



Faculty of Engineering

Department of Textile Engineering

Thesis Report On

Sewing Faults

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Bachelor of Science in Textile Engineering

Advance in Apparel Manufacturing Technology

Letter of Approval

17th March, 2024

To The Head (In charge)

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

Dear Sir, I am just writing to let you know that this Project Report titled as “sewing Faults” has been prepared by the students bearing Ashita Elin (201-23-849), Halima Akhter Putul (201-23-929), Hriday Debnath (201-23-871) is completed for final evaluation. The whole report is prepared based on the proper investigation and information. The students were directly involved in their Thesis report activities.

Therefore, it will highly be appreciated if you kindly accept this Thesis report and consider it for final evaluation.

Yours Sincerely



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DECLARATION

The following Thesis/Project report is a work done by our group and We are the undersigned, the student of B. Sc in Textile Engineering. ID: 201-23-849, ID:201-23-929, ID: 201-23-871 of Daffodil International University would like to mention here that this B.Sc thesis paper on “Sewing Faults” has been prepared by us. While preparing this thesis paper, we didn’t breach any copyright act intentionally

And most importantly this report is only for our academic purpose.

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Chapter 1

Introduction

1.1 Background:

Sewing process is one of the most important and essential stages of RMG sector of Textile Industry. With the change of global economy and people's high demand, Number of Textile Industries is increasing day by day. As a result there begins a competition between them. And now customer's main demand is quality full products. The industry which can provide high quality of product, can survive here.

At RMG sector sewing is a very crucial parameter as this is related to customer's comfort and apparel's outlook. If there arrive stitch related problems, Customer's won't accept that and the apparel will be rejected. Defect in garments becomes a common things now a days which highly effect the factories economical condition.

So this is very important to have knowledge on sewing faults and their remedies.

1.2 Objective:

- To introduced with different type of sewing fault and indentify them properly
- To learn about the remedies of those sewing fault
- To know how to prevent them
- To learn how to increase production efficiency
- To provide a guideline
- To decrease sewing fault
- To ensure 100% quality of product
- To Fulfill buyers requirement

1.3 Limitations of the Study :

- Companies rules and regulation's
- Insufficient guideline at Industry
- Less experience
- Input output related problem

- Lack of sufficient data
- Sewing Line arrangement problem
- Limited time

1.4 Aim of the Project:

As we already know Bangladesh is highly RMG sector based and more than 4 million workers associated here and contributed 10.35% percent to GDP of our country with 7% annual growth (2023). Bangladesh lists 3723 RMG factories (MiB website, textile today, 2022).

As sewing is one of major stages of this sector. So sewing fault can highly hamper the economy of that garment as it indicates the quality of a garment.

So our main goal is to prevent or minimize sewing faults, so that our customer's can't questioned on our quality of garments products and increase productivity and efficiency of the industry.

Chapter 2

Literature Review

2.1 Defects in Apparel

Before arriving the final product to market, the product go through apparel manufacturing stage. So this is a very important phase as here the garment or apparel product finally inspected before going to customer's hand. We can address defects as unwanted features of product or lack of desired qualities. These defect products are rejected when it loose it's sales ability in the market.

But if the product has defect, this indicates lack of quality and customer's won't accept this. That's why this is very important to know about the types of garment defect.

Defects are basically three types

- I. Major
- II. Minor
- III. Critical

Table 2.1 Types of defects

Critical Defect	Major Defect	Minor Defect
Insect in garment	Skip stitch	Uncut thread
Broken needle in garment	Broken stitch	Over stitch
	Puckering	Wavy stitch
	Short stitch	
	Uneven stitch	
	Uneven Join	
	Bar tack Displace	

Again There are two defects based on sewing

- I. Sewing defects
- II. Non sewing defects

2.2 Non sewing Defects

The defects which are generally occur by Faulty raw materials or elements, wrong pattern or wrong cutting method, poor handling of goods are known as Non sewing defects. Sometimes it occur due to wrong ironing ,packaging etc reasons.

2.3 Sewing Defects

The defects which are basically occur during sewing. This mostly like seam related.

The main factors are

- Improper stitch
- Wrong in needle choosing or needle related problem
- Seam
- Machine problem

2.4 Sewing Faults

Some Sewing faults name are

- Uneven Stitch
- Needle breakage
- Bobbin or looper thread breakage
- Skipped stitch
- Oil spot
- Dirty / Stain spot
- Un-cut thread
- Needle hole
- Seam puckering
- Broken Stitch
- Loose stitch
- Poor ironing
- Thread fusing when the machine stops
- Pleat
- High/Low

2.4.1 Uneven Stitch:

Improper threading, using the incorrect type or size of needle and thread for the fabric, and uneven tension in the sewing machine can all result in uneven stitches.



Fig 3.1: Uneven Stitch

Causes:

- Improper fabric handling
- Incorrect tension of sewing thread
- Use wrong thread path.
- Wrong adjustment of needle thread path
- Thread quality
- needle issues
- Fabric problems
- Incorrect stitch settings
- Machine maintenance.
- Bobbin issues
- Uneven pressure
- Sewing speed

Remedies:

- Examine the accurate thread tension.
- Use accurate thread path.
- Use better quality thread.
- Keep the Machine Clean
- Use the Correct Needle and Thread
- Sharpen or replace the needle
- Check the width and length of the stitch
- Slow down the sewing speed
- Properly thread the machine.

- Practice and Improve operator Sewing Technique
Check the Bobbin and Bobbin Case.

2.4.2 Needle Breakage: When sewing, needles might break, either inflicting harm to the cloth or posing a safety risk.



Fig 3.2: Needle Breakage

Causes:

- Needle is loose or Too Little Tightness in the Needle Screw
- Sewing Over a Zipper
- The fabric is too thick and does not fit the used needle.
- Removing fabric after stitching without lifting the presser foot.
- Too-small sewing machine needle

Remedies:

- Use needle lubricant via thread.
- Use needle cooler.
- Use proper needle size.
- Properly set the needle with the needle screw.
- Improve operating technique.

2.4.3 Bobbin or looper thread breakage:

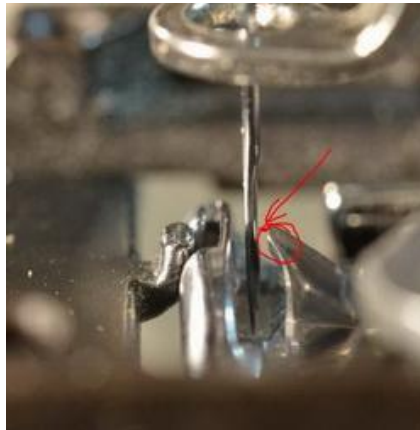


Fig 3.3 : Bobbin Or Looper Thread Breakage

Causes:

- The bobbin's thread was badly wrapped.
- Too much tension or excessive bobbin running
- Bobbin case with sharp edges
- The Bobbin case is not fitting properly.

Remedies:

- Modify the orientation of the bobbin winder. use pre-wound bobbins.
- Adjust the bobbin Case tension. Add a washer or spring to prevent excessive bobbin running.
- Polish the edge of bobbin case and correct the surface.
- Use proper proper bobbin size.

2.4.4 Skipped Stitch:

There are gaps in the stitching caused by skipped stitches, which occur when the sewing machine is unable to grab the fabric.



Fig 3.4 : Skipped Stitch

Causes:

- Not inserting the hook, looper, or needle into the thread loops at the appropriate moment.
- Inappropriate needle size or style for the thread size or type is the cause of thread loop failure.
- bent or deflected needles.
- Incorrect sewing tension in the needle
- inadequate creation of the thread loop.
- Incorrect seam width.

Remedies:

- Notice that the needle is properly placed and positioned.
- With a deeper scarf, use a needle.
- Modify the needle's size and style.
- Re-adjust the pressure on the presser foot
- To match the needle, Change the throat plate.
- Re-adjust the thread tensions on the upper and lower loop.
- Keeping wright seam width.

2.4.5 Oil Spot: When sewing, a typical error known as a "oil spot" develops during the stitching process. It occurs when visible stains or spots are left on the fabric being sewed as a result of oil from the sewing machine's parts, like the needle or bobbin case, coming into contact with the fabric/ garments.

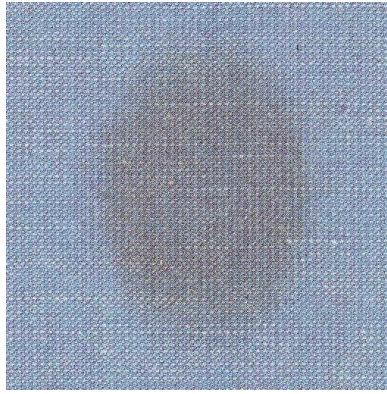


Fig 3.5 : Oil Spot

Causes:

- Oil leakage from sewing machine parts resulting from inadequate machine maintenance.

Remedies:

- Proper machine maintenance .
- A sewing maintenance staff will make sure to check if any oil leaks.

2.4.6 Dirty / Stain Spot: The term "dirty spot" in sewing describes a flaw in the fabric that is brought about by stains, dirt, or other foreign objects. The final product may become less appealing or perhaps unusable due to dirty patches that compromise its quality and appearance.



Fig 3.6 : Dirty Spot

Causes:

- Poor garments handling at cutting and sewing section.
- A spot during garments washing.
- Dirty workplace also cause stain on garments.

Remedies:

- Appropriate fabric / garments handling from fabric inspection to finishing to remove stain.
- Properly check the spot after washing.
- Keep clean the work area.

2.4.7 Un-Cut thread: where there is some extraneous thread are present.



Fig 3.7 : Un-Cut Thread

Causes:

- Improper method of trimming.
- Improper finishing
- Lack of helper concentration.
- Not following the proper method.

Remedies:

- Adjusting the thread cutter
- Manually trimming threads
- Ensure that workers are following proper technique and method of trimming and operators are doing self trimming.

- Motivation and give proper training to the operator
- Proper machine maintenance.

2.4.8 Needle Hole:

The term "needle hole" refers to the hole made by the needle in the seam line during sewing.



Fig 3.8 : Needle Hole

Causes:

- Incorrect selection of needle.
- Using a defective needle.

Remedies:

- Before starting to sew a new product, mechanics should check the right needle size.
- The operator have to check the needle after every two hours while sewing.

2.4.9 Seam Puckering: The term "seam puckering" describes the gathering of a seam immediately following sewing or subsequent to laundering, resulting in an unsatisfactory seam look. Compared to knits, woven fabrics are more likely to pucker at the seams, and this is especially noticeable on tightly woven textile

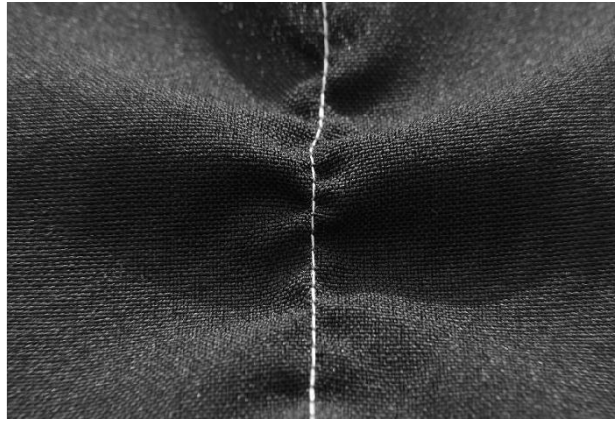


Fig 3.9: Seam puckering

Causes:

- Wrong needle or looper thread tension.
- Operator handling issue.
- Wrong Fabric Feed
- High stitch density (SPI)
- Wrong thread balance.
- zigzag that is too broad for the thickness of the Fabric;
- stitch length that is too lengthy for the thickness of the fabric.

Remedies:

- Enhance the fabric feed mechanism
- Reduce the sewing machine's maximum speed.
- Change to a limited stitch width
- Change to a shorter stitch length
- Properly maintain the sewing thread tension guide
- Check the thread tension

2.4.10 Poor Ironing: Inadequate ironing: If ironing is done too heavily, the garment may have a shining mark, and if it is done too little, the surface may have creases and crinkles.



Fig 3.10 : Poor Ironing

2.4.11 Broken Stitch: A broken stitch occurs when a stitch breaks and the start and finish stitch lines do not correctly join at the same point.



Fig 3.11 : Broken Stitch

Causes:

- High thread tension
- Bad thread quality
- Wrong thread size
- The sewing machine is running in excessive speed.

Remedies:

- Proper sewing machine adjustment.
- Use better thread quality.
- The machine maintenance staff has to check every sewing machine speed in routine wise.

2.4.12 Loose stitch: An issue with the bobbin case adjustment or improper threading.



Fig 3.12 :Loose Stitch

Causes:

- Utilised poor thread quality.
- Lack of enough thread tension.
- Sewing too quickly

Remedies:

- Use better thread quality
- Ensure proper thread tension
- Use correct thread and needle size
- Maintain correct sewing speed

2.4.13 Thread Fusing when the machine stops:



Fig 3.13: Thread Fusing When Machine Stops

Causes:

- Incorrect Thread or poorly finished thread
- Densd woven Fabric that is poorly finished or haeshly finished.
- Use overheated needle or damaged needle

Remedies:

- Use good quality Thread
- Use needle coolant
- Use Fabric finish

2.4.14 Pleat: When the folded fabric in the seam line is called pleat.



Fig 3.14 : Pleat

Causes:

- Operator fails to correctly align both layer and the feed.
- Operator handling issue.

Remedies:

- All machine should be check 2 dayes in a week.
- Monthly training should be arrange for the operator.

2.4.15 High / Low :



Fig 3.15 : High- Low

Causes:

- Due to operator negligence.
- Wrong cut mark
- Marking up down
- Lack operator attention during marking.

Remedies:

- Proper train up the sewing operator for stitching incorrect seam point.
- Ensure correct cut mark
- Maintain proper sewing guide
- Marking to market correctly, the sewing supervisor is responsible for it.

Chapter 3

Experiment Details and Data Collection

3.1 Methodology

For our case study we choose HAMS FASGION Ltd. Their main product is T-shirt, short pant ,night dress ,tank top etc. Their main buyer H&M and TB. Sewing line 10 and per month capacity 4.5 lakh to 5 lakh. As we are working on sewing fault ,that's why we have collected data of three month from their sewing floor for our thesis report.

3.2 Defect Per Hundred Unit (DHU) Analysis

Defects Per Hundred Units is referred to as DHU. Simply said, the DHU is the quantity of defects found during a garment's inspection out of every 100.

The following formula can be used to determine the DHU: $DHU\% = \frac{\text{Total defects found} \times 100}{\text{Total number of garments}}$. The number of defects per lot or sample, express as a percentage, is known as the DHU ratio.

3.3 Inspection Of November

Table 3.1 Data Collection of Month of November

Line No	Total Check Qty	Total Pass Qty	Total DHU Qty	Total DHU %	Alter	Alter %
1	44681	41560	3259	7.29	2536	5.68
2	46486	42788	3472	7.47	3032	6.52
3	44877	41358	3306	7.37	2731	6.09
4	49761	45604	3386	6.80	2537	5.10

5	46185	42402	3102	6.72	2657	5.75
6	41349	37935	3072	7.43	2406	5.82
7	55955	52014	3496	6.25	2831	5.06
8	47543	43649	3673	7.73	3090	6.50
9	40008	35790	3527	8.82	2980	7.45
10	48910	44956	3618	7.40	2680	5.48
	465755	428056	33911	7.28%	27480	5.90%

Table 3.2 Faults percentage

Total in line	A-Broken stitch	B-oil spot	C-Dirty spot	D-Uncut thread
26	135	479	244	711
26	189	105	335	574
26	401	366	209	737
26	148	363	486	587
26	241	1	444	403
26	157	101	565	928
26	270	69	596	821
26	184	255	328	758
27	316	48	499	663
26	216	75	863	508
261	2257	1862	4569	6690
.8%	6.7% %	5.5%	13.5%	19.7%

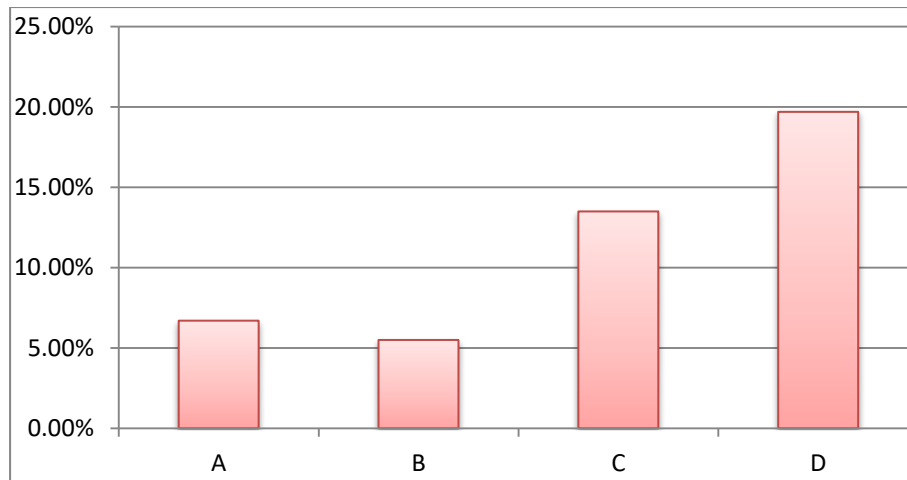


Table 3.3 Faults percentage

E-Needle cut/needle hole	F-Uneven	G-Print Spot	H-Skip Stitch	I-Puckering	J-Open Seam	K-Loose Tension
0	293	0	177	21	94	0
0	100	0	178	0	148	0
0	136	0	278	22	216	0
0	232	0	55	1	191	0
28	291	0	145	0	130	0
0	83	0	157	20	61	0
0	66	0	50	130	289	0
0	377	0	251	53	127	0
0	111	0	142	0	173	0
0	85	0	113	0	140	0

28	1774	0	1546	247	1569	0
0.1%	5.2%	0.0%	4.6%	0.7%	4.6%	0.0%

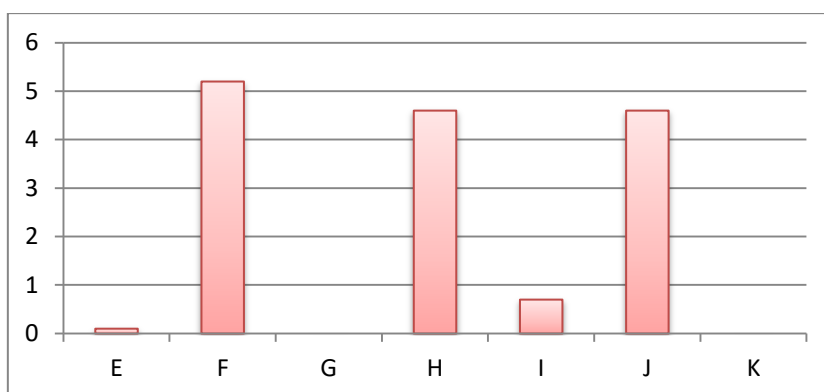


Table 3.4 **Faults percentage**

L-rawedge	M Shading	N-Print Placement Wrong	O-Tuck Missing	P-Crack Stitch
134	0	0	32	0
326	1	0	0	0
9	0	0	46	83
109	0	0	0	0
340	0	0	0	0
2	0	0	0	0
88	0	0	0	0
161	0	0	6	0
300	0	0	8	0
193	1	0	48	0
1662	2	0	140	83
4.9%	0.0%	0.0%	0.4%	0.2%

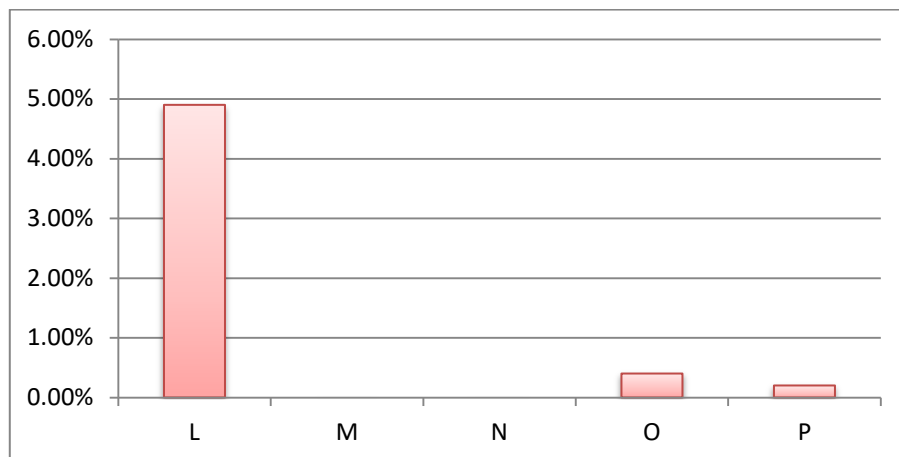
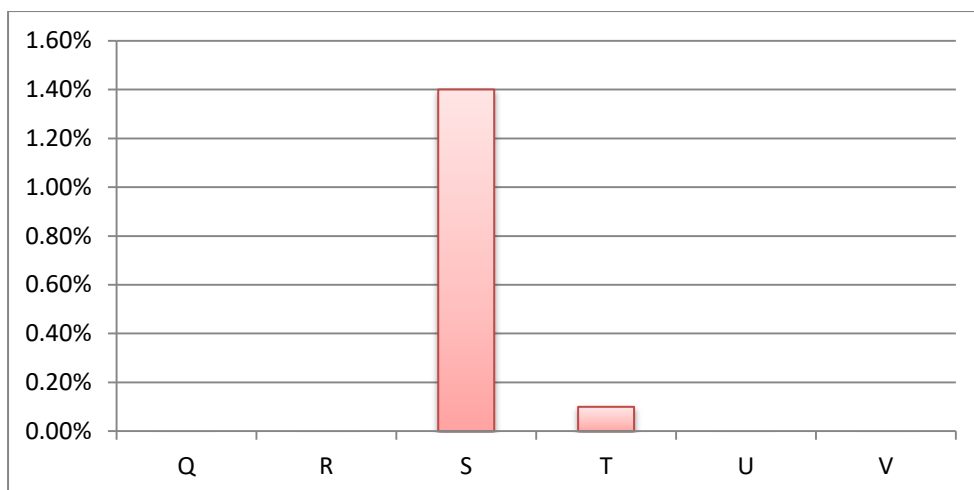


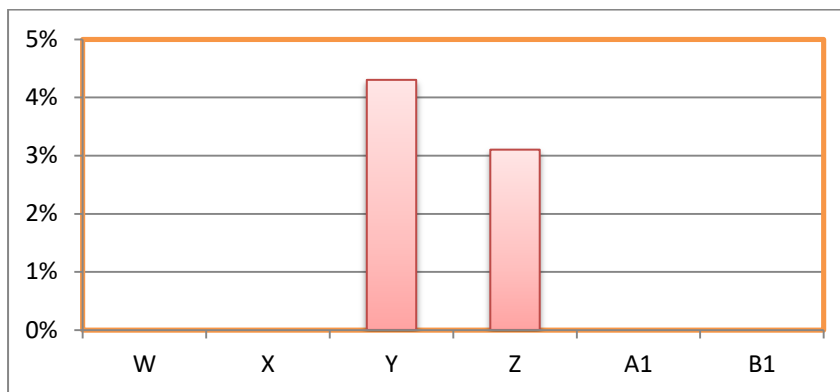
Table 3.5 **Faults percentage**

Q-Pen Mark	R-Hole	S-Twisting	T-Contramination	U-Yarn Missing	V-Crease Mark
0	0	1	0	0	0
0	0	13	0	0	0
0	0	0	0	0	0
0	0	121	4	0	4
0	0	110	0	0	0
0	0	76	0	0	0
0	0	0	0	0	0
0	0	58	2	0	0
0	0	100	0	0	0
0	0	9	13	0	0
0	0	488	19	0	4
0.0%	0.0%	1.4%	0.1%	0.0%	0.0%



3.6 Faults percentage

W-Patta	X-Looseness	Y-Pleat	Z-Point Up Down	A1-Button Problem	B1- Hole Up Down
0	2	63	107	0	0
0	0	218	134	0	0
0	0	185	25	0	0
0	0	278	148	0	0
0	0	157	50	0	0
0	0	155	48	0	0
0	0	34	305	0	0
0	0	142	161	0	0
0	0	93	7	0	0
0	2	118	62	0	0
0	4	1443	1047	0	0
0.0%	0.0%	4.3%	3.1%	0.0%	0.0%



3.7 Faults percentage

C1-Mistake	D1-Care Label Mistake	E1-Size Label mistake	F1-Label Missing	G1-Loose Thread	H1-Poor Iron	H2-High low
0	0	0	0	27	451	0
0	0	0	0	0	421	0
0	0	0	0	0	372	0
0	0	0	0	0	595	0
0	38	0	18	0	294	48
0	0	0	0	0	719	
0	30	0	0	0	621	0
0	0	0	0	0	427	0
0	0	0	11	0	472	0
0	0	0	3	0	728	0
0	68	0	32	27	5100	48
0%	0.2%	0%	0.1%	0.1%	15%	0.1%

3.8 Faults percentage

Updown	Label Slanted	Width Revirs	Measurement deviation	Shearing	Joint Stitch	Loop Missing
0	0	0	0	0	97	0
0	0	0	0	391	0	0

0	0	0	0	0	119	0
0	0	0	0	0	0	0
16	0	0	0	23	0	0
0	0	0	0	0	0	0
0	0	0	0	45	0	0
36	0	0	0	132	0	0
44	0	0	0	366	0	0
0	0	32	0	180	0	0
96	0	32	0	1137	216	0
0.3%	0.0%	0.1%	0.0%	3.4%	0.6%	0.0%

3.9 Faults percentage

Line No	over stitch	tack Open	Drowsting Updown	Down Stitch	Talpart	Shoulder Updown
1	0	0	188	3	0	0
2	0	0	0	0	339	0
3	0	0	102	0	0	0
4	0	0	0	0	51	0
5	0	0	0	0	0	0
6	0	0	0	0	0	0
7	0	0	0	0	82	0
8	0	0	0	0	215	0
9	0	0	0	0	174	0
10	0	0	0	8	221	0
	0	0	290	11	1082	0
	0.0%	0.0%	0.9	0.0%	3.2%	0.0%

3.3 Inspection Of December

Table 3.10 Inspection of December

Line No	Total Check Qty	Total DHU Qty	Total DHU %	Alter	Alter%
1	41756	3332	7.98%	2327	5.57%
2	48235	3739	7.75%	2952	6.12%
3	47818	2575	5.39%	1991	4.16%
4	47741	4200	8.80%	3020	6.33%
5	44899	3252	7.24%	2405	5.36%
6	40095	2690	6.71%	2076	5.18%
7	46833	3436	7.34%	2584	5.52%
8	46327	4171	9.00%	3347	7.22%
9	52265	3883	7.43%	3026	5.79%
10	49432	3650	7.38%	2829	5.72%
	465401	34928	7.50%	26557	5.71%

Table 3.11 Faults percentage

Total Inline	A-Broken stitch	B-Oil spot	C-Dirty spot	D-Un Cut thread	E-Needle Cut/ needle Hole	F-Uneven	G-Print Spot
25	168	568	437	469	0	394	0
25	128	141	646	310	10	313	0
25	97	0	584	539	0	0	0
25	261	266	914	704	0	194	0

25	185	119	728	666	0	169	0
25	103	576	38	771	0	79	0
25	149	54	798	479	34	210	0
25	263	383	441	795	0	185	0
25	273	353	504	832	0	119	0
25	164	269	552	701	0	22	0
250	1791	2729	5642	6266	44	1685	0
0.7	5.1	7.8	16.2	17.9	0.1	4.8	0

3.12 Faults percentage

H-Skip Stitch	I-Puckering	J- Open Seam	K-Loose Tension	L-rawedge	M Shading	N-Print Placement Wrong
121	1	118	0	29	38	0
100	0	194	8	46	52	0
61	0	275	0	5	0	0
467	11	78	0	70	19	0
174	0	75	0	299	0	0
133	42	166	0	0	0	0
195	19	107	0	105	0	0
231	31	253	0	205	0	0
188	16	310	0	82	0	0
342	0	216	0	132	10	0
2012	120	1792	8	973	119	0
5.8 %	0.3%	5.1%	0%	2.8%	0.3%	0%

3.13 Faults percentage

O-Tuck Missing	P-Crack Stitch	Q-Pen Mark	R- Hole	S-Twisting	T-Contramination	U-Yarn Missing
31	0	0	0	33	0	0
0	0	10	0	84	0	5
0	0	0	0	0	0	0
0	0	0	0	120	0	0

0	0	0	0	34	0	0
0	0	0	0	19	0	0
27	0	0	0	68	88	0
0	0	0	0	0	0	10
23	0	0	0	58	13	0
8	0	0	0	7	0	0
89	0	10	0	423	101	15
0.3%	0.0%	0.0%	0.0%	1.2%	0.3%	0.0%

3.14 Faults percentage

V-Crease Mark	W-Patta	X-Looseness	Y-Pleat	Z-Point Up Down	A1-Button Problem	B1- Hole Up Down
0	0	10	158	30	0	0
0	0	80	260	161	0	0
0	0	11	334	200	0	0
0	0	2	50	154	0	0
0	0	0	10	105	0	0
0	3	0	90	40	0	0
0	0	0	102	431	0	0
0	0	0	236	60	0	0
0	0	32	83	182	0	0
0	0	4	22	29	0	0
0	3	139	1345	1392	0	0
0.0%	0.0%	0.4%	3.9%	4.0%	0.0%	0.0%

3.15 Faults percentage

C1-Mistake	D1-Care Label Mistake	E1-Size Label mistake	F1-Label Missing	G1-Loose Thread	H1-Poor Iron	H2-High low
0	0	0	11	0	419	77
0	80	15	77	0	380	70
0	0	6	0	0	376	5

0	5	0	21	0	391	0
0	0	0	0	0	309	0
0	0	0	0	0	604	
0	0	0	0	0	261	0
0	0	0	0	0	882	0
0	0	0	0	0	525	0
0	0	0	2	0	587	0
0	85	21	111	0	4734	152
0.0%	0.2%	0.1%	0.3%	0.0%	13.6%	0.4%

3.16 Faults percentage

Updown	Label Slanted	Width Revirs	Measurement deviation	Shearing	Joint Stitch	Joint Stitch
0	8	0	0	49	2	0
0	43	0	0	282	0	0
8	0	0	0	74	0	0
0	0	0	0	14	175	0
0	0	0	0	75	32	0
0	0	0	0	0	0	0
87	0	21	0	33	0	0
120	0	0	0	0	0	0
0	0	0	0	244	0	0
10	0	0	0	313	0	0
225	51	21	0	1084	209	0
0.6%	0.1%	0.1%	0.0%	3.1%	0.6%	0.0%

3.17 Faults percentage

over stitch	tack Open	Drowsting Updown	Down Stitch	Talpart	Shoulder Updown
-------------	-----------	------------------	-------------	---------	-----------------

0	0	0	57	104	0
0	0	0	0	244	0
0	0	0	0	0	0
0	0	0	0	284	0
0	0	0	0	0	0
0	0	0	0	24	0
0	0	0	0	168	0
0	0	0	0	76	0
0	0	0	0	46	0
0	0	0	0	260	0
0	0	0	57	###	0
0.0%	0.0%	0.0%	0.2%	0.0%	0.0%

3.4 Inspection Of January

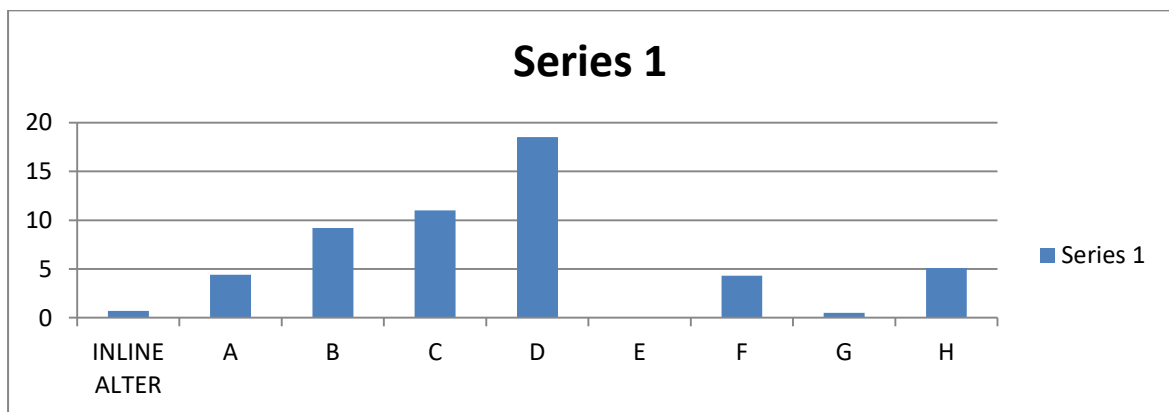
Table 3.18 Inspection of January

Line No	Total Check Qty	Total DHU Qty	Total DHU %	Alter	
1	37830	2839	7.50%	2325	6.15%
2	53359	3950	7.40%	3238	6.07%
3	47984	4081	8.50%	3205	6.68%
4	48409	4363	9.01%	3037	6.27%
5	48906	3416	6.98%	2675	5.47%
6	41650	2962	7.11%	2202	5.29%
7	55254	4042	7.32%	3333	6.03%
8	47225	4505	9.54%	3972	8.41%
9	57804	3661	6.33%	2884	4.99%
10	51008	3660	7.18%	3006	5.89%
	489429	37479	7.66%	29877	6.10%

Table 3.19 Faults percentage

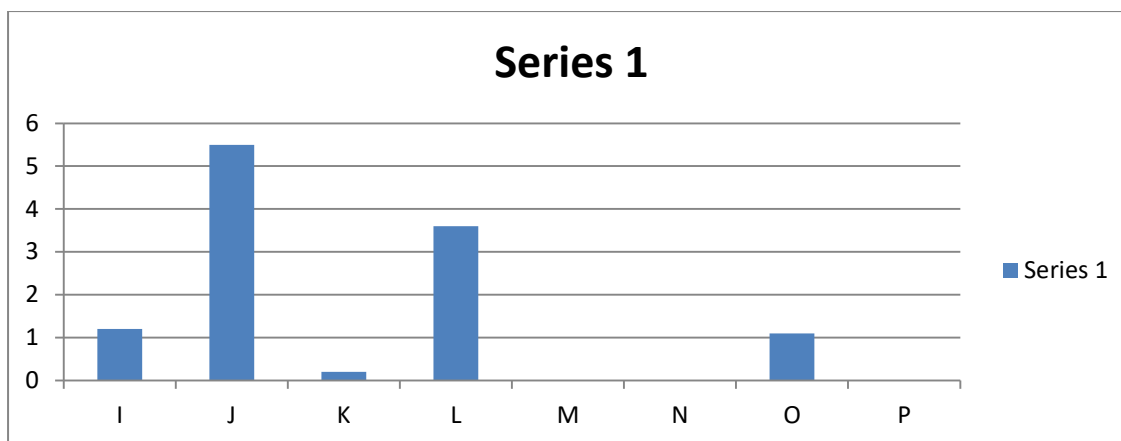
Line no	Total Inline	A- Broken stitch	B-Oil spot	C- Dirty spot	D-Un Cut thread	E- Needle Cut/ needle Hole	F- Uneven	G- Print Spot	H- Skip Stitch

1	26	82	390	124	567	0	301	0	373
2	26	23	165	547	489	0	288	0	13
3	26	133	251	625	599	0	119	155	92
4	26	239	980	346	736	10	151	0	416
5	26	170	167	574	794	0	29	32	170
6	26	135	671	89	776	0	118	0	90
7	26	242	225	484	741	0	134	0	73
8	26	339	416	117	765	0	197	0	367
9	26	164	65	712	820	0	197	0	41
10	26	106	131	523	636	0	85	0	267
Total	260	1633	3461	4141	6923	10	1619	187	1902
Total %	0.7%	4.4%	9.2%	11.0%	18.5%	0.0%	4.3%	0.5%	5.1%



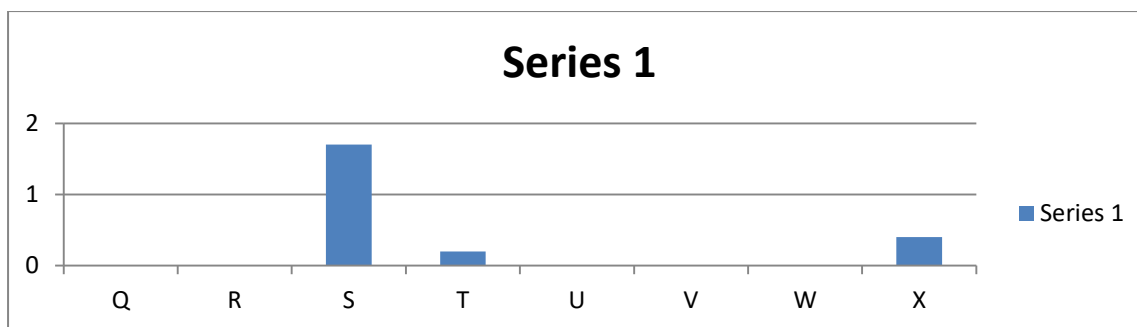
3.20 Faults percentage

Line no	I-Puckering	J-Open Seam	K-Loose Tension	L-rawedge	M Shading	N-Print Placement Wrong	O-Tuck Missing	P-Crack Stitch
1	46	108	0	68	0	0	0	10
2	0	576	54	265	18	0	23	0
3	57	104	1	71	0	0	112	0
4	0	97	0	187	0	0	0	0
5	0	87	0	244	0	0	13	0
6	19	185	0	56	0	0	0	0
7	145	180	8	107	0	0	69	0
8	20	205	0	284	0	0	72	0
9	48	345	9	13	0	0	27	0
10	124	186	6	54	0	0	99	0
Total	459	2073	78	1349	18	0	415	10
Total %	1.2%	5.5%	0.2%	3.6%	0.0%	0.0%	1.1%	0.0%



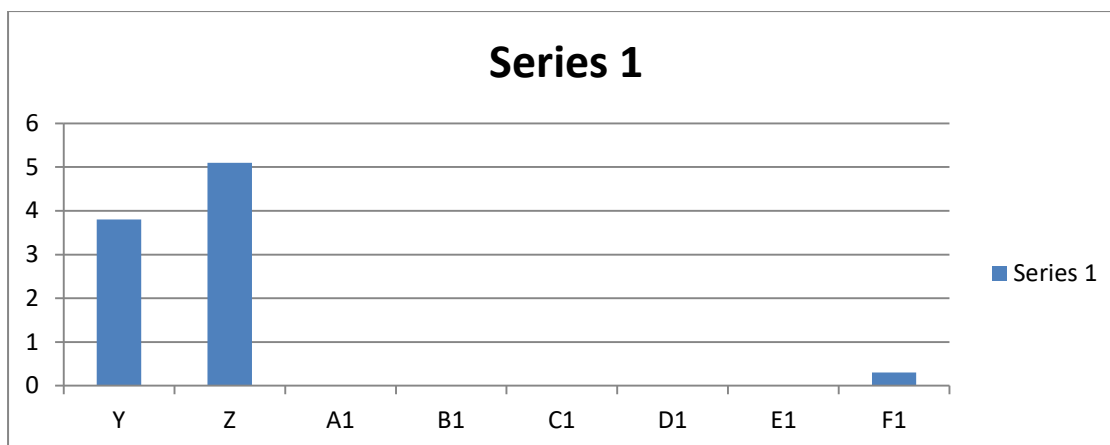
3.21 Faults percentage

Line no	Q-Pen Mark	R-Hole	S-Twisting	T-Contraination	U-Yarn Missing	V-Crease Mark	W-Patta	X-Looseness
1	0	0	0	0	0	0	0	0
2	4	0	0	0	0	0	0	0
3	0	0	181	6	0	0	0	53
4	0	0	149	0	0	0	0	0
5	0	0	73	0	0	0	0	54
6	0	0	9	0	0	0	0	0
7	0	0	111	22	0	0	0	116
8	0	0	45	0	9	0	0	0
9	0	0	30	37	0	0	0	2
10	0	0	25	0	0	0	0	4
Total	4	0	623	65	9	0	0	229
Total %	0.0%	0.0%	1.7%	0.2%	0.0%	0.0%	0.0%	0.6%



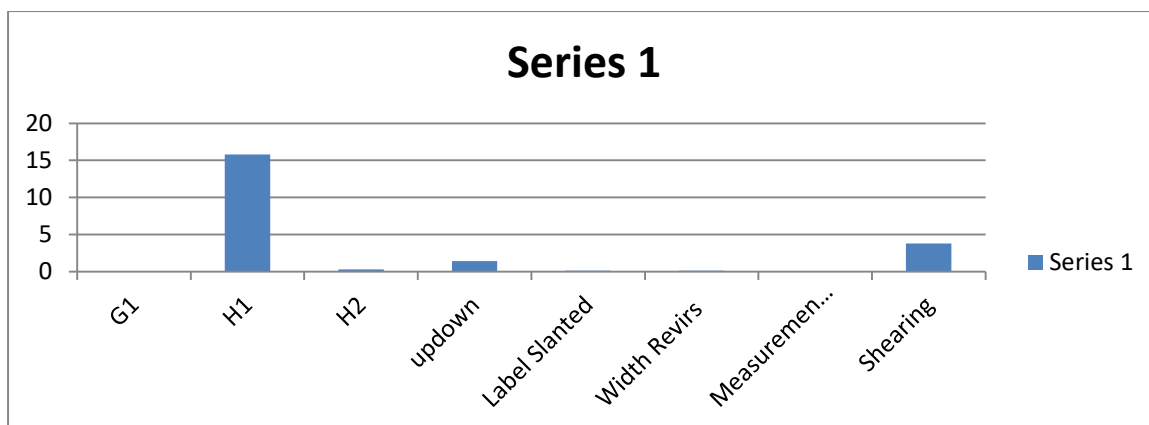
3.22 Faults percentage

Line no	Y-Pleat	Z-Point Up Down	A1-Button Problem	B1- Hole Up Down	C1-Mistake	D1-Care Label Mistake	E1-Size Label mistake	F1-Label Missing
1	125	51	0	0	0	0	0	0
2	339	167	0	0	0	0	0	100
3	194	168	0	0	0	1	0	41
4	39	94	0	0	0	0	0	3
5	25	216	0	0	0	0	0	2
6	114	89	0	0	0	0	0	0
7	170	537	0	0	0	0	0	0
8	286	71	0	0	0	0	0	38
9	96	268	0	0	0	0	0	0
10	27	243	0	0	0	0	0	8
Total	1415	1904	0	0	0	1	0	192
Total %	3.8%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%



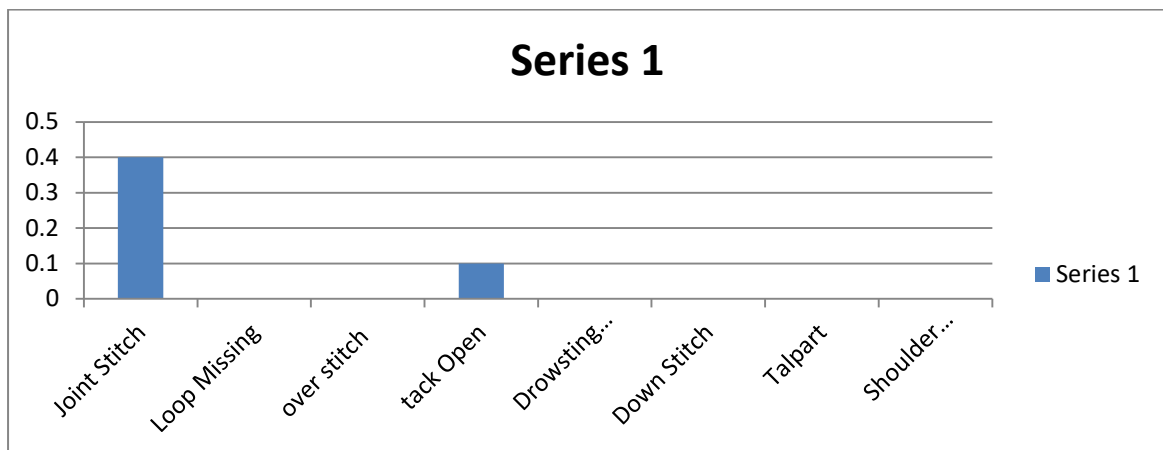
3.23 Faults percentage

Line no	G1-Loose Thread	H1-Poor Iron	H2-High low	Updown	Label Slanted	Width Revirs	Measurement deviation	Shearing
1	0	476	0	20	0	5	0	54
2	0	506	0	48	0	0	0	325
3	12	715	75	0	23	51	0	151
4	0	632	0	0	0	0	0	0
5	0	411	0	0	8	0	0	247
6	0	611		0	0	0	0	0
7	0	367	0	100	0	0	0	211
8	0	870	9	352	0	0	0	20
9	0	591	0	0	0	0	0	196
10	0	758	35	0	0	0	0	235
Total	12	5937	119	520	31	56	0	1439
Total %	0.0%	15.8 %	0.3%	1.4%	0.1%	0.1%	0.0%	3.8%



3.24 Faults percentage

Line no	Joint Stitch	Loop Missing	over stitch	tack Open	Drowsting Updown	Down Stitch	Talpart	Shoulder Updown
1	30	0	0	9	0	0	0	0
2	0	0	0	0	0	0	0	0
3	25	2	0	0	0	4	60	0
4	90	0	0	0	0	0	194	0
5	12	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	23	0	0	0	0
9	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	108	0
Total	157	2	0	32	0	4	362	0
Total %	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%



Chapter 4

Result and Discussion

4.1 Major sewing Faults with percentage

Table 4.1 Readings of November

No	Name	Percentage
1	Uncut thread	19.7%
2	Poor Iron	15%
3	Dirty spot	13.5%
4	Broken stitch	6.7%
5	Oil spot	5.5%

Table 4.2 Readings Of December

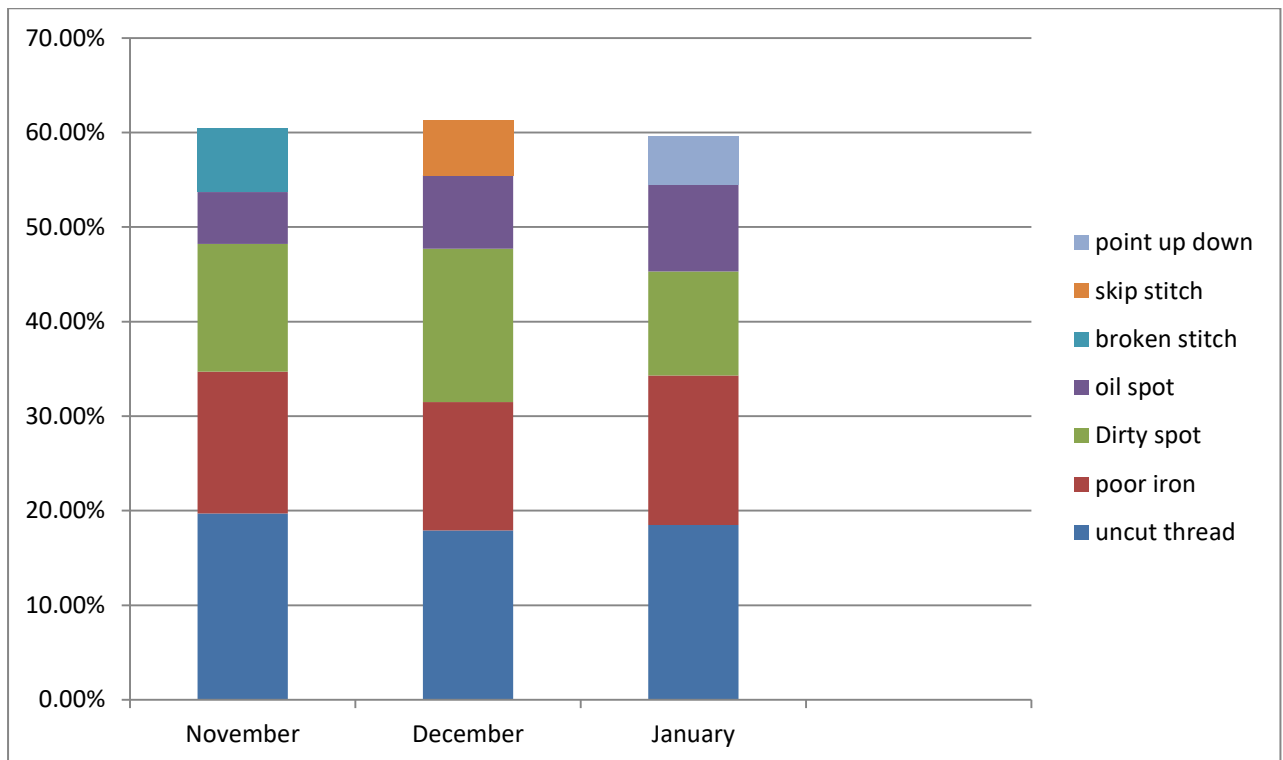
No	Name	Percentage
1	Uncut thread	17.9%
2	Dirty spot	16.2%
3	Poor Iron	13.6%
4	Oil spot	7.8%
5	Skip Stitch	5.8%

Table 4.3 Readings From January

No	Name	Percentage
1	Uncut thread	18.5%
2	Poor Iron	15.8%
3	Dirty spot	11%
4	Oil spot	9.2%
5	Point up down	5.1%

4.2 Result and discussion

By Observing the major defects we come to know that Uncut Thread has the high rank at every single month. Other major defects are Poor iron, Dirty spot, oil spot, Point up down.



We can solve these problem by

- Uncut thread: We can solve this problem with the help of proper tanning and motivated the assistant operator.
- Poor iron: In iron table have a pattern. To solve this problem iron men have to maintain this pattern carefully.
- Dirty sport: To solve this problem every operator and assistant operator must wear hand gloves and food is not allowed on the floor.
- Broken stitch : We can solve this problem with the help of proper tanning and motivated the assistant operator.

- Oil spot: We can solve this problem with the help of properly machine adjustment and use proper amount of oil on the needle.
- Skip Stitch: we can solve this problem with the help of change needle.

We are human being. We'll make mistake that's normal. But at the same time we have to be careful about these faults and defects as these are highly related to fabric quality. People won't buy defected or faulty product.

To avoid Defect

- Skilled worker's must be appointed
- Machine's should be checked on regular basis
- Fabric should be inspected properly before inputted in sewing line
- Everyone should be aware of defects and their remedies

Chapter 5

Conclusion

5.1 Conclusion

Finally the thesis on “sewing faults” has been completed. The whole journey was very interesting as well as tough too. We’ve learned a lot during this project experiment. We’ve introduced with many faults, come to know about their remedies and also how to prevent them. From this case study of three month we come to know that uncut thread has highest percentage among all of faults and also figure out the remedies too.

At the same time we face some barriers on our way. Some because of companies strict rules and regulations or sometimes because of factories internal condition. Again sometime because of our lack of skill or experience. But at least We did it.

For RMG sector garments quality control is a vital factor. That’s why sewing faults are major issue here. So, knowledge on sewing faults is must.

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