneven Stitch F) Skipped G) Pleat H) High-low I) Incomplete Tack J) Join stitch K) Print Problem L) Label W/S M) Over Lap N) Needle Cut O) Uncut Thread P) Puckering Q) Out of shape R) Raw edge S) Size Mistake T) Twisting U) Updown V) Fabric Hole/Reject W) Without label X) Stain, Oil, Dirty mark Y) Yarn Missing Z) Label Missing AA) Poor Shape AB) Embroidery problem AC) Single AD) Iron Problem AE) Loss stitch AF) Position Wrong AG) Reverse AH) Heat seal problem AI) Shading AJ) Yarn Missing							
Operation	Week						Total Defects
	1st day	2nd day	3rd day	4th day	5th day	6th	
Shoulder joint		A-111 D-1111	M-111		M-11 A-11 D-111		23
Hood T/S	O-11 A D-10-11	M-1111 N-1111	O-1111	M-11	O-1111	O-111	26
Back Tip	D-11 D-1 E-11 E-11 D-11 E-11 D-11	E-11111	E-11111	E-111 AA-11111	E1111		33
Arm hole		O-111		AE-11111	AE-11	O-11111	15
Bottom T/S		AC-11		V-111	V-1		6
Cuff T/S			O-111	H-1111	H-1	O-11	10
Zipper T/S	A-11 A-1 O-1 U-1 U-1 A-1	O-11 U-111 AE-11	O-1111 U-1111 AE-11	AE-111			31
Pocket	U-1 U-11		H-11 V-11		U-11	V-1	10
Label joint	F-11 F-11	F-111		F-11 F-11	F-111	F-11	16
Side seam				F-11111	F-11	F-11111	12
F&B Part	U-11-111 U-11-11-11	U-1 V-11		U-11-111 U-111	U-111	U-111	22
Loose Thread				7	9	8	24
Uncut thread	8	9	15	8	7	7	54
Alter	17	12	10	8	7		54
Oil/ Dirty	8	3		3	2	2	18
Iron problem	3	5				9	17
Reject		2	2	3	1	1	9
Total check Gmts	415	433	428	445	442	439	2602
Total pass Gmts	387	412	405	427	422	419	2472
Total Defective Gmts	28	21	23	18	20	20	130
Total Defect Qty	36	31	27	29	26	27	167
DHU%	8.67	7.16%	6%	6.52%	5.88	6.35	6.73%

Fig 3.1.2: One Week Audit Report Line A

3.2 In Line Operations Line-B

3.2.1 Order Details:

Buyer Name: H&M

Style No: Kunt Thermolite T-shirt

Colour: GREY

Item: Full sleeve T-shirt

Fabrication: Single jersey

GSM: 160



Fig 3.2.1: Full sleeve t-shirt

3.2.2 One Week Audit Report:

Regr: H&M		Style No: Knit ThermoFit		AVE DHJ-6.61	
Floor: S-1		Line No: 07		Colour: GREY	
A) Skip Stitch G) Pleat M) Overlap S) Size Mistake V) Yarn Missing A8) Lost stitch B) Broken Stitch H) High-low N) Needle Cut T) Twisting Z) Label Missing A9) Position Wrong C) Contamination I) Incomplete Tack O) Uncut Thread U) Updown AA) Poor Shape AG) Reverse D) Down stitch J) Jo in stitch P) Puckering V) Fabric Hole/Reject AB) Embroidery pr E) Uneven Stitch K) Print Problem Q) Out of shape W) Without Label AC) Single AH) Heat seal problem F) Skirted L) Label W/S R) Raw edge X) Stain/Oil/Dirty mark AJ) Shading AD) Iron Problem AI) Yarn Missing					

Fig 3.2.2: One Week Audit Report Line B

3.3 In Line Operations Line-C

3.3.1 Order Details:

Buyer Name: H&M

Style No: RONNY T-shirt

Colour: Blue

Item: T-shirt

Fabrication: S/J

GSM: 160



Fig 3.3.1: T-Shirt

3.3.2 One Week Audit Report:

Buyer: H&M		Style No: RON NY T-shirt		AVE DHU-7.11	
Fabric: S-1		Line No:03		Colour: BLUE	
A) Skip Stitch G) Pleat M) Over Lap S) Size Mistake Y) Yarn Missing AB) Loss stitch					
B) Broken Stitch H)High-low N) Needle Cut T) Twisting Z) Label Missing AF)Position Wrong					
C) Contamination I) Incomplete Tack O) Uncut Thread U) Updown AA) Poor Shape AG) Reverse					
D) Down stitch J) Join stitch P) Puckering V) Fabric Hole/Reject AB) Embroidery problem					
E) Uneven Stitch K) Print Problem Q) Out of shape W) Without label AC) Single AH)Heat seal problem					
F) Skipped L) Label W/S R) Raw edge X) Stain/Dil/Dirty mark AI) Shading					
AD) Iron Problem AJ) Yarn Missing					

Operation	Week						Total Defects
	1st day	2nd day	3rd day	4th day	5TH day	6th day	
Shoulder joint			Q-11111 C-11111 A-11111			Q-111 C-111 A-1111	25
Neck Rib	O-1 AL-111	O-1111 AL-11111	O-111111 AL-111111	O-111 AL-111111	O-11111 AL-111	AL-11111111111111	46
Sill joint	O-1 G-111111111	O-111 G-111 C-111	O-111111 G-1111111 C-111111	O-111111	C-11111 G-1111111		58
Side seam	O-1 U-1111111111	O-11111 O-11 U-11111	O-111111	U-1111111111	O-1111111	O-1111111	53
Back tie		O-11111 O-11 F-1111111	F-1111111	O-11111 F-1111111		F-11111	37
S.L Vhem	AO-111	AO-11111 AC-111111	AO-11111 AC-111111	AO-111 AC-111111			35
L.B.L.T/S	B-11	B-1111	B-111111		B-111111	B-11111	25
Iron problem	33	29	26	25	22	14	124
Loose thread		21	23	20	26	35	125
Uncut thread	20	17	22	19	32	27	137
Alter	45	33	34	37	35		184
Oil spot	34	28				12	74
Reject	8		16	17		20	61
Total Check Gmts	1757	1700	1712	1668	1707	1729	10008
Total pass Gmts	1621	1586	1586	1569	1600	1633	9615
Total Defective Gmts	134	104	116	104	107	96	661
Total Defect Qty	142	128	121	116	115	108	730
DHUN	8.19	7.53	7.1	6.83	6.74	6.25	7.11

Fig 3.3.2: One Week Audit Report Line C

3.6 In Line Operations D

3.4.1 Order Details:

Buyer Name: H&M

Style No: Max Regular

Colour: NAVY MIX

Item: Max Regular

Fabrication: Heavy Jersey

GSM: 240



Fig 3.4.1: Max Regular

3.4.2 One Week Audit Report:

Buyer: H&M		Style No: Mm Regular		AVE DHU- 10, 36%	
Floor: S-1		Line No: 01		Colour: NAVY MIX	
A) Skip Stitch G) Pleat M) Over Lap S) Size Mistake Y) Yarn Missing AE) Loss stitch					
B) Broken Stitch H) High-low N) Needle Cut T) Twisting Z) Label Missing AF) Position Wrong					
C) Contamination I) Incomplete Tack O) Uncut Thread U) Updown AA) Poor Shape AG) Reverse					
D) Down stitch J) Join stitch P) Puckering V) Fabric Hole/Reject AB) Embroidery problem					
E) Uneven Stitch K) Print Problem Q) Out of shape W) Without Label AC) Single AH) Heat seal problem					
F) Skipped L) Label W/S R) Raw edge X) Stain, Oil, Dirty mark AI) Shading					
AD) Iron Problem AJ) Yarn Missing					

Operation	Week						Total Defects
	1st day	2nd day	3rd day	4th day	5TH day	6th day	
Shoulder joint	D-11	D-111A-1111C-11		C-111111		A-1111	21
Label T/S		A-1111111111	A-11111	A-111	A-1111111		25
Arm hole T/S	B-1C-11	B-1111C-11	C-111111				15
Shoulder	G-11	G-11111		E-11111	G-111111111	E-11	25
Placket		G-1111111	G-111			G-111	13
Cuff T/S		M-111111111	M-1111		M-11111		18
Body panel T/S	A-11	A-111		A-11111		A-111111	16
Side seam	AK-1111			T-111111	T-1111AK-1111		17
Side bend	A-11111AF-1	AF-1111111	AF-111AF-111			AF-11111	24
Body hem		AO-11111		AO-111111	AO-1111111111		21
F & B part	X-11111111111111		T-111111111				22
Iron problem	6	5	8		4	3	26
Alter	8	7	5	9	8	5	37
Uncut thread	6	6		13	7	13	45
Loose thread		8	14	10	11	16	59
oil/dirty	11	4			7	3	27
Reject			5	4			9
Total check Gmts	334	300	327	350	334	346	1994
Total pass Gmts	305	280	308	321	305	330	1854
Total Defective Gmts	29	20	24	29	29	26	140
Total Defect Qty	31	30	32	36	37	40	166
DHUK	9.43	10	9.79	10.29	11.06	11.46	1034

Fig 3.4.2: One Week Audit Report Line D

3.7 In Line Operations E

3.5.1 Order Details:

Buyer Name: M&S

Style No: 3377

Colour: D-Air fore

Item: Men's Trouser

Fabrication: Terry

GSM: 220



Fig 3.5.1: Men's Trouser

3.5.2 One Week Audit Report:

Buyer: MAS

Floor: S-1

Line No: 3A

Style No: 3377

AVE DHU- 10.34%

Colour: In-Air Force

A) Skip Stitch

B) Broken Stitch

C) Contamination

D) Down stitch

E) Uneven Stitch

F) Skirted

G) Pleat

H) High-low

I) Incomplete Tack

J) Join stitch

K) Print Problem

L) Label W/S

M) Over Lap

N) Needle Cut

O) Uncut Thread

P) Puckering

Q) Out of shape

R) Raw edge

S) Size Mistake

T) Twisting

U) Updown

V) Fabric Hole/Reject

W) Without Label

X) Stain,Oil, Dirty mark

Y) Yarn Missing

Z) Label Missing

AA) Poor Shape

AB) Embroidery problem

AC) Single

AD) Iron Problem

AE) Loss stitch

AF) Position Wrong

AG) Reverse

AH) Heat seal problem

AI) Shading

AJ) Yarn Missing

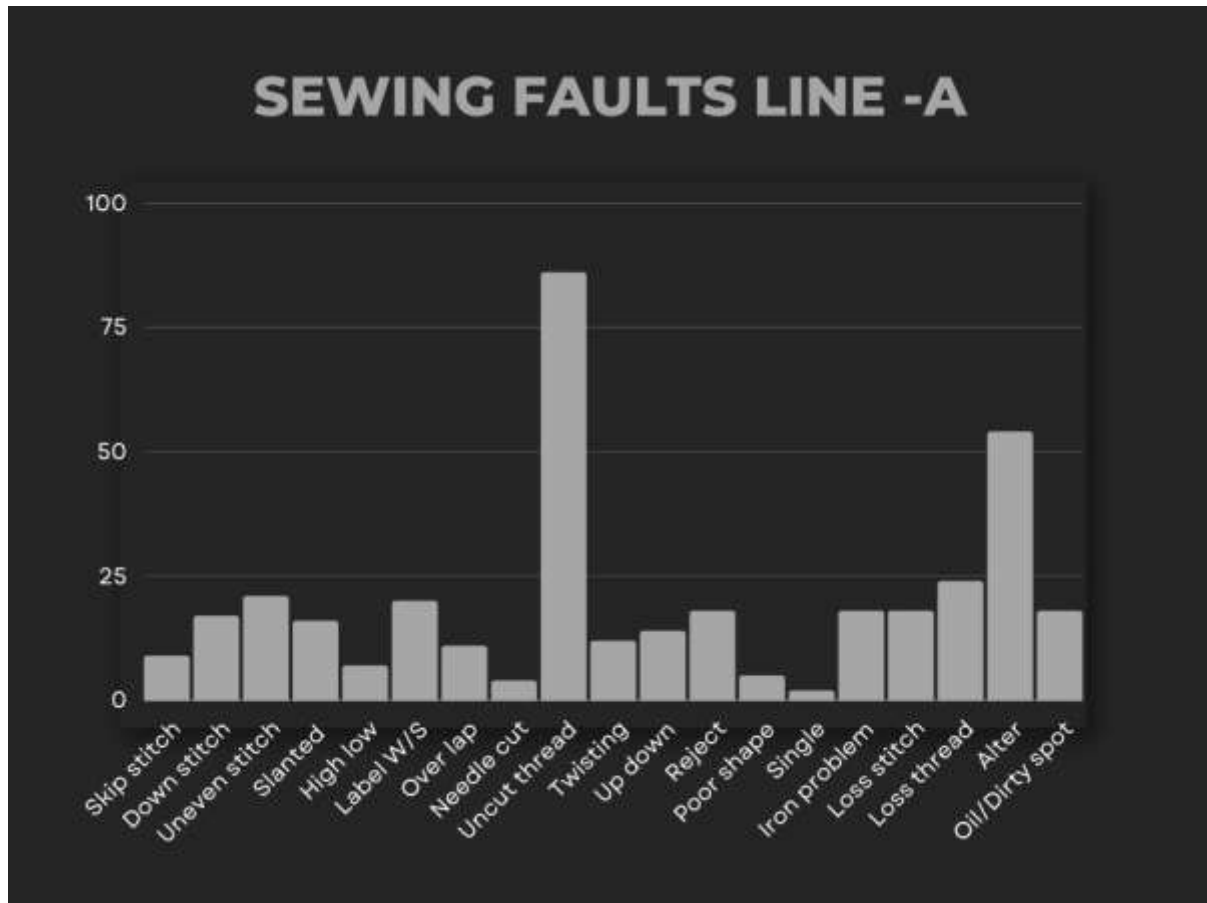
Operation	Week						Total Defects
	1st day	2nd day	3rd day	4th day	5TH day	6th day	
Waist T/S	AJ-1111 AD-1A-11	AJ-111111	AJ-1111	A-1111 D-11111		A-11 D-111	31
Label joint	G-1AJ-1	G-111	AJ-111111	AJ-11111			16
Leg hem T/S	AJ-11AK-1	AK-11111	AJ-1111111	AK-1111111	AJ-11111		27
In seam	AK-11		AK-111111		AK-1111111	AK-11111	21
Side seam	A-1	A-11		T-111		A-111111	12
Pocket joint	C-1 S-1 AJ-1 AF-1	C-111S-111			C-11S-1111AF-111	S-1111C-111	26
F & B part	T-1X-11111111 M-1111 A-11		A-111111		T-1111 X-1111111		32
Reject	V-1111	V-111		V-1111		V-111111	17
Dirty spot			7	6	1	2	12
Oil spot	8	7					18
Iron problem	4	5	3				12
Loose thread	6	5	12	13	14	12	50
Uncut thread	10	7	10	17	18	16	62
Alter	6	12					18
Total Check Gmts	462	450	455	480	423	420	2640
Total Pass Gmts	431	417	429	399	395	397	2468
Total Defective Gmts	31	33	26	31	28	23	172
Total Defect Qty	37	36	32	36	33	30	204
DHUN%	7.96	8	7.03	8.37	7.8	7.14	7.72

Fig 3.5.2: One Week Audit Report Line E

CHAPTER-04 RESULT & DISCUSSION

4.1 Analysis of In Line Operations Audit Report: (Line -A)

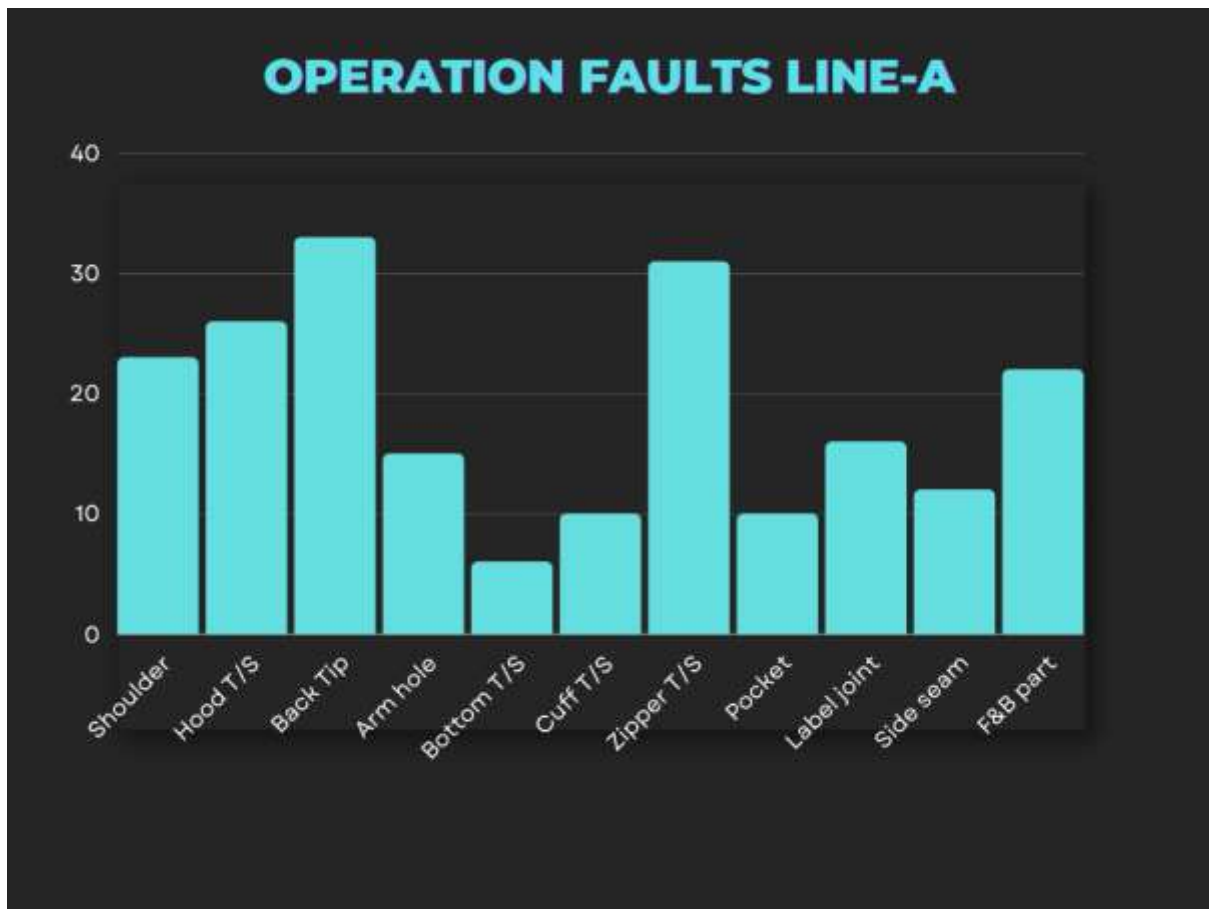
4.1.1 Sewing Faults:



Graph 01: Sewing Faults Line -A

Analysis of in “Line -A” has found uncut thread the number is 86 then Alter is 54, Loose thread 24, Uneven stitch 21, Label W/S 20, Iron problem Oil/Dirty spot Reject & loose stitch both 18, Down stitch is 17. Here Uncut thread, Alter, and Loose thread the top 3 mostly found faults Lack of concentration of the worker Quality escape the eye due to which such faults were more. Sewing faults are reduced here due to quality timely action and operator skill. Skip stitch, Slanted, Twisting, Up down found a moderate number Such problems could have been rectified if timely action had been taken.

4.1.2 Operation Faults:



Graph 02: Operation Faults Line A

4.1.3 Summary:

Total check garments	Total Pass garments	Total defect Qty	Alter	Reject	DHU%
2602	2472	167	54	9	6.73%

Table No 01: Summary Line A

4.2 Analysis of In Line Operations Audit Report: (Line-B)

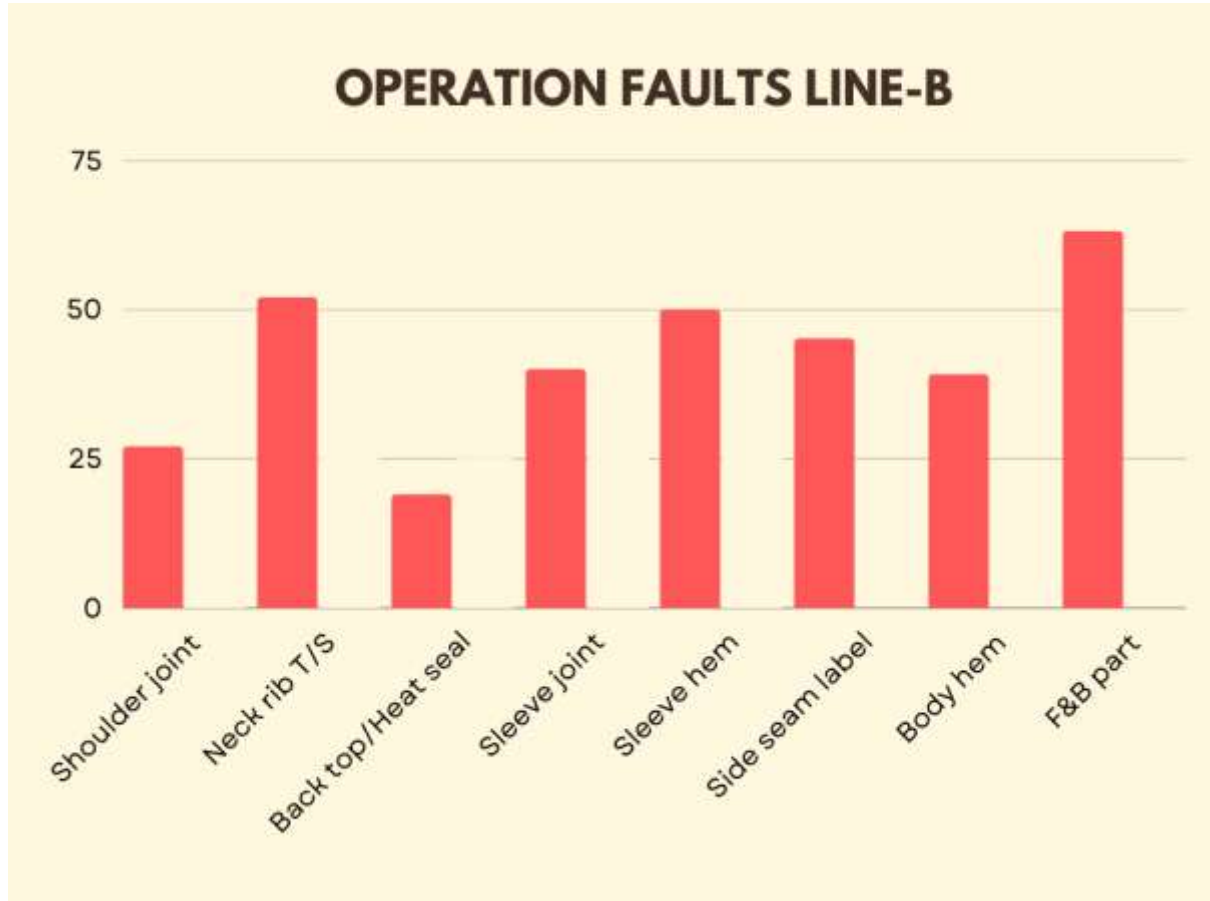
4.2.1 Sewing Faults:



Graph 03: Sewing Faults Line B

In this analysis report has found, oil/dirty spots 140, Alter is 78, Uncut thread the number is 72, Loose thread 73, Uneven stitch 28. For reduce oil and dirt sports worker must be clean their sewing machine properly.

4.2.2 Operation Faults:



Graph 04: Operation Faults Line B

4.2.3 Summary:

Total check garments	Total Pass garments	Total defect Qty	Alter	Reject	DHU%
6101	5784	402	78	58	6.61

Table No 02: Summary Line B

4.3 Analysis of In Line Operations Audit Report: (Line-C)

4.3.1 Sewing Faults:



Graph 05: Sewing Faults Line C

In this analysis report has found about types of faults are high in a week. Uncut thread the number is 176, Alter is 184, Loose thread 125, Uneven stitch 23, Iron problem Oil/Dirty spot 74. Uncut thread and loose thread are found in large number, here operator need to sincere their work and must be known about handling sewing machine.

4.3.2 Operation Faults:



Graph 06: Operation Faults Line C

4.3.3 Summary:

Total check garments	Total Pass garments	Total defect Qty	Alter	Reject	DHU%
10303	9615	730	184	61	7.11

Table No 03: Summary Line C

4.4 Analysis of In Line Operations Audit Report: (Line-D)

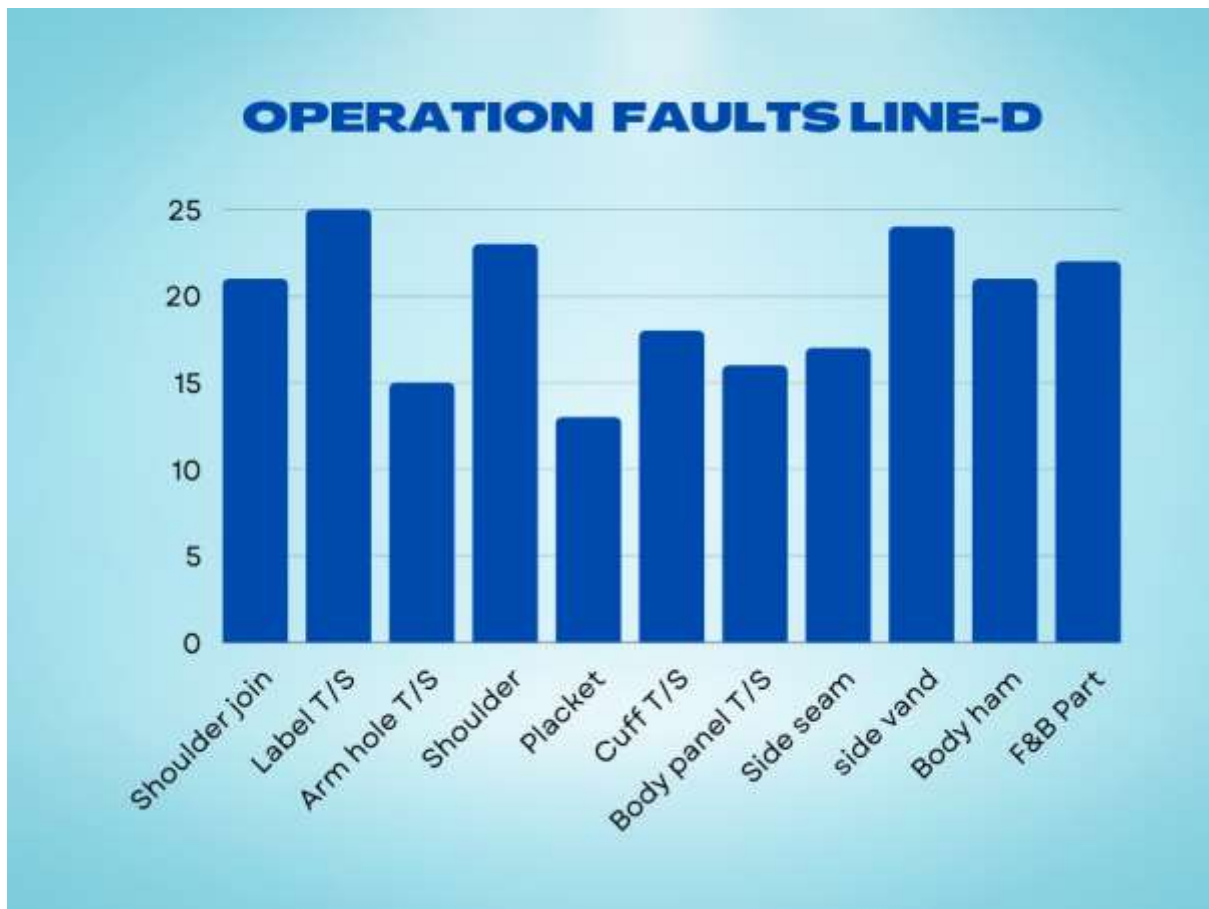
4.4.1 Sewing Faults:



Graph 07: Sewing Faults Line D

In this analysis report has found faults are high in a week. Skip stitch 64, Uncut thread the number is 45, Alter is 37, Loose thread 59, Uneven stitch 23, Iron problem Oil/Dirty spot 40. Sewing faults are reduced here due to quality timely action and operator skill.

4.4.2 Operation Faults:



Graph 08: Operation Faults Line D

4.4.3 Summary:

Total check garments	Total Pass garments	Total defect Qty	Alter	Reject	DHU%
1994	1834	206	37	9	10.34

Table No 04: Summary Line D

4.5 Analysis of In Line Operations Audit Report: (Line-E)

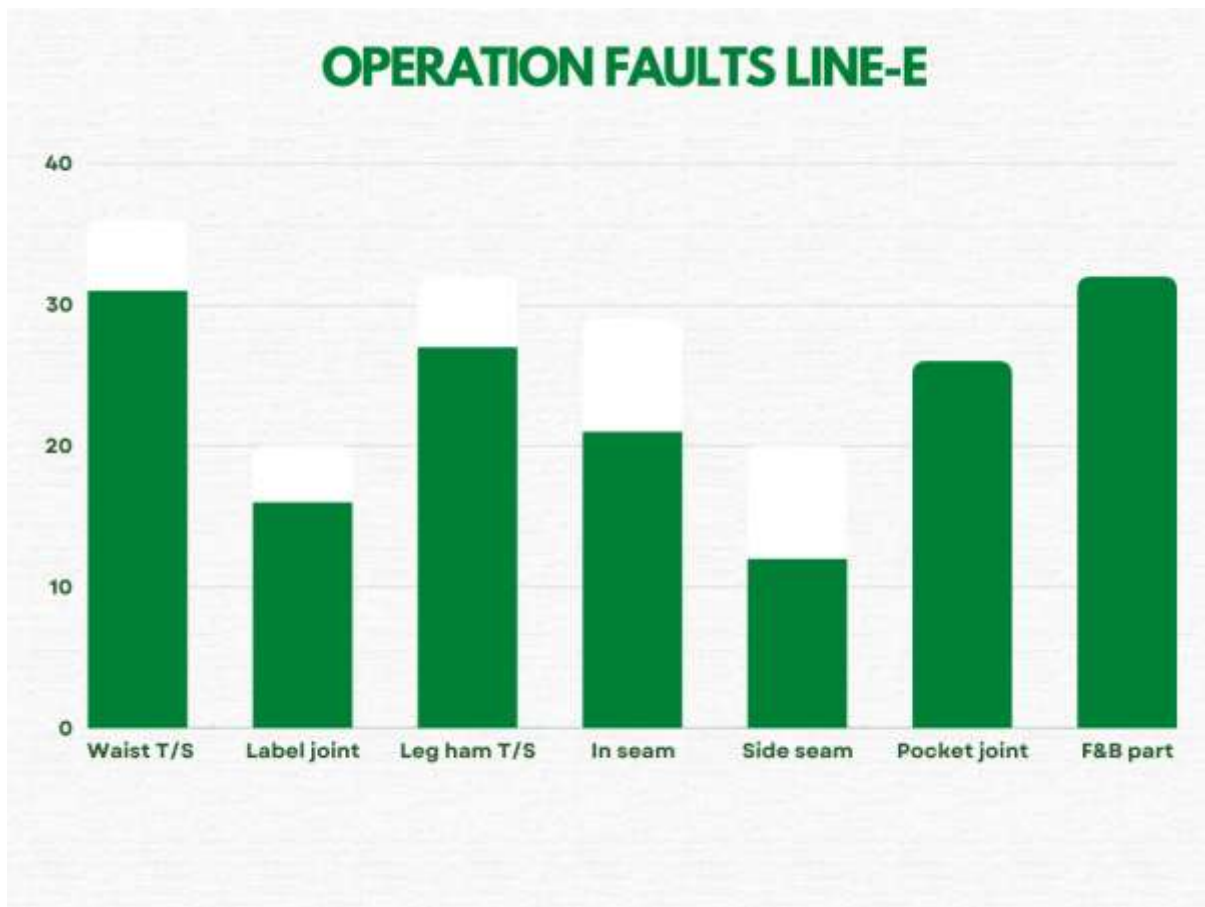
4.5.1 Sewing Faults:



Graph 09: Sewing Faults Line E

In this analysis report has found about faults are high in a week. Uncut thread the number is 62 then Loose thread 50, Iron problem Oil/Dirty spot Reject & loose stitch both 45, yarn missing 42, Alter is 18. Here operator need to sincere their work and must be known about handling sewing machine.

4.5.2 Operation Faults:



Graph 10: Operation Faults Line E

4.5.3 Summary:

Total check garments	Total Pass garments	Total defect Qty	Alter	Reject	DHU%
2640	2468	204	18	17	7.72

Table No 05: Summary Line E

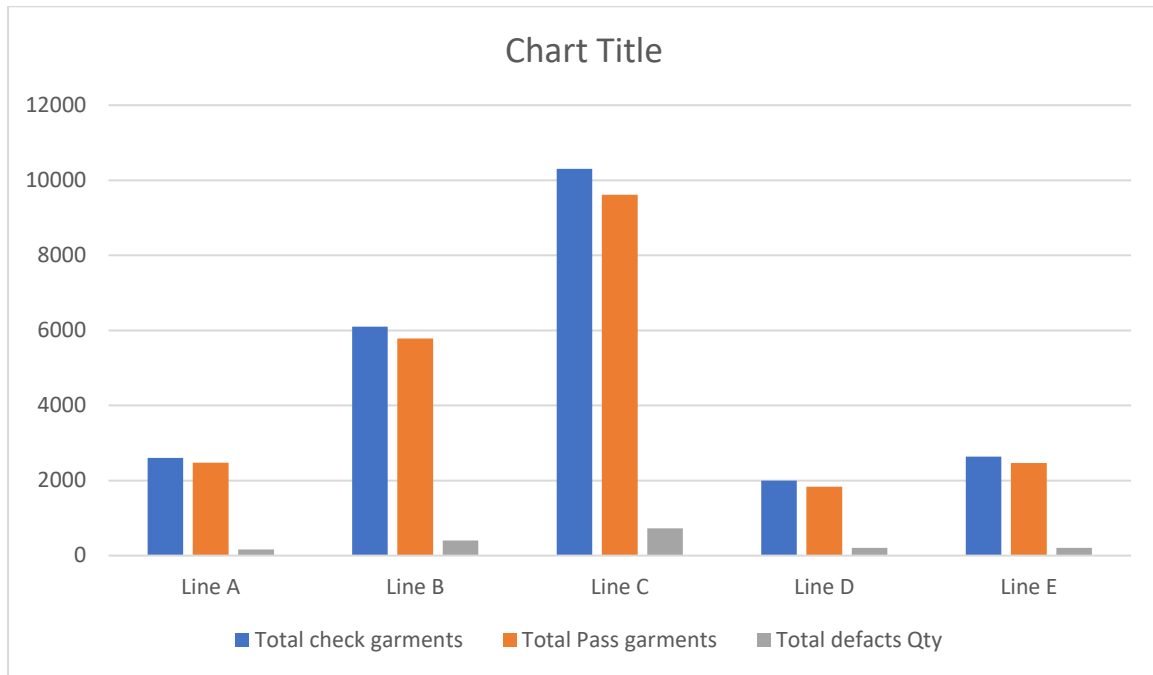
4.6 Comparing Sewing Line: (Line-A to Line-E)

4.6.1 Sewing Faults:

Line No	Total Sewing Faults
Line A	167
Line B	402
Line C	730
Line D	206
Line E	204

Table No 06: Comparing Sewing Line: (Line-A to Line-E)

4.6.2 Summary:



Graph No 11: Comparing Sewing Line: (Line-A to Line-E)

Line No.	DHU%
Line A	6.73%
Line B	6.61%
Line C	7.11%
Line D	10.34%
Line E	7.72%

Table No 07: Comparing Sewing Line: DHU% (Line-A to Line-E)

CHAPTER 05: CONCLUSION

In the end, we have completed the thesis the core intention of this project report is study indicates that by eliminating non-productive activities like reworks in the apparel industry time, as well as cost, are saved by ensuring quality products that have a significant impact on the overall factory.

We have done our “Thesis” (Project Report) after a five-line inspection on Meghna Knit Composite Ltd. We have found,

- Uncut thread and loose thread are found in large numbers, here operators need to sincere their work.
- To reduce oil and dirt sports workers must clean their sewing machines properly.
- Make sure that alter is low.
- In sewing, a line must be careful about DHU%. Reducing DHU% is increase production and product quality. Ultimately, sewing faults will be reduced.
- Ensuring a proper working environment for the operators.

At the same time, any type of error occurs while sewing the garment inventing those causes and acting accordingly to take necessary action for the type of fault caused by the machine operator or any other parameter.

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