



Faculty of Engineering

Department of Textile Engineering

Study on Line Wise Target of Linking, Trimming & Mending Section of a Sweater Industry

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“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

LETTER OF APPROVAL

April 2, 2019

To

The Head

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Daffodil International University

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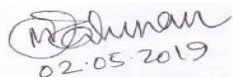
Subject: Approval of Project Report of B.Sc. in TE Program

Dear Sir

I am just writing to let you know that this project report titled as “**Line Wise Target of Linking, Trimming, and Mending Section of a Sweater Industry**” has been prepared by the student bearing ID 162-23-4767 and 162-23-4770 is completed for final evaluation. The whole report is prepared based on the proper Investigation and interruption through critical analysis of empirical data with required belongings. The students were directly involved in their project activities and the report become vital to spark of many valuable information for the readers.

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

Yours Sincerely



Mr.Md. Mominur Rahman

Assistant Professor & Assistant Proctor

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Faculty of Engineering

Daffodil International University

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

DECLARATION

We hereby declare that the work which is being presented in this thesis entitled, **“Line Wise Target of Linking, Trimming, Mending Section of a Garments Industry”** is original work of our own, 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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This is to certify that the above declaration made by the candidate is correct to the best of my knowledge.

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“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

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We are very thankful to our honorable teacher **Mr.Md. Mominur Rahman, Assistant Professor & Assistant Proctor**, Department of Textile Engineering., Faculty of Engineering, Daffodil International University for giving me this opportunity to do my Industrial Attachment and Thesis report on **“SINHA KNIT INDUSTRIES LTD”**. We are manage to complete our report within the time given by our respectable teacher. We are also like to thank almighty Allah forgiving me the strength to complete this report with the help of my supervisor teacher, our **IE manager**, Work Study Officers and collected information from industry. We have tried our best to complete this report on the appointed time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

ABSTRACT

We will discuss about the line wise Linking, Trimming and Mending target of three design and two buyer sweater production in knit industry. The now -a-days textile field becomes very competitive. For making Garments, sweater linking,trimming, mending is very important. Because of, By According to the sweater linking, trimming, mending should produce to make a garments. The quantity of sweater which is required in line wise linking, trimming,mending to produce. A successful attempt was made to my project when I decided to do everything for a comparative analysis for the production of Line wise linking, trimming, mending sweater. All the basic things man, machin and material setup, production time, lost time, machine type, style , Linking type, textile or other sectors of course something must be wrong or he can not achieve the goal. So, to maintain a valuable time, we have to follow a real path that will be effective for some development. In this report, we showed flow charts for line wise sweater linking, trimming,mending process. we hope this project will be helpful in comparing to fashion able sweater production. In Linking, Trimming and Mending section Average Efficiency 82%, Average 304 Lost Hours, Average 1437 Earned Hours and Average 96.77 Productivity.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

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Chapter-1

“ INTRODUCTION ”

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

1.1 Background of the Project

The sweater industry a wide variety of production step. The processing of fabric or sweater part to yarn process. The include yarn collect knitting panel knitting start then linking process and finishing process. It's very important process of sweater industry. Sweater is a one kind of knitting process. It can be pullover or cardigans which are uses by adults and children of both gender. Sweater items also followed a garments manufacturing flow chart which makes the manufacturing process easier. They are process Linking, Trimming, Mending. The actual process flow chart of sweater garments manufacturing has discussed in this article. when fulfil setup skilled able man power, machine and material at this time successfully is highly growth production.

A thesis paper is known as a research paper that provides sufficient information about particular topics. Our thesis paper contains " Line wise Linking, Trimming and Mending sector in sweater industry with amount and ratio in each section" which can help to determine the condition of sweater production...*Reference- Rahaman Asifur.*

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

1.4 Objectives of the Project

The broad objective is to study about the Line balancing to productivity improvement.

The objectives of this report are as follows:

- ❖ To minimize the slack time and process time of production.
- ❖ To analyze the line balance and specially created the line efficiently.
- ❖ To reduce production cost and promote regular flow of material.
- ❖ To minimize the number of workstations and maximize productivity in desired time.
- ❖ To maximize the usage of labour and machine ensuring the capacity and quality if products.

1.5 Important of the project

Some of important of the report are,

A researcher will be able to know about the production efficiency, time earned, people and machines production capacity from this report. Find out how a student can meet the goals of the line and achieve success goals. A general person can learn from this report how the goal is set in the textile industry and it is successfully completed. From this report, the factory authorities will know that to increase their product, some of them should be improved

1.6 Limitation fo the project

Some of the limitation of the report are,

- ❖ Due to confidentiality, the Factory restricts disclosing some important data.
- ❖ Accuracy of the secondary data depends upon the accuracy of the secondary source as cross checking was not possible.
- ❖ Personal business of the factory at the time collecting primary data.
- ❖ All concerns personnel of the office have not been interviewed.
- ❖ The time of internship is limited and not over 2 months.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Chapter-2

“LITERATURE SERVEY/REVIEW”

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

2.1 Sweater Production

Bangladesh is located in the division of third world countries, and it is no doubt a poor country, but is not poor in human resources, especially in the garment industry. We have a huge chip of labor force - those who provide the best manufacturer and the most suitable clothing and fashion clothing for the developed world at a very high rate.

Bangladeshi garment industries have low-cost labor, but they can not make the highest profit without applying new strategies. The modern process of sweater manufacturing control is the modern competitive market implementation.

Producing while making sweater are linking, trimming and mending of many production. A sweater manufacturer are requirement like fulfil garments production. For differents types of sweater manufacturing process.

There are several areas in sweater manufacturing sector. Such as-

- ❖ Winding section.
- ❖ Knitting section.
- ❖ Inspection section.
- ❖ Linking section.
- ❖ Washing section.
- ❖ Zipper section.
- ❖ Finishing section.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

2.1.1 Linking Area



Figure (2.1.1): Linking section

- ❖ Sleeve Join
- ❖ Side seam Join
- ❖ Shoulder Join
- ❖ Neck Join
- ❖ Pocket Join

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

2.1.2 Trimming Area



Figure (2.1.2): Trimming section

- ❖ Loose yarns cutting.
- ❖ Finishing yarns remove.
- ❖ Linking joining yarns repering.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

2.1.3 Mending Area



Figure (2.1.3): Mending section

- ❖ Needle hole repairing.
- ❖ Knitting defect repairing.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Chapter-3

“EXPERIMENTAL DETAILS”

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.1 Sweater Linking, Trimming, Mending Procedure

- ❖ **Sweater Linking Process:** The work process of this section is linked to different panels to create a complete sweater. In this section, the linking operator uses linking machines to link to different panels that are known as dial-linking machines. The dial linking machine can be different gauges like 3GG, 5GG, 7GG, 12GG etc. When fabrics are received from the knitting section, It is style wise linking process start.

This linking section areas of body linking process are:

- Sleeve stitch
- Shoulder join
- Shoulder over lock
- Sleeve join
- Side seam join
- Neck join

When body linking complet at this time quality checking of all body because when present any faults in this body then identify this faults and transfer to garments body repering section.

- ❖ **Sweater Trimming Process:** At this stage, additional threads are moved or inserted into the body panel. Then the clothes are sent to the light check inspection department for proper examination.
- ❖ **Sweater Mending Process:** In this method, there are different operators for repair or repair of faulty sweater. It is a manual process which uses needles and yarn.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.1.1 Line Wise Target of Ladies cardigan (Style

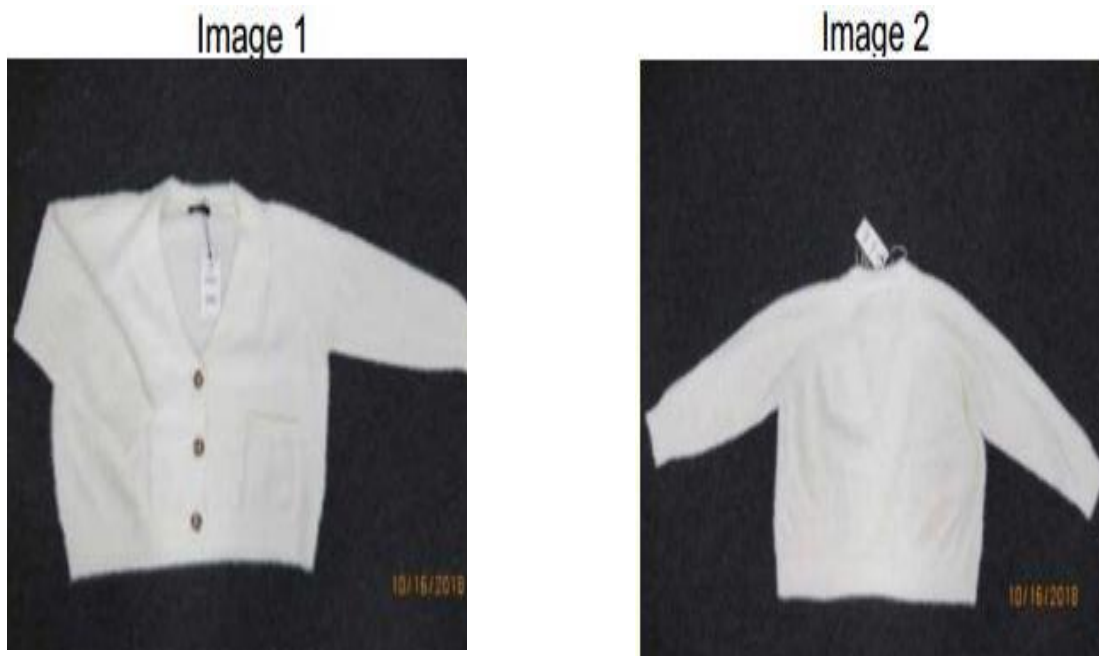
No.:910/332): When start to linking production firstly setup to man, machine and material, because it is very important fulfil production.

3.1.2 Product Details: This product type is “Open Ladies Cadigan”. It is very comfortable goods. It is use to 4-hole plastic button and 2 pieces pocket.

- ❖ knitted fabrics
- ❖ knitting yarn
- ❖ Buttons
- ❖ Diverse
- ❖ Chemical test package
- ❖ Physical test package
- ❖ Labeling

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.1.3. Buyer Name: KIK, Style Name: 910/332, Ladies Cardigan.



Front Part

Back Part

Figure (3.1.3) Indicates the front part and back part in Ladies Cardigan.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.1.4. Measurement of Ladies Cardigan.

Measurement	Tol (-)	Tol (+)	34	36	38	40	42	44	46	48	Comment
length from cb till bottom (top)	-1	1.50	59	59	60	61	62	63	64	65	
½ chest	-1	1.50	53	55.50	58	60.50	63	65.50	68.50	71.50	
½ hem	-1	1.50	50	52	54	56	58	60.50	63	66	
Neck width	-0.50	0.50	13.50	13.50	14	14	14.50	14.50	15	15	
Front neck drop from hnp	-0.50	0.50	33	33	33.50	30.50	34	34	34.50	34.50	
Back neck drop from hnp	-0.50	0.50	2	2	2	2	2	2	2	2	
Tongue width front	-0.50	0.50	7	7	7	7	7	7	7	7	
Tongue width at back	-0.50	0.50	5	5	5	5	5	5	5	5	
armhole straight hnp	-0.50	0.50	29	30	31	32	33	34.50	36	37.50	
sleeve length hnp	-0.50	0.50	68	69	70	71.50	73	75	77	79.50	
1/2 bicep	-0.50	0.50	17	17.50	18	18.50	19.50	20.50	21.50	22.50	
1/2 sleeve opening	-0.50	0.50	8.50	8.50	9	9	9.50	9.50	10	10	
Pocket position from cf	-0.50	0.50	8	8	8	8	8	8	8	8	
Pocket opening	-0.50	0.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	
Pocket length center	-0.50	0.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	
1/2 sleeve opening 2	-0.50	0.50	12.50	12.50	13	13	13.50	13.50	14	14	5cm above rib
1/2 hem 2	-1	1.50	54	56	58	60	62	64.50	67	70	10cm above rib

Table(3.1.4) Indicates the size chart of ladies cardigan where there are fifteen (15) measurement.

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3.1.5. Line Wise Target of Linking for Ladies Cardigan: Linking is a major part in sweater industry. When production start at first line wise man, machine, material setup and Calculate the how much production capacity then setup to production target.

Table 3.1.6 : Capacity study of ladies cardigan in linking section

Date	Style Details			Today Target				Last Day Achivement		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SMV	Per Hour Target	Target 100%	Last Day Target	Last Day Achieve	Lost Qty.	Lost Hrs	Total Earned Hrs	Total Worked Hrs	Efficiency %	Productivity /Day	Productivity/ Hrs
07.03.19	5GG	KIK	910	23	15.00	92	920	920	900	20	5.0	225	230	98%	39.1	3.91
09.03.19	5GG	KIK	910	21	15.00	84	840	741	630	111	31.5	179	210	85%	30.0	3.00
10.03.19	5GG	KIK	910	22	15.00	88	880	840	708	132	33.0	177	210	84%	33.7	3.37
11.03.19	5GG	KIK	910	22	15.00	88	880	906	912	-6	-1.4	228	226.6	101%	41.5	4.02
12.03.19	12GG	KIK	332	23	30.00	46	474	288	107	181	136.1	80	216.3	37%	5.1	0.49
13.03.19	12GG	KIK	332	23	25.00	55	569	418	80	338	191.6	45	236.9	19%	3.5	3.68
14.03.19	12GG	KIK	332	20	30.00	40	412	1090	1060	30	5.8	203	209	97%	55.8	5.07
15.03.19	12GG	KIK	332	19	30.00	38	304	412	154	258	129.0	77	206.6	37%	7.7	0.75
16.03.19	12GG	KIK	332	24	30.00	48	494	368	203	165	82.5	102	184	55%	8.8	1.10
17.03.19	12GG	KIK	332	23	30.00	46	474	480	244	236	118.0	122	240	51%	10.2	1.02
18.03.19	12GG	KIK	332	22	30.00	44	453	460	260	200	100.0	130	230	57%	11.3	1.13
19.03.19	3GG	KIK	910	21	15.00	84	840	842	805	37	9.6	210	220	96%	36.6	3.66
20.03.19	3GG	KIK	910	22	16.50	80	800	840	677	163	40.8	169	210	81%	32.2	3.22
21.03.19	12GG	KIK	332	20	33.00	36	375	412	362	50	25.0	181	206	88%	18.1	1.76
23.03.19	12GG	KIK	332	22	33.00	40	412	375	359	16	8.6	197	206	96%	18.0	1.74
24.03.19	12GG	KIK	332	21	33.00	38	393	412	252	160	88.0	139	226.6	61%	11.5	1.11
25.03.19	12GG	KIK	332	21	33.00	38	393	393	352	41	22.7	194	216.3	90%	16.8	1.63
27.03.19	12GG	KIK	332	20	33.00	36	375	453	473	-20	-10.8	252	241.5	104%	22.5	1.96

Table (3.1.6) Indicates the style wise linking target in ladies cardigan chart of 18 days.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

It is found of style wise linking section in capacity target and result a eighteen days. Here, 4 days 5GG and 2 days 3GG machines have been used for the 910 style and 12 days 12GG use to 332 style. This session total manpower 389 and average SMV 25.64 uses. During this time the total target was 10288pcs but the achieve production was 8518pcs here with the lost quantity 1770 pcs. Total working hours 65.43 but achieved 48.5 hours and 16.93 lost hours. Average efficiency in production capacity 74.27% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.1.7 : Capacity study of ladies cardigan in trimming section.

Date	Style Details			Today Target				Last Day Achievement		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SM V	Per Hour Target	Target 100%	Last Day Target	Last Day Achieve	Lost Qty	Lost Hrs	Total Earned Hrs	Total Worked Hrs	Efficiency %	Productivity /Day	Productivity/ Hrs
07.03.19	5GG	KIK	910	10	8	75	750	825	690	135	18.0	92	110	84%	62.7	6.27
09.03.19	5GG	KIK	910	10	7	75	750	750	731	19	2.5	97	100	97%	73.1	7.31
10.03.19	5GG	KIK	910	11	8	83	825	750	660	90	12.0	88	100	88%	66.0	6.60
11.03.19	5GG	KIK	910	11	8	83	825	1031	980	51	6.8	131	137.5	95%	89.1	7.13
12.03.19	12GG	KIK	332	10	8	75	750	1100	985	115	11.5	99	110	90%	98.5	8.95
13.03.19	12GG	KIK	332	10	8	75	750	750	510	240	32.0	68	100	68%	51.0	5.10
14.03.19	12GG	KIK	332	10	8	75	750	825	727	98	13.1	97	110	88%	72.7	6.61
15.03.19	12GG	KIK	332	8	8	60	480	750	670	80	10.7	89	100	89%	67.0	6.70
16.03.19	12GG	KIK	332	8	8	60	600	480	310	170	22.7	41	64	65%	38.8	4.84
17.03.19	12GG	KIK	332	7	8	53	525	600	590	10	1.3	79	80	98%	73.8	7.38
18.03.19	12GG	KIK	332	9	10	54	540	420	410	10	1.7	68	70	98%	58.6	5.86
19.03.19	3GG	KIK	910	8	8	60	600	525	350	175	23.3	47	70	67%	50.0	5.00
20.03.19	3GG	KIK	910	7	8	53	525	600	350	250	33.3	47	80	58%	43.8	4.38
21.03.19	12GG	KIK	332	10	10	60	600	600	510	90	15.0	85	100	85%	51.0	5.10
23.03.19	12GG	KIK	332	8	10	48	480	600	521	79	13.2	87	100	87%	52.1	5.21
24.03.19	12GG	KIK	332	9	10	54	540	480	250	230	38.2	42	80	52%	31.3	3.13
25.03.19	12GG	KIK	332	9	10	54	540	648	542	106	17.7	90	108	84%	60.2	5.02
27.03.19	12GG	KIK	332	10	10	60	600	648	500	148	24.7	83	108	77%	55.6	4.63

Table (3.1.7) Indicates the style wise trimming target in ladies cardigan chart of 18 days.

It is found of style wise trimming section in capacity target and result a eighteen days. Here, 4 days 5GG and 2 days 3GG machines have been used for the 910 style and 12 days 12GG use to 332 style. This session total manpower 165 and average SMV 8.61 uses. During this time the total target was 12382 pcs but the achieve production was 10356 pcs here with the lost quantity 2026 pcs. Total working hours 28.79 but achieved 23.83 hours and 4.96 lost hours. Average efficiency in production capacity 81.65% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.1.8 : Capacity study of ladies cardigan in mending section.

Date	Style Details			Today Target				Last Day Achivement		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SM V	Per Hour Target	Target 100%	Last Day Target	Last Day Achive	Lost Qty	Lost Hrs	Total Earned Hrs	Total Worked Hrs	Efficiency %	Productivity /Day	Productivity/ Hrs
07.03.19	5G G	KIK	910	4	3	80	800	600	525	74	3.70	26	30	84%	175.3	17.53
09.03.19	5G G	KIK	910	2	2	60	600	960	883	77	3.21	37	40	92%	220.8	22.08
10.03.19	5G G	KIK	910	3	2	90	900	480	342	138	5.75	14	20	71%	171.0	17.10
11.03.19	5G G	KIK	910	3	3	90	900	900	693	207	6.90	23	30	77%	231.0	23.10
12.03.19	12G G	KIK	332	4	3	80	800	800	513	287	14.35	26	40	64%	128.3	12.83
13.03.19	12G G	KIK	332	4	3	80	800	800	650	150	7.50	33	40	81%	162.5	16.25
14.03.19	12G G	KIK	332	4	3	80	800	880	791	89	4.45	40	44	90%	197.8	17.98
15.03.19	12G G	KIK	332	4	3	80	640	960	917	43	2.15	46	48	96%	229.3	19.10
16.03.19	12G G	KIK	332	4	3	80	800	640	321	319	15.95	16	32	50%	80.3	10.03
17.03.19	12G G	KIK	332	4	3	80	800	960	950	10	0.50	48	48	99%	237.5	19.79
18.03.19	12G G	KIK	332	4	3	80	800	686	341	345	20.11	20	40	50%	85.3	8.53
19.03.19	3G G	KIK	910	3	3	60	600	514	389	125	7.31	23	30	76%	129.7	12.97
20.03.19	3G G	KIK	910	3	3	60	600	514	415	99	5.79	24	30	81%	138.3	13.83
21.03.19	12G G	KIK	332	3	3	60	600	514	413	101	5.91	24	30	80%	137.7	13.77
23.03.19	12G G	KIK	332	4	3	80	800	754	736	18	1.07	43	44	98%	184.0	16.73
24.03.19	12G G	KIK	332	4	3.5	69	686	754	529	225	13.14	31	44	70%	132.3	12.02
25.03.19	12G G	KIK	332	4	3.5	69	686	823	709	114	6.64	41	48	86%	177.3	14.77
27.03.19	12G G	KIK	332	4	3.5	69	686	823	800	23	1.33	47	48	97%	200.0	16.67

Table (3.1.8) Indicates the style wise mending target in ladies cardigan chart of 18 days.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

It is found of style wise mending section in capacity target and result a eighteen days. Here, 4 days 5GG and 2 days 3GG machines have been used for the 910 style and 12 days 12GG use to 332 style. This session total manpower 65 and average SMV 2.97 uses. During this time the total target was 12539 pcs but the achieve production was 10917 pcs here with the lost quantity 1622 pcs. Total working hours 11.43 but achieved 9.37 hours and 2.06 lost hours. Average efficiency in production capacity 80.27% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.2 Line Wise Target of Ladies mini dress (Style Name / No. SOFIA / 501) : When start to linking production firstly setup to man, machine and material, because it is very important fulfil production.

3.2.1 Product Details: SOFIA MINI DRESS

knitted fabrics
knitting yarn
2 Loops
Chemical test package
Physical test package
Labeling

3.2.2 Buyer Name: BERSHKA, Style Name / No. : SOFIA / 501, Ladies mini dress.



Figure (3.2.2): Sofia mini dress

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.2.3 : Measurement of sofia mini dress.

Measurement	XXS	XS	S	M	L	XL
Body width	31	33	36	38	40.5	43
Chest width	26	27	28	29	30.5	32
Back width	22	23	24	25	26.5	28
Waist line height	32.75	33.25	34	34.5	35.25	36
Waist line width	39	41	44	46	48.5	51
Bottom width straight	58	60	63	65	67.5	70
Total length	71.75	72.25	73	74.5	76.25	78
Armhole drop	12	12.5	13	13.5	14	14.5
Back armhole drop	13.5	14	14.5	15	15.5	16
Shoulder strap length	13	14	15	16	17	18
Dist. Between front straps	18.5	19.5	21	22	23.5	25
Dist. Between back straps	13.5	14.5	16	17	18.5	20
Front neck line drop	9.5	10	10.5	11	11.5	12
Back neck line drop	1.5	1.5	1.5	1.5	1.5	1.5

Table (3.2.3): Indicates the size chart of Sofia mini dress where there are 14 measurements.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.2.4 Line Wise Target of Linking, Trimming, Mending for Ladies mini dress. When start to linking production firstly setup to man, machine and material, because it is very important fulfil production.

Table 3.2.5 : Capacity study of sofia mini dress in linking section.

Date	Style Details			Today Target				Last Day Achivement		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SMV	Per Hour Target	Target 100%	Last Day Target	Last Day Achive	Lost Qty	Lost Hrs	Total Earned Hrs	Total Worked Hrs	Efficiency %	Productivity /Day	Productivity/Hrs
07.03.19	12GG	BER SHKA	SOFIA	24	17.00	85	872	836	800	36	10.2	277	236.9	96%	34.8	3.38
09.03.19	12GG	BER SHKA	SOFIA	23	17.00	81	836	836	849	-13	-3.7	241	236.9	102%	36.9	3.58
10.03.19	12GG	BER SHKA	SOFIA	24	16.50	87	899	899	890	9	2.5	245	247.2	99%	37.1	3.60
11.03.19	12GG	BER SHKA	SOFIA	24	16.50	87	899	899	887	12	3.3	244	247.2	99%	37.00	3.59
12.03.19	12GG	BER SHKA	SOFIA	25	16.50	91	936	936	940	-4	-1.0	259	257.5	100%	37.6	3.65
13.03.19	12GG	BER SHKA	SOFIA	24	16.30	88	910	957	958	-1	-0.3	247	247.2	100%	39.9	3.88
16.03.19	12GG	BER SHKA	SOFIA	20	16.50	73	749	304	147	157	78.5	74	152	48%	7.7	0.97
17.03.19	12GG	BER SHKA	501	21	18.30	69	709	687	718	-31	-9.4	215	206	105%	35.9	3.49
18.03.19	12GG	BER SHKA	501	19	18.30	62	642	787	779	8	2.1	214	216.3	99%	37.1	3.60
19.03.19	12GG	BER SHKA	501	20	18.30	66	675	642	443	199	60.6	135	195.7	69%	23.3	2.26
20.03.19	12GG	BER SHKA	501	20	18.30	66	675	675	689	-14	-4.1	210	206	102%	34.5	3.34

Table (3.2.5): Indicates the style wise linking target in ladies mini dress chart of 11 days.

It is found of style wise linking section in capacity target and result a 11 days. Here, 12 days 12GG machines have been used for the SOFIA style and 4 days 12GG use to 501 style. This session total 244 manpower setup and average SMV 17.22 calculated. During this time the total target was 9133 pcs but the achieve production was 8130 pcs here with the lost quantity 1003 pcs. Total working hours 40.81 but achieved 39.35 hours and 1.46 lost hours. Average efficiency in production capacity 92.64% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.2.6 : Capacity study of ladies mini dress in trimming section.

Date	Style Details			Today Target				Last Day Achivemen t		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SMV	Per Hour Target	Target 100 %	Last Day Target	Last Day Achieve	Lost Qty	Lost Hrs	Total Earned Hrs	Total Worked Hrs	Efficiency %	Productivity /Day	Productivity/ Hrs
07.03.19	12GG	BER SHKA	SOFIA	10	8	75	750	750	620	130	17.3	83	100	83%	62.0	6.20
09.03.19	12GG	BER SHKA	SOFIA	10	8	75	750	675	648	27	3.6	86	90	96%	72.0	7.20
10.03.19	12GG	BER SHKA	SOFIA	10	8	68	675	750	512	238	31.7	68	100	68%	51.2	5.12
11.03.19	12GG	BER SHKA	SOFIA	9	8	68	675	844	726	118	15.7	97	112.5	86%	80.7	6.45
12.03.19	12GG	BER SHKA	SOFIA	9	8	68	675	743	563	180	23.9	75	99	76%	62.6	5.69
13.03.19	12GG	BER SHKA	SOFIA	10	8	75	750	675	526	149	19.9	70	90	78%	58.4	5.84
16.03.19	12GG	BER SHKA	SOFIA	7	8	53	525	480	216	264	35.2	29	64	45%	27.0	3.38
17.03.19	12GG	BER SHKA	SOFIA	9	8	68	675	675	675	0	0.0	90	90	100 %	75.0	7.50
18.03.19	12GG	BER SHKA	501	10	6.5	92	923	675	390	285	38.0	52	90	58%	43.3	4.33
19.03.19	12GG	BER SHKA	501	10	6.5	92	923	923	426	497	53.9	46	100	46%	42.6	4.26
20.03.19	12GG	BER SHKA	501	10	6.5	92	923	923	510	413	44.8	55	100	55%	51.0	5.10
21.03.19	12GG	BER SHKA	510	10	16.5	92	923	923	623	300	32.5	67	100	67%	62.3	6.23

Table (3.2.6): Indicates the style wise trimming target in ladies mini dress chart of 12 days.

It is found of style wise trimming section in capacity target and result a 12 days. Here, 12 days 12GG machines have been used for the SOFIA style and 4 days 12GG use to 501 style. This session total 114 manpower setup and average SMV 8.33 calculated. During this time the total target was 9336 pcs but the achieve production was 6434 pcs here with the lost quantity 2902 pcs. Total working hours 18.92 but achieved 13.63 hours and 5.29 lost hours. Average efficiency in production capacity 71.5% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.2.7 : Capacity study of ladies mini dress in mending section.

Date	Style Details			Today Target				Last Day Achivemen t		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SM V	Per Hour Target	Target 100%	Last Day Target	Last Day Achie ve	Lost Qty.	Lost Hrs	Total Earned Hrs	Total Worked Hrs	Efficiency %	Productivity /Day	Productivity/ Hrs
07.03.19	12GG	BER SHKA	SOFIA	4	3	80	800	800	614	186	9.30	31	40	77%	153.5	15.35
09.03.19	12GG	BER SHKA	SOFIA	4	3	80	800	800	780	20	1.00	39	48	81%	195.0	16.25
10.03.19	12GG	BER SHKA	SOFIA	4	3	80	800	800	762	38	1.90	38	48	79%	190.5	15.88
11.03.19	12GG	BER SHKA	SOFIA	4	3	80	800	800	726	74	3.70	36	40	91%	181.5	18.15
12.03.19	12GG	BER SHKA	SOFIA	4	3	80	800	800	642	158	7.90	32	40	80%	160.5	16.05
13.03.19	12GG	BER SHKA	SOFIA	4	3	80	800	800	426	374	18.70	21	40	53%	106.5	10.65
16.03.19	12GG	BER SHKA	SOFIA	4	3	60	600	640	426	214	10.70	21	32	67%	106.5	13.31
17.03.19	12GG	BER SHKA	SOFIA	4	3	80	800	720	710	10	0.50	36	36	99%	336.7	19.72
18.03.19	12GG	BER SHKA	501	4	3	80	800	686	510	176	10.25	30	48	62%	127.5	10.63
19.03.19	12GG	BER SHKA	501	4	3	80	800	686	350	336	19.58	20	48	43%	87.5	7.29
20.03.19	12GG	BER SHKA	501	4	3	80	800	686	347	339	19.76	20	48	42%	86.8	7.23
21.03.19	12GG	BER SHKA	510	4	3	80	800	686	510	176	10.25	30	48	62%	127.5	10.63

Table (3.2.7): Indicates the style wise mending target in sofia mini dress chart of 12 days.

It is found of style wise mending section in capacity target and result a 12 days. Here, 12 days 12GG machines have been used for the SOFIA style and 4 days 12GG use to 501 style. This session total 48 manpower setup and average SMV 3 calculated. During this time the total target was 8904 pcs but the achieve production was 6803 pcs here with the lost quantity 2101 pcs. Total working hours 8.6 but achieved 5.9 hours and 2.7 lost hours. Average efficiency in production capacity 69.67% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.3 Line Wise Target of Ladies Camisole (Style Name : RABAJO)

When start to linking production firstly setup to man, machine and material, because it is very important fulfil production.

3.3.1 Product Details:

- knitted fabrics
- knitting yarn
- 2 Loops
- 2 Hanger loops
- Chemical test package
- Physical test package
- Labeling

3.3.2 Buyer Name: BERSHKA, Style Name : RABAJO, Ladies Camisole

Image



Figure:(3.3.2): Rabajo ladies camisole

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.3.3 : Measurement of Ladies Camisole.

Measurement	XXS	XS	S	M	L	XL
Body Width (Armhole to Armhole)	21	23	26	28	30.5	33
Chest Width	19	20	21	22	23	24
Bottom width straigth	20	22	25	27	29.5	32
Total length	33.75	34.25	35	36	37.25	38.5
Armhole drop	10.5	11	11.5	12	12.5	13
Shoulder strap length	24	25.5	27	28.5	30	31.5
Dist. Between Front straps	13.5	14.5	16	17	18.5	20
Dist. Between Back straps	11	12	13.5	14.5	16	17.5
Front neckline drop	9	9.5	10	10.5	11	11.5

Table (3.3.3): Indicates the size chart of ladies camisole where there are 9 measurement.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

3.3.4 Line Wise Target of Linking, Trimming, Mending for Rabajo

ladies camisole: When start to linking production firstly setup to man, machine and material, because it is very important fulfil production.

Table 3.3.5 Capacity study of ladies camisole in linking section.

Date	Details			Today Target				Last Day Achievement		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SM V	Per Hour Target	Target 100 %	Last Day Target	Last Day Achieve	Lo st Qty.	Lo st Hrs	Tot al Earned Hrs	Tot al Wo rked Hrs	Effic iency %	Produ ctivity/Day	Prod uctivity/ Hrs
26.1.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1200	932	26 8	53. 6	186	240	78%	38.8	3.88
27.1.19	12G G	BER SHK A	RAB AJO	23	12.0 0	115	1150	1200	643	55 7	11 1.4	129	240	54%	26.8	2.68
28.1.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1150	972	17 8	35. 6	194	230	85%	42.3	4.23
29.1.19	12G G	BER SHK A	RAB AJO	21	12.0 0	105	1050	1155	1091	64	12. 8	218	231	94%	52.0	4.72
30.1.19	12G G	BER SHK A	RAB AJO	22	12.0 0	110	1100	840	761	79	23. 7	228	252	91%	36.2	3.02
31.1.19	12G G	BER SHK A	RAB AJO	21	12.0 0	105	1050	1100	1095	5	1.0	219	220	100 %	49.8	4.98
02.02.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1320	1008	31 2	62. 4	202	264	76%	42.0	3.82
03.02.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1320	1062	25 8	51. 6	212	264	80%	44.3	4.02
04.02.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1320	924	39 6	79. 2	185	264	70%	38.5	3.50
05.02.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1320	1106	21 4	42. 8	221	264	84%	46.1	4.19
06.02.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1200	1029	17 1	34. 2	206	240	86%	42.9	4.29
07.02.19	12G G	BER SHK A	RAB AJO	24	12.0 0	120	1200	1200	1087	11 3	22. 6	217	240	91%	45.3	4.53

Table (3.3.5): Indicates the style wise linking target in ladies camisole chart of 12 days.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

It is found of style wise linking section in capacity target and result a 12 days. Here, 12 days 12GG machines have been used for the RABAJO style. This session total 279 manpower setup and average SMV 12 calculated. During this time the total target was 14325 pcs but the achieve production was 11710 pcs here with the lost quantity 2615 pcs. Total working hours 49.15 but achieved 40.28 hours and 8.87 lost hours. Average efficiency in production capacity 82.41% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.3.6 : Capacity study of ladies camisole in trimming section.

Date	Details			Today Target				Last Day Achivemen t		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SM V	Per Hour Target	Target 100%	Last Day Target	Last Day Achieve	Lost Qty	Lost Hrs	Total Earned Hrs	Total Worked Hrs	Efficiency %	Productivity /Day	Productivity/ Hrs
26.1.19	12GG	BER SHKA	RAB AJO	9	6	90	900	1000	845	155	15.5	85	100	85%	81.5	8.15
27.1.19	12GG	BER SHKA	RAB AJO	8	6	80	800	800	573	227	22.7	57	80	72%	71.6	7.16
28.1.19	12GG	BER SHKA	RAB AJO	10	6	100	1000	800	780	20	2.0	78	80	98%	97.5	9.75
29.1.19	12GG	BER SHKA	RAB AJO	8	6	80	800	1000	726	274	27.4	73	100	73%	72.6	7.26
30.1.19	12GG	BER SHKA	RAB AJO	9	6	90	900	960	846	114	11.4	85	95	88%	105.8	8.81
31.1.19	12GG	BER SHKA	RAB AJO	10	6	100	1000	900	712	188	18.8	71	90	79%	79.1	7.91
02.02.19	12GG	BER SHKA	RAB AJO	8	6	80	800	1000	920	80	8.0	92	100	92%	92.0	9.20
03.02.19	12GG	BER SHKA	RAB AJO	8	6	80	800	1248	1143	105	8.8	95	104	92%	142.9	10.99
04.02.19	12GG	BER SHKA	RAB AJO	8	6	80	800	1248	1050	198	16.5	88	104	84%	131.3	10.10
05.02.19	12GG	BER SHKA	RAB AJO	8	6	80	800	1152	1140	12	1.0	95	96	99%	142.5	11.88
06.02.19	12GG	BER SHKA	RAB AJO	8	6	80	800	1056	1010	46	3.8	84	88	96%	126.3	11.48
07.02.19	12GG	BER SHKA	RAB AJO	8	6	80	800	1056	956	100	8.3	80	88	91%	119.5	10.86

Table (3.3.6): Indicates the style wise trimming target in ladies camisole chart of 12 days

It is found of style wise trimming section in capacity target and result a 12 days. Here, 12 days 12GG machines have been used for the RABAJO style. This session total 102 manpower setup and average SMV 6 calculated. During this time the total target was 12220 pcs but the achieve production was 10701 pcs here with the lost quantity 1519 pcs. Total working hours 18.75 but achieved 16.38 hours and 2.37 lost hours. Average efficiency in production capacity 82.41% of total work time.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Table 3.3.7: Capacity study of ladies camisole in mending section.

Date	Details			Today Target				Last Day Achivemen t		Lastday Time Analysis				Last Day Efficiency & Productivity		
	M/C GG	Buyer Name	Style Name	Present M/C, M/P	SM V	Per Hour Target	Target 100%	Last Day Target	Last Day Achi ve	Los t Qty .	Lo st Hr s	Tota l Ear ned Hrs	Tota l Wor ked Hrs	Effici ency %	Produ ctivity /Day	Produ ctivity/ Hrs
26.1.19	12G G	BER SHK A	RAB AJO	4	2.5	96	960	960	926	34	1.4 2	39	48	80%	234.3	23.4 3
27.1.19	12G G	BER SHK A	RAB AJO	4	2.5	96	960	720	675	45	1.8 8	28	30	94%	225.0	22.5 0
28.1.19	12G G	BER SHK A	RAB AJO	4	2.5	96	960	960	950	10	0.4 2	40	40	99%	237.5	23.7 5
29.1.19	12G G	BER SHK A	RAB AJO	4	2.5	96	960	960	879	81	3.3 8	37	40	92%	219.8	21.9 8
30.1.19	12G G	BER SHK A	RAB AJO	4	2.5	96	960	1152	1025	127	5.2 9	43	48	89%	256.3	21.3 5
31.1.19	12G G	BER SHK A	RAB AJO	4	2.5	96	960	960	846	114	4.7 5	35	40	88%	211.5	21.1 5
02.02.1 9	12G G	BER SHK A	RAB AJO	4	2.5	96	960	1152	1140	12	0.5 0	48	48	99%	285.0	23.7 5
03.02.1 9	12G G	BER SHK A	RAB AJO	3	2.5	72	720	1152	1021	131	5.4 6	43	48	89%	255.3	21.2 7
04.02.1 9	12G G	BER SHK A	RAB AJO	3	2.5	72	720	864	810	54	2.2 5	34	36	94%	270.0	22.5 0
05.02.1 9	12G G	BER SHK A	RAB AJO	4	2.5	96	960	1170	1023	147	4.9 0	34	39	87%	341.0	26.2 3
06.02.1 9	12G G	BER SHK A	RAB AJO	4	2.5	96	960	1560	1495	65	2.1 7	50	52	96%	373.8	28.7 5
07.02.1 9	12G G	BER SHK A	RAB AJO	4	2.5	96	960	720	250	470	15. 67	8	24	35%	62.5	10.4 2

Table (3.3.7): Indicates the style wise mending target in ladies camisole chart of 12 days.

It is found of style wise mending section in capacity target and result a 12 days. Here, 12 days 12GG machines have been used for the RABAJO style. This session total 46 manpower setup and average SMV 2.5 calculated. During this time the total target was 12330 pcs but the achieve production was 11040 pcs here with the lost quantity 1290 pcs. Total working hours 8.21 but achieved 7.32 hours and 0.89 lost hours. Average efficiency in production capacity 86.83% of total work time.

CHAPTER – 4
“DISCUSSION OF RESULTS”

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

After taking all data from the factory on 11, 12, and 18 days, we have the result in each section. The not same because of the variation of quantity, manpower, variation of total target and total achievement, variation of earned hour and total working hour, variation of efficiency % etc. We will try to find out the lost hours and the amount of losses. All the results are given below on basis of Linking section, Trimming section and Mending section line wise target data discussion.

4.1 Linking, trimming and mending Efficiency%

Result: In sweater linking section man, machine and material setup is significant issue. So we have analyzed the result. The calculated result is-

Table (4.1.1) Capacity of linking, trimming and mending section average efficiency%

Section	Day	Buyer Name	Style	Total Target	Total Achieved	Efficiency %	Individual Efficiency %	Average Efficiency %
Linking	18	KIK	910/332	10288	8518	83%	84.66%	82%
	11	BERSHKA	SOFIA/501	9133	8130	89%		
	12	BERSHKA	RABAJO	14325	11710	82%		
Trimming	18	KIK	910/332	12382	10356	83%	76.66%	
	12	BERSHKA	SOFIA/501	9336	6434	69%		
	12	BERSHKA	RABAJO	12220	10701	87%		
Mending	18	KIK	910/332	12539	10917	87%	84%	
	12	BERSHKA	SOFIA/501	8904	6803	76%		
	12	BERSHKA	RABAJO	12330	11040	89%		

Table (4.1.1) Indicates the style wise linking, trimming and mending chart of average efficiency%.

Discussion:

To increases of the production efficiency in sweater linking, trimming, and mending.

- ❖ Have a measure the input and output in linking, trimming and mending for sweater making.
- ❖ An Industrial Engineer can increase the production efficiency by well guide of the Supervisor.
- ❖ Skilled worker needed to increase Efficiency%.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

4.1.2 Linking, trimming and mending lost hour

Result:

In sweater linking section man, machine and material setup is significant issue. So we have analyzed the result. The calculated result is-

Table (4.1.2) Capacity of linking, trimming and mending section average lost hour

Section	Day	Buyer Name	Style	Average SMV	Total Lost Quantity	Lost Hour	Individual Lost Hrs.	Average Lost Hour
Linking	18	KIK	910/332	25.64	1770	756	522	304 Hrs.
	11	BERSHKA	SOFIA/501	17.22	1003	287		
	12	BERSHKA	RABAJO	12	2615	523		
Trimming	18	KIK	910/332	8.61	2026	405	319.33	
	12	BERSHKA	SOFIA/501	8.33	2902	402		
	12	BERSHKA	RABAJO	6	1519	151		
Mending	18	KIK	910/332	2.06	1622	55	71	
	12	BERSHKA	SOFIA/501	3	2101	105		
	12	BERSHKA	RABAJO	2.5	1290	53		

Table (4.1.2) Indicates the style wise linking, trimming and mending chart of average lost hour.

Discussion:

To increases of the production lost hour in sweater linking, trimming, and mending.

- ❖ Accurate time linking, trimming and mending can increase production in section.
- ❖ Well skilled manpower can make linking trimming and mending properly which can minimize the losses hour.
- ❖ If production man gets for save enough time for well sweater making that can reduce the unskilled worker.
- ❖ An Industrial Engineer can decrease the production lost hour by well guide of the Supervisor.
- ❖ A skilled worker can reduce lost hour

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

4.1.3 Linking, trimming and mending earned hour

In sweater linking section man, machine and material setup is significant issue. So we have analyzed the result. The calculated result is-

Result:

Table (4.1.3) Capacity of linking, trimming and mending section average earned hour

Section	Day	Buyer Name	Style	Average SMV	Total Achievement	Total Earned Hour	Individual Earned Hrs.	Average Earned Hour
Linking	18	KIK	910/332	25.64	8518	3640	2771.66	1437 Hrs.
	11	BERSHKA	SOFIA/501	17.22	8130	2333		
	12	BERSHKA	RABAJO	12	11710	2342		
Trimming	18	KIK	910/332	8.61	10356	1486	1149.66	
	12	BERSHKA	SOFIA/501	8.33	6434	893		
	12	BERSHKA	RABAJO	6	10701	1070		
Mending	18	KIK	910/332	2.06	10917	374	391	
	12	BERSHKA	SOFIA/501	3	6803	340		
	12	BERSHKA	RABAJO	2.5	11040	460		

Table (4.1.3) Indicates the style wise linking, trimming and mending chart of average earned hour

Discussion:

To increases of the production earned hour in sweater linking, trimming, and mending.

- ❖ Accurate time linking, trimming and mending can increase earned hour in section.
- ❖ Well skilled manpower can make linking trimming and mending properly which can earned accurate hour.
- ❖ An Industrial Engineer can increase the earned hour by well guide of the Supervisor.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

4.1.4 Linking, trimming and mending productivity

In sweater linking section man, machine and material setup is significant issue. So we have analyzed the result. The calculated result is-

Result:

Table (4.1.3) Capacity of linking, trimming and mending section average productivity

Section	Day	Buyer Name	Style	Total Manpower	Total Achievement	Total Productivity	Individual Productivity	Average Productivity		
Linking	18	KIK	910/332	389	8518	21.89	32.39	96.77		
	11	BERSHKA	SOFIA/501	244	8130	33.31				
	12	BERSHKA	RABAJO	279	11710	41.97				
Trimming	18	KIK	910/332	165	10356	62.76	74.7		96.77	
	12	BERSHKA	SOFIA/501	114	6434	56.43				
	12	BERSHKA	RABAJO	102	10701	104.91				
Mending	18	KIK	910/332	65	10917	167.95	183.22			96.77
	12	BERSHKA	SOFIA/501	48	6803	141.72				
	12	BERSHKA	RABAJO	46	11040	240				

Table (4.1.2) Indicates the style wise linking, trimming and mending chart of average productivity.

Discussion:

To increases of the production earned hour in sweater linking, trimming, and mending.

- ❖ An Industrial Engineer can increase the productivity by well guide of the Supervisor.
- ❖ Productivity can be increased according to manpower and machine capacity.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Chapter- 5

“CONCLUSION”

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Sinha knit industry line wise target of Linking, Trimming and Mending role in knit factory for production and productivity.

- ❖ In Linking, Trimming and Mending section Average Efficiency 82%.
- ❖ In Linking, Trimming and Mending section Average Lost Hours 304.
- ❖ In Linking, Trimming and Mending section Average Earned Hours 1437.
- ❖ In Linking, Trimming and Mending section Average Productivity 96.77
- ❖ This discussion reviewed the management of supporters for Manpower, Machine setup, material setup the strategy, Target and Achievement, Total earned hour, Efficiency% information flow and decision-making process for Sinha Knit industry Ltd. customers.

From the whole observation we find some causes for sweater linking, trimming and mending section. We see that in production section the ratio of sweater linking, trimming and mending as the quantity, as if it has a cause which is, to make linking, trimming and mending very fine, but, it needed to increases the time loss in production sector to get more profit.

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

REFERENCES:

1. <https://www.google.com/search?q=sweater+mending+process+image&tbm=isch&tbs=ring:CbELK>
2. <http://www.assignmentpoint.com/science/textile/report-export-sweater-bangladesh.html>
3. <https://www.onlineclothingstudy.com/2014/11/process-of-sweater-manufacturing.html>
4. https://www.academia.edu/33547012/PRODUCTION_LINE_BALANCING_FOR_PRODUCTION_ACTIVITY_IMPROVEMENT_IN_APPAREL_MANUFACTURING_Supervised_by_Submitted_by

“Study on Line Wise Target of Linking, Trimming and Mending Section of a Sweater Industry”

Study on Line Wise Target of Linking, Trimming & Mending Section of a Sweater Industry

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