

## **4. TEXTILES / CLOTHING**



## LIST OF FACTORIES VISITED-TEXTILE

DATE	COMPANY CODE	INTERVIEWEE	COMPANY'S PROFILE		ASSESSMENT	
19-May	TEX-1	Marketing Director	Location	Harare	Technology	2
			Capital	Z\$ 32,000.	Qty of Productio	1
			Sales amount	Z\$ 2,800,000.	Productivity	2
			No. of employee	56	Marketing	4
					Labor	2
			Total points:	11		
20-May	TEX-2	Managing Director	Location	Harare	Technology	3
			Capital	Z\$ 32,000.	Qty of Productio	2
			Sales amount	Z\$ 3,200,000.	Productivity	3
			No. of employee	33	Marketing	1
					Labor	3
			Total points:	12		
20-May	TEX-3	Marketing Director	Location	Harare	Technology	4
			Capital	Z\$ 50,000.	Qty of Productio	3
			Sales amount	Z\$ 450,000.	Productivity	4
			No. of employee	21	Marketing	4
					Labor	3
			Total points:	18		
21-May	TEX-4	Deputy Managing Director	Location	Harare	Technology	3
			Capital	Z\$ 100,000,000.	Qty of Productio	3
			Sales amount	Z\$ 90,000,000.	Productivity	2
			No. of employee	2000	Marketing	3
					Labor	3
			Total points:	14		
21-May	TEX-5	Managing Director	Location	Harare	Technology	4
			Capital	Z\$ 250,000.	Qty of Productio	4
			Sales amount	Z\$ 3,000,000.	Productivity	5
			No. of employee	50	Marketing	5
					Labor	4
			Total points:	22		
22-May	TEX-6	Managing Director	Location	Harare	Technology	3
			Capital	Z\$ 32,000.	Qty of Productio	3
			Sales amount	Z\$ 850,000.	Productivity	2
			No. of employee	27	Marketing	1
					Labor	3
			Total points:	12		
26-May	TEX-7	Managing Director	Location	Bulawayo	Technology	2
			Capital	Z\$ 32,000.	Qty of Productio	3
			Sales amount	Z\$ 1,500,000.	Productivity	4
			No. of employee	26	Marketing	4
					Labor	2
			Total points:	15		
28-May	TEX-8	Marketing Director	Location	Bulawayo	Technology	2
			Capital	Z\$ 50,000.	Qty of Productio	3
			Sales amount	Z\$ 7,200,000.	Productivity	2
			No. of employee	36	Marketing	4
					Labor	3
			Total points:	14		
28-May	TEX-9	Managing Director	Location	Bulawayo	Technology	2
			Capital	Z\$ 50,000.	Qty of Productio	2
			Sales amount	Z\$ 480,000.	Productivity	4
			No. of employee	16	Marketing	4
					Labor	2
			Total points:	14		

DATE	COMPANY CODE	INTERVIEWEE	COMPANY'S PROFILE		ASSESSMENT	
29-May	TEX-10	Managing Director	Location	Bulawayo	Technology	3
			Capital	Z\$ 32,000.	Qty of Productio	3
			Sales amount	Z\$ 552,000.	Productivity	3
			No. of employee	20	Marketing	2
					Labor	2
					Total points:	13
1-Jun	TEX-11	Managing Director	Location	Masvingo	Technology	3
			Capital	Z\$ 32,000.	Qty of Productio	2
			Sales amount	Z\$ 736,000.	Productivity	4
			No. of employee	9	Marketing	3
					Labor	3
					Total points:	15
1-Jun	TEX-12	Managing Director	Location	Gutu	Technology	3
			Capital	Z\$ 32,000.	Qty of Productio	3
			Sales amount	Z\$ 1,260,000.	Productivity	2
			No. of employee	35	Marketing	2
					Labor	3
					Total points:	13
2-Jun	TEX-13	Sales Rep.	Location	Kwekwe	Technology	2
			Capital	Z\$ 3,900.	Qty of Productio	2
			Sales amount	Z\$ 210,000	Productivity	2
			No. of employee	9	Marketing	3
					Labor	2
					Total points:	11
3-Jun	TEX-14	Managing Director	Location	Gweru	Technology	4
			Capital	Z\$ 32,000.	Qty of Productio	3
			Sales amount	Z\$ 20,000,000.	Productivity	3
			No. of employee	130	Marketing	4
					Labor	4
					Total points:	18
3-Jun	TEX-15	Manager	Location	Gweru	Technology	4
			Capital	Z\$ 32,000.	Qty of Productio	4
			Sales amount	Z\$ 3,229,000.	Productivity	3
			No. of employee	157	Marketing	2
					Labor	3
					Total points:	16
3-Jun	TEX-16	Director	Location	Gweru	Technology	2
			Capital	Z\$ 64,000.	Qty of Productio	2
			Sales amount	Z\$ 2,500,000.	Productivity	4
			No. of employee	23	Marketing	4
					Labor	3
					Total points:	15
5-Jun	TEX-17	Managing Director	Location	Mutare	Technology	3
			Capital	Z\$ 32,000.	Qty of Productio	3
			Sales amount	Z\$ 36,000,000.	Productivity	3
			No. of employee	130	Marketing	4
					Labor	4
					Total points:	17
5-Jun	TEX-18	Managing Director	Location	Mutare	Technology	2
			Capital	Z\$ 32,000.	Qty of Productio	2
			Sales amount	Z\$ 148,000.	Productivity	2
			No. of employee	12	Marketing	2
					Labor	2
					Total points:	10

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
19-May-98	Harare	TEX-1	M.D. Etal

Evaluation	Point*	
Technology	2	
Quality of Production	1	
Profitability	2	
Marketing	4	
Labor	2	

(1-Very Bad, 2-Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$32,000.      Sales: Z\$2,800,000.      No. of Employee: 59

### 2. Activities of the Company

- The company is manufacturing school uniforms for students from 7 to 19 years old, and protecting clothes such as jackets, coats, and overalls.
  
- Working capital for procuring raw and sub-materials has been lacking since their down town shop was looted during riots earlier this year. The loss of Z\$285,000 by looting affected their working capital conditions badly, and also delay of delivery of the school uniform too.
  
- The hike in the rents for the factory and an outlet in town was main reason for the deficit in 1997. Rent per month increased from Z\$6,600 in 1996 to Z\$10,500 in 1997 for the factory and from Z\$6,000 in 1996 to Z\$9,000 in 1997 for the outlet.
  
- School uniforms, the company's main product, are not competing with the secondhand clothing which is flooding the domestic market.

### 3. Findings and Analysis

- Current facilities in the factory do not include all the machinery necessary to compete with exporters in other countries. For example, the factory needs a band knife, pressing machines, a bartucking machine, inspection facilities, and attachments of sewing machines.
- There are few fluorescent lamps in the factory and they are very high on the ceiling. As a result, the lightning is inadequate, especially during the night shift.
- The quality of the products is not good even for to the domestic market. The owner is just realize this.
- The environment of the factory is not clean enough.
- The working attitude of the workers is as good as that of workers in East Asian countries. However, it seems that the percentage of defects per production run is much higher than in East Asian countries.
- Bonus is paid to workers if they exceed their production targets.
- Raw and sub-materials are obtained on local markets only and the prices are high.
- The procurement of raw and sub-materials is affected by the shortage of working capital.
- Production problems are not properly solved by the current management system in the factory.

### 4. Advice

- Concept of "To dispose of useless articles, To put in order, To clean and inspect equipment, To keep cleanliness & To instill the need to keep the rules" must be introduced.
- The current inspection system, which include trimming work, is not an appropriate. Inspectors specializing only in quality control are needed.

- A collar attachment was defective because of poor sewing. Inspection practices at all stages of sewing should be improved.
  
- To be competitive with and to create better products, it is recommended that, manager and workers must be familiar about world standard through observing many fashion magazines as possible.
  
- Use of attachments for the sewing machines seems recommendable. They will get catalogue of attachments when we meet them during our next visit.
  
- The sub-material available locally used as a collar and interlining is not suitable. We will deliver samples when we visit them during our next visit.

## **Results of Production and Technology Diagnosis**

### (a) Factory work flow:

Receipt of customer order ---- fabrication of prototype pattern ---- sample fabrication ---- pattern modification ---- issuance of factory production order ---- cutting ---- sewing ---- finishing ---- inspection ---- packing ---- shipping

### (b) Equipment layout:

See attached equipment layout plan

### (c) Process flow chart for girl's dress:

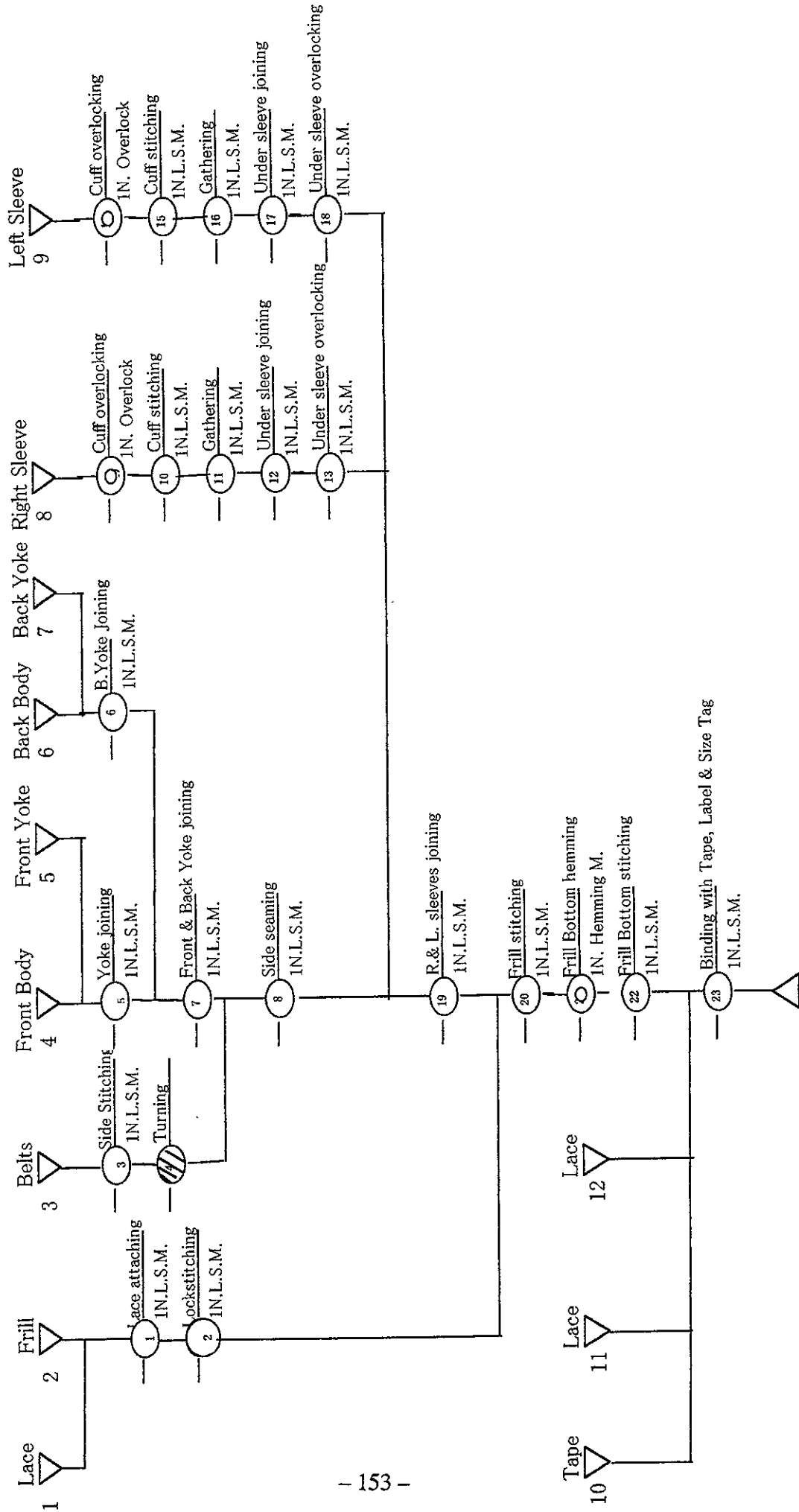
See attached chart.

### (d) Results of diagnostic survey

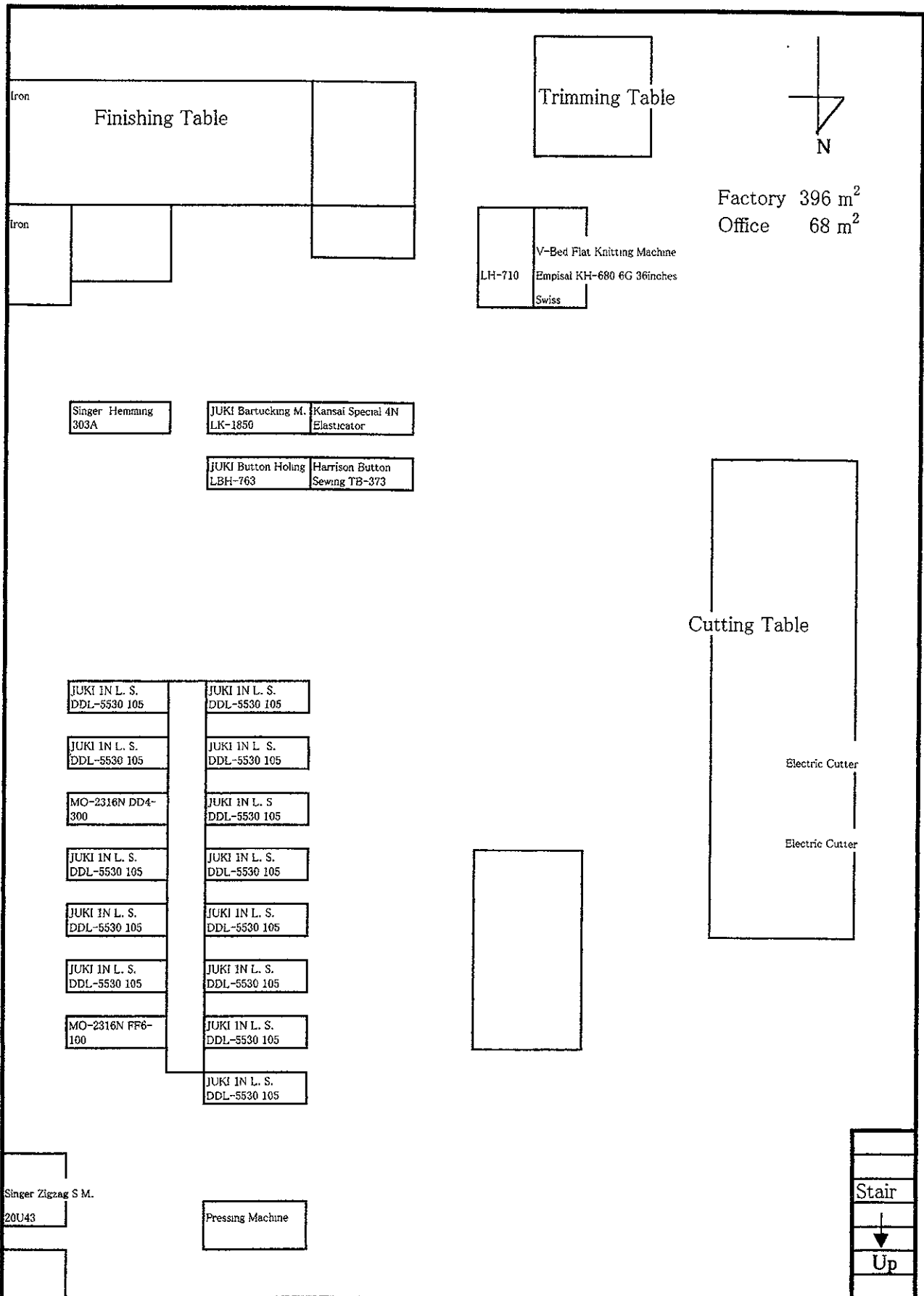
Compared to the time of previous survey, operational condition at the factory have further improved exhibiting a smooth turn-over of orders. The factory at present operates in two shifts, with the second shift working 11 hours and 15 minutes a day, four days a week.



# Process Flow Chart (girl's dress)



# Factory Layout



However, current customer order load is small, and the production plan itself uncertain. Accordingly, management examines variables (design, wages, absenteeism, customer order load, etc.) as a basis of formulating operational goals including section, line and individual targets, and meet with employees to explain new policy to motivate the work force. In consideration of the foregoing, the following diagnosis was made.

1) Production management

No records are kept of the production process. This includes the total absence of management logs. (For example: record of customer orders; logs of raw materials orders, shipment records for incoming materials and outgoing products; cutting, sewing and finishing logs; product inspection records; etc.)

Instead, management is performed solely on the basis of manager's experience and intuition, with ordered number of items, cutting pattern and corresponding fabric simply passed to the factory for actual manufacture.

Accordingly, opportunities are extremely few to review procedures and efficiency of cutting, sewing, finishing and inspection as a basis for further upgrading these operations. These leaves the enterprise without a framework for base cost control, quality control and management of delivery periods.

2) Production technology

Sewing specifications are almost all cases determined by the in-house designer (one person). This entails no detailed written specifications for sewing to be passed to the factory. In other words specifications are set out by the designer himself in the form of simple diagrams or drawings. Also, since production criteria (for example: criteria for cutting, sewing, finishing, inspection, etc.) have not been formally established as written form, an objective comparison for quality control is not possible.

Furthermore, the rational movement of elements in the course of product fabrication has a major impact on overall production efficiency; however, no flow study is carried out by the enterprise yet. Accordingly, equipment layout is highly inflexible, and numerous instances are seen where items those one sewing process has been completed are simply tossed to a separate location than the subsequent fabrication stage resulting in much wasted effort and movement.

In order to upgrade productivity, it is necessary that the overall manufacturing process be analyzed, including measurement of the time required to execute work tasks, and setting an appropriate process and time for work allocation. At present, however, the factory director determines work allocation solely on the basis of the number of work tasks involved. As a result, no examination is made of ways to improve the workflow for fabrication including a rational integration of the movement of materials and components. Furthermore, due to lack of information on available technology (particularly with regard to types of attachments available) inappropriateness of equipment and attachments utilization are observed.

# Financial Diagnosis Report

## Aggressive Management

- Entrepreneurship -keen to learn from specialists
- Quick action & vitality -visited SEDCO to find a possibility of finance soon after the seminar -though no success
- Preventive for repeating mistakes-insurance for riots and looting-risk management
- Ready to change-Reduce of debt to cope with high interest

# Marketing Strategy

- **Learnt from failure of big textile company**
  - No entry to Fashion market- as too much competition
  - School uniform-no competition with import
  - Protected area for local industries-overall wear, dust clothes, and work suits
  - Children's wear-generous for the price
- **Outlet shop at town center**
  - good for knowing customers' need and fashion trend as antenna shop
  - flexibility of selling activities in the future

**Analysis of Ratio Indicator**

Ratio Indicator	Indicator	Formula
A1	Operating Profit to Net Sales	$(\text{Operating Profit}/\text{Net Sales}) \times 100$
A2	Gross Profit to Net Sales	$(\text{Gross Profit}/\text{Net Sales}) \times 100$
A3	Operating Profit to Working Capital	$(\text{Operating Profit}/\text{Working Capital} \times 1) \times 100$
A4	Turnover to Working Capital	$(\text{Turnover}/\text{Working Capital} \times 1)$
A5	Selling & Admin. Expense to Sales	$(\text{Selling \& Admin. Expense})/\text{Net Sales} \times 100$
B1	Net Worth to Total Capital	$\text{Net Worth} \times 2 / \text{Total Capital} \times 3 \times 100$
B2	Interest Paid to Sales	$(\text{Interest Payable} - \text{Interest Receivable}) / \text{Net sales} \times 100$
B3	Fixed Assets to Long term Capital	$\text{Fixed Assets} / (\text{Net Worth} + \text{Longterm Debt}) \times 100$
B4	Current Ratio	$\text{Current Asset} / \text{Current Liability} \times 100$
B5	Quick Ratio	$\text{Quick Assets} / \text{Current Liability} \times 100$
C1	Annual Production per Head	$A^* / \text{Employees}$
C2	Personnel Expenses to Processed Amount	$B^{**} / A^*$
C3	Processed Amount to Net Sales	$A^* / \text{Net Sales} - \text{Purchased Products}$
C4	Efficiency of Machinery Investment	$A^* / \text{Equipment}$
C5	Machinery per Head	$\text{Equipment} / \text{Employee}$

**Remarks:**

\*1=Liability +Net Worth

\*2=Paid Capital+Reseve+Profit

\*3=Liability+Net Worth+Non Operating Asset

A\*=Net Sales–Purchsed Products–Direct Materials–Outsourcing Labor Cost–Indirect Materials

B\*\*=Salaries & Allowance for Sales & Direct/Indirect Labor, and Welfare & Board

# Profitability

Ratio	(a) 1997	(b) 1996	(c) 1995	(d) Japanese Index
A1 Operating Profit to Net	2.8	14.2	11.6	3.8
A2 Gross Profit to Net	28.3	35.5	33.8	27.3
A3 Operating Profit to Working Capital	2.9	15.8	15.2	4.4
A4 Operating Capital to Turnover	1.0	1.1	1.3	1.2
A5 Selling & Admin. Expense to Sales	25.4	21.3	22.3	23.5



# Corporate Soundness

	(a) 1997	(b) 1996	(c) 1995	(d) Japanese Index
B1 Net Worth to Total Capital	38.5	44.7	48.0	30.6
B2 Interest Paid to Sales	14.8	10.7	8.8	1.1
B3 Fixed Assets to Long term Capital	40.4	47.4	62.5	60.6
B4 Current Ratio	144.9	152.9	146.8	155.9
B5 Quick Ratio	3.2	115.0	103.8	106.4

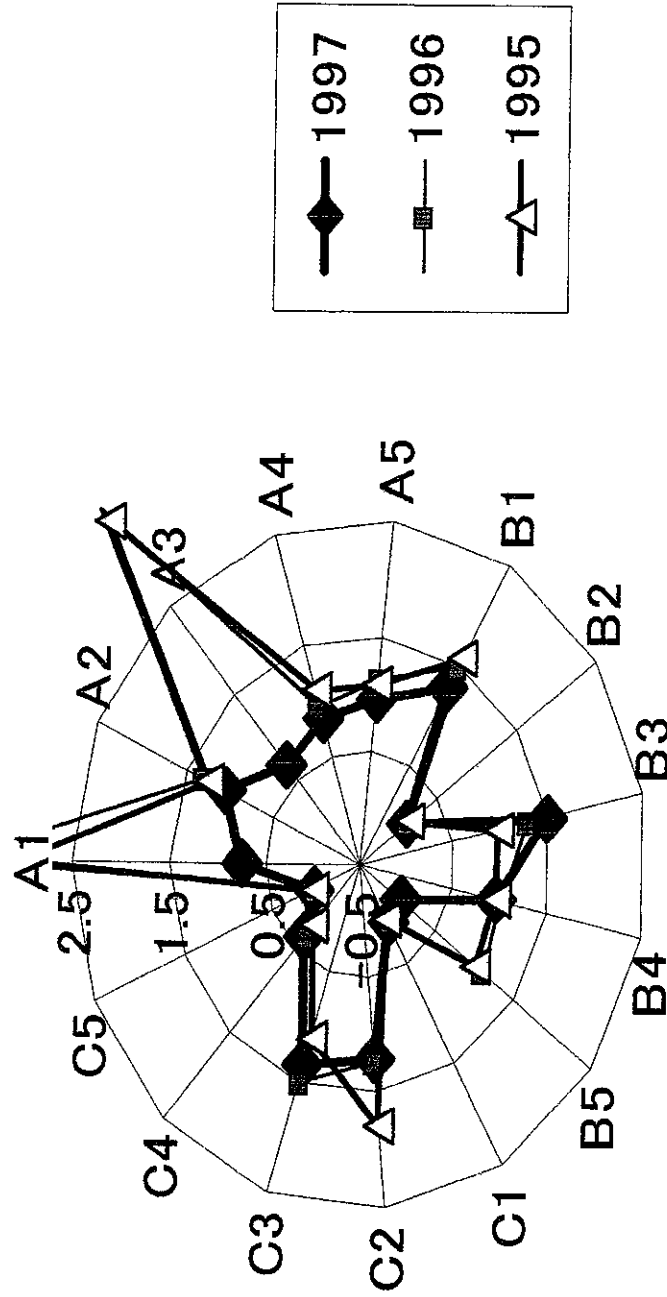
# Productivity

Ratio	(a) 1997	(b) 1996	(c) 1995	(d) Japanese Index
C1 Annual Production per Head	157.5	140.9	98.7	2,086.9
C2 Personnel Expenses to Processed Amount	34.9	34.2	23.7	41.6
C3 Processed Amount to Net Sales	74.6	83.0	60.5	56.1
C4 Efficiency of Machinery Investment	5.3	4.7	2.8	14.4
C5 Machinery per Head	30.0	29.8	34.8	1,266.0

Analysis of Ratio Indicator					
	(a) 1997	(b) 1996	(c) 1995	(d) Japanese Index	
A1	Operating Profit to Net	2.8	14.2	11.6	3.8
A2	Gross Profit to Net	28.3	35.5	33.8	27.3
A3	Operating Profit to Working Capital	2.9	15.8	15.2	4.4
A4	Operating Capital to Turnover	1.0	1.1	1.3	1.2
A5	Selling & Admin. Expense to Sales	25.4	21.3	22.3	23.5
B1	Net Worth to Total Capital	38.5	44.7	48.0	30.6
B2	Interest Paid to Sales	4.8	10.7	8.8	1.1
B3	Fixed Assets to Long term Capital	40.4	47.4	62.5	60.6
B4	Current Ratio	144.9	152.9	146.8	155.9
B5	Quick Ratio	37	115.0	103.8	106.4
C1	Annual Production per Head	157.5	140.9	98.7	2,086.9
C2	Personnel Expenses to Processed Amount	34.9	34.2	23.7	41.6
C3	Processed Amount to Net Sales	74.6	83.0	60.5	56.1
C4	Efficiency of Machinery Investment	5.3	4.7	2.8	14.4
C5	Machinery per Head	30.0	29.8	34.8	1,266.0

# RADAR CHART

## YEARLY COMPARISON



## Small suggestions

- Up Grading ( 1 ) -expose to the public
  - Print business card
  - Make company resume
- Up Grading ( 2 ) -Communication with the public
  - Install fax
  - Use Email
  - Make internet home page

## Questions for the future

- Have you made future projection ( target on sales, market, profit and number of the employees) ?
- Does your financial statement include the figures for your store in the town ?
- What is your priority among various technical recommendations made by Mr. Hasegawa ?

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
20-May-98	Harare	TEX-2	M.D. Etal

Evaluation	Point*	
Technology	3	
Quality of Production	2	
Profitability	3	
Marketing	1	
Labor	3	

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 32,000.

Sales: Z\$: 3,200,000.

No. of Employee: 33

### 2. Activity of Company

- The company is manufacturing ladies' casual dresses and work clothing.
- For two years after establishing the company, children wears were produced 1,000 units per week at Z\$5.00/pc on CMT basis. And they worked overtime and employed new workers to keep the delivery time of orders.
- Most of incomes from this business are spent for the payment of labors and left no profit for the company.
- After developing new items for retailers, they could continue the business until today, though the factory has not been in full operation for this year because of prevailing market conditions.
- Main customers are big retailers of high quality products.
- The quality of products meets with market demands. However the consumers are mainly for indigenous people who wants the quality of W & W, wash and wear, products.
- Raw and sub-materials of the products are difficult to get from the local market.
- They are specialized to fashionable items for ladies. The raw and sub-materials of fashion sensitive products must have varieties and a trend sensitivity.
- The production lot is small and it is difficult to fulfil the minimum quantity of fabrics imported from Korea, Taiwan and etc.

So, the company is obliged to get them through traders and importers such as A and B Garments whose prices are much higher than importing them directly.

- The imported materials often include fabrics of B graded quality.

### 3. Facts found and analysis

- Present facilities in the factory are not fully equipped, such as band knife machine, pressing machine, sewing machine, inspection facilities, attachments of sewing machines, to enable to compete with exporters in other countries.
- We observed that the concept of "To dispose of useless articles, To put in order, To clean up & to inspect equipment, To keep cleanliness & To keep to the rules" are well maintained.
- The working attitude of the workers seems to have almost reached to that of ASEAN countries.
- The bonus system for those who achieved more than the target is not applied since the amount of orders has not been enough for this year.
- The supply sources of raw and sub-materials are only from local markets and the prices are high.
- It has been difficult for the company to get or to reach to fashion related information.
- The most of patterns are created from buyers' samples by a patternner in the company.
- Workers in the company have been trained internally, which takes quite a time to bring them up.
- They have been procuring raw and sub-materials only through local agents or traders because of the shortage of working capital.
- The present management system has not been responding well to the problems in the production line.

### 4. Advice

The following advice is made, namely:-

- Concept of "To dispose of useless articles, To put in order, To clean & inspect equipment, To keep cleanliness & To instill the need to keep to the rules" must be applied more widely to all the aspects.
- Although three quality inspectors are checking the quality of products on hungers, there are some unbalanced collars, collar points of right and left differ, which is a part of critical zone



are still observed. Inspectors are advised to put more efforts on the collar points.

- The collar points are not sharp and neat.

They are advised to cut the excessive cloth inside the points before turning the materials after stitching.

- The target of production seems to be set low because of time study is not carried.

The method of time study is introduced to the managers.

- It is advised that new ideas of designs should be proposed to the customers rather than simply receiving the design from their customers.

- Fashion magazines will be introduced at next visit to create more ideas for making samples.

- It was a careless fault of a worker to have uneven collar points on a shirts.

The management is advised that an everyday training, such as a morning meeting, should be introduced.

- The machinery should be renewed since they are too old because the factory started with second hand machinery.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
20-May-98	Harare	TEX-3	M.D. Etal

Evaluation	Point*	
Technology	4	
Quality of Production	3	
Profitability	4	
Marketing	4	
Labor	3	

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 50,000.

Sales: Z\$: 450,000.

No. of Employee: 21

### 2. Activity of Company

- The company is manufacturing knitted garments.
- Raw materials are purchased from traders in town and are sent to domestic dyeing factories.
- The circular knitted fabrics are imported from Mauritius and the rib fabrics are imported from Taiwan through traders.
- This factory is obliged to accept poor color fastness of current dyeing since they don't have a power to negotiate with the dye house.
- The color fastness of dyed fabrics has been the main problem for domestic materials..
- The production in the factory is well managed by the owner except the color fastness of local materials.
- The productivity of the factory is not high because of no knowledge about their competitors outside country who are in export markets.
- The owner largely relied on a incentive system, which gives Cents 5/pc as a target bonus to workers.
- The present factory is too small to accommodate all the machinery, and a new factory is building in the same compound where they are going to move soon.

### 3. Facts found and analysis

- The quality of products are good to export except color fastness.
- The productivity of the factory is about 1/2 to 1/3 compared to that of in Japan.
- The working attitude of workers are as good as in ASEAN countries.
- They have been purchasing raw and sub-materials from local markets, although prices is high.
- Renewals of some of production facilities are recommended to compete with ASEAN countries, and additional investments for machinery are needed, such as band knife machine, pressing machine, inspection facilities, attachments of sewing machines.

### 4. Advice

The following advice is made, namely:-

- Factory is very small and congested, though materials are arranged somehow neatly but not sufficient. This affects the productivity and quality of products.
- The concept of "To dispose of useless articles, To put in order, To clean up & to inspect equipment, To keep cleanliness & To breed to keep to the rules" must be applied.
- The first step to improve the quality and productivity is to become familiar to use a statistical quality control method with which a manager would realize the problems in the factory.
- To improve the color fastness, one who is going to place dyeing orders must show and insist what levels of color fastness required for their products.
- Their productivity is much lower than that of in Japan. To improve it, they have to study "time study and motion analysis".
- The following work is recommended to improve the productivity of the factory:  
The leaders should finish the jobs left unfinished in the process by workers after leaving the workers and complete preparation works for tomorrow.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
21-May-98	Harare	TEX-4	M.D. Etal

Evaluation	Point*
Technology	3
Quality of Production	3
Profitability	2
Marketing	3
Labor	3

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 100,000,000.

Sales: Z\$: 90,000,000.

No. of Employee: 2,000

### 2. Activity of Company

- The company is manufacturing knitted fabrics, woven fabrics and blanket.
- They have spinning, dyeing, weaving, knitting, mercerizing, texturing and blanket facilities.
- Products are woven fabrics, knitted fabrics and blanket.
- Only 10 to 20% machines are in production due to a delay of payment from a bank for procurement of lint, which caused the lay off of 5,000 employees and only 2,000 employees were working in the factory.
- Main production items are denims which is a monopoly of this factory, 100% polyester lining fabrics, printed fabrics, T/C pants, shirting fabrics, blanket and etc.
- Machinery seems well maintained.

### 3. Facts found and analysis

- They lack working capital, which causes a very low operation in the factory.
- A cargo clearance is used to take about 2 weeks, which is too slow for the factory.
- The procedure of borrowing money from banks is too complicated and paid not in time for them.
- Bank takes too long to process the money and too little amount to lend for them.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
21-May-98	Harare	TEX-5	M.D. Etal

Evaluation	Point*	
Technology	4	
Quality of Production	4	
Profitability	5	
Marketing	5	
Labor	4	

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 250,000.

Sales: Z\$: 3,000,000.

No. of Employee: 50

### 2. Activity of Company

- Main facility is Juki's new sewing machines, which they bought 2 years ago when the company established. And they have enough machines at present..
- The company is manufacturing casual ladies' dresses, middle to high class quality.
- Raw and sub-materials are directly imported from Korea by themselves, and the quality has been good and the prices are competitive unlikely to many of other SMEs in this field.
- They sell the products to high class retailers.
- The main customers are indigenous people who prefer to wear polyester, nylon and etc. which are originally made in Japan but they have been getting similar one from Korea and Taiwan.

### 3. Facts found and analysis

- They lack working capital.
- The payment conditions of stores and shops are 30 days after delivery.
- The import duty for raw and sub-materials won't be refunded unless the export percentage exceeds more than 80%.
- A cargo clearance is used to take about 2 weeks which is too long for this factory.

### 4. Advice

The following advice is made, namely:-

- Collar sizes of right and left which are a critical zone for the shirts should be inspected properly, since there are many unbalanced collar points of right and left.
- The reason of above mistake should be carelessness of inspectors, which needs everyday training to remind employees' attention.
- An excessive cloth at the collar point should be cut to avoid uneven swells after finishing.
- Their productivity is lower than that of in Japan. To improve it, they have to learn "time study and motion analysis".
- The following work is recommended to improve the productivity of the factory:  
The leaders should finish the jobs left unfinished in the process by workers after leaving the workers and complete preparation works for tomorrow.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
22-May-98	Harare	TEX-6	M.D. Etal

Evaluation	Point*	
Technology	3	
Quality of Production	3	
Profitability	2	
Marketing	1	
Labor	3	

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 32,000.

Sales: Z\$: 850,000.

No. of Employee: 27

### 2. Activity of Company

- The company is manufacturing casual wear on CMT(Cutting, Manufacturing & Trimming) basis, and patterns are supplied by the client.
- By the nature of products, job loading is not even throughout of the year, and almost one third of the year are facing shortage of job. (loading only 20~25%)
- The quality, including design, is moderate, however QC has not reached as average standard, since only one inspector (MD himself) is doing the inspection.

### 3. Facts found and analysis

- Cost analysis is carried out briefly as shown below:-

Raw material ( Denim): Z\$62 per meter per 58" width

Required quantity for making a shirt : 1.6 meter

Factory cost per pc.      1. Fabric 62x1.6x1.05 = 104.16

2. Sub materials, etc      = 35.00

3. Stone wash              = 15.00

4. Making Charges         = 30.00

**Total price ex factory    184.16**

equivalent in US\$10.95  
I. & F., Imp. Charges: US\$4.95

- Landed price in Japan US\$15.90 (or J. Yen2,150) seems rather high and may not be accepted by Japanese market, if design and quality of the shirt are kept same level as produced at present.
- The following problems were observed, viz.:-
  - Shortage of working capital
  - Shortage of machinery and equipment, such as:-
    - Bar tucking sewing machine, Press for trousers.
  - Shortage of work due to seasonal fluctuation of demand.
  - Poor control system on production and quality.

#### 4. Advice

The following advice is made, namely:-

- Inspection at present is carried out by MD only, and therefore, inspection stage becomes a bottleneck in the case where the MD is busy. The inspector in charge must always attend at factory.
- Concept of "To dispose of useless articles, To put in order, To clean & inspect equipment, To keep cleanliness & To instill to keep to the rules" must be introduced.
- A defect on collar attaching was observed due to defect in sewing. Recommendation to improve inspection practices at sewing stages is made.
- Preparation works by job leaders or charge hands for tomorrow's job are not carried out.

The importance of such preparation in improving productivity is justified using facts found at the site.



## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
26-May-98	Bulawayo	TEX-7	M.D. Etal

Evaluation	Point*
Technology	2
Quality of Production	3
Profitability	4
Marketing	4
Labor	2

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 32,000.

Sales: Z\$: 1,500,000.

No. of Employee: 26

### 2. Activity of Company

- The company is mainly manufacturing sports wear like soccer uniforms.
- Materials used are 100% polyester or mixed cotton.
- Products are focussed on people of middle class income, and show room is arranged inside the factory premises.
- Due to nature of sports wear market, import and sales of second hand wears are practically impossible which has helped the company to maintain a good level of profit.
- However, productivity and quality seems to be not good because the products are not facing severe competition.
- The condition of the factory seems to be not in good order since various things are scattered here and there which could reduce the productivity largely.
- Turn round of working capital seems good since stock of raw materials are kept minimum.

### 3. Facts found and analysis

- Supply source of sports wear raw materials is very limited and this has forced the manufacture to buy rather high priced raw materials and sometime to loose the flexibility of material supply.
- Productivity seems to be half or one-third of that of in Japan.

- The working attitude of the workers seems not to have reached to that of in ASEAN countries.
- The Bonus is paid to workers if they achieve more than target.
- Shortages of facilities and equipment are obvious, viz. band knife, pressing machine, 2N lock stitch sewing machine & etc.
- The access to useful data regarding materials, equipment, etc. are difficult.
- Although some amount of export is carried out, the company can not get any incentives since criteria set by Government is too high (80% export).
- The shortage of working capital becomes one of barriers to enter into export market.

#### 4. Advice

The following advice is made, namely:-

1. Dissemination of the concept, " To dispose of useless articles, To put in order, To clean & inspect equipment, To keep cleanliness & To instill to keep to the rules", which will contribute to the improvement of productivity, shall be carried out for all levels of workers and staff.  
The practicing of the above concept shall be done every day, just before leaving the shop.
2. It is recommended that the study to find out causes of defects of products and the necessary remedy be done by those who caused such defects. This should be carried out immediately when soon after the defect is found. ( The defective products produced during the working hours should be repaired by the person who caused the problems after the day's works together with the leader in charge)
3. The habit of keeping time and pace must be practiced by employees to maintain harmony among different stages of work.
4. Time study & work analysis to establish standard pitch time must be carried out, and such standard pitch time shall be introduced in production planning.
5. Preparation works such as preparation of materials, finishing the work in progress etc. before commencement of work should be carried out by the job leaders to improve smooth operation of works. Such operation work should be done not before the start of daily work, but after the closing of the job for the day as a way of preparation for tomorrow's activities.

The above advice is given to job leaders, which is strongly requested by the managing director.

# Results of Production and Technology Diagnosis

Date: from July 21, 1998 to July 23, 1998

(a) Factory work flow:

Receipt of customer order ---- fabrication of prototype pattern ---- sample fabrication ---- pattern modification ---- issuance of factory production order ---  
- cutting ---- sewing ---- finishing ---- packing ---- shipping

(b) Equipment layout:

See attached equipment layout plan

(c) Time study of the track suit top and bottom

See attached time study sheet and graphs

(d) Results of diagnostic survey

1) Confirmation of previous instructions

1. To keep starting time of operation:

The starting time of the factory has been kept since the instruction given to the leaders at previous visit.

2. To keep the concept of “To dispose of useless articles, To put in order, To clean and inspect equipment, To keep cleanliness & To instill the need to keep the rules”:

All the workers participate in cleaning of own machine after the work and cleaning the surroundings.

3. To improve the quality consciousness and the participation of QC activities:

They started the movement to promote the quality consciousness with the logo of “Get right first time”.

4. The time study and work motion analysis to improve the

productivity:

The owner compares the result of production with the target everyday.

And he calculates all costs of products to set proper mark up for the turn over.

Target turnover: Z\$13,500/day

Projected total expense: Z\$105,570/month

Ex. Track suit top & bottom

Z\$340/set Ex-factory price

Target production:  $Z\$13,500/340=40$ sets/day

Result: 35~36 sets/day

Achievement %: 88~90%

5. The preparation works by group leaders:

The 6 group leaders prepare the next day's jobs after the day's job is over.

And the next day, they come earlier than the other workers to make preparation works for them.

6. To write records of production:

The owner starts recording the daily production and comparing the results with the target to take an action for improvements.

2) Technical diagnostic study & advice

1. The studies for switching the items and a factory layout were carried out as follows:

The managing director instructed the workers to move to new positions to start the production of new item, which took for about 30 minutes to complete the new setting.

All the workers moved to different machines from that of yesterday.

The switching from shorts production line to a tracksuit top

was started with four sets of sewing machines initially, which was smoothly completed because of the regular item.

The managing director and a group leader distributed the works to workers based on the experience.

2. Problems

2-1 The decision of switching position is not made by the result of time study.

2-2 Therefore, there are differences of the stock in the line.

2-3 The process of the line is not flowing along with the order of the production so that some processes are flowing backward.

From the above mentioned result, the following guidance was given:

1. The time study for the tracksuit top and bottom, which were switched from the previous item, are instructed to the managing director.
2. The analysis of the time study is made based on the data of attached sheet 1 & 2. And the way to analyze the result of the time study is also guided to the managing director.

	Pitch time	Formation efficiency
Tracksuit tops	289 sec.	74%
Tracksuit bottoms	339 sec	61%

The formation efficiency of over 85% is normally necessary. As a result of this diagnosis, neck processes are found in the line. (Cf. attached pitch diagrams)

Working hours to use the sewing machine is only 10 to 20% in the sewing work.

The remainder of 90% in the sewing work is mainly preparation works for sewing, material-handling time, which are guided to the managing director, too.

The neck processes are analyzed and works exceeding the pitch time are delivered to the preceding and next processes respectively.

(Cf. Pitch diagrams attached)

3. Production target:

The target production quantity is decided consulting the pitch time that is calculated from the process time measured and the formation efficiency.

Ex

The allowance to the production time: 20%

The formation efficiency: 85%

3-1 Tracksuit top:

Plan for production quantity =  $\frac{\text{working hours/day} \times \text{Nos. of worker} \times \text{formation efficiency}}{\text{Total processing time} \times (1 + \text{allowance})}$

$$\begin{aligned} &= \frac{9 \times 60 \times 60 \times 11 \times 0.85}{3176 \times (1 + 0.20)} \\ &= 79 \text{ sets/day} \end{aligned}$$

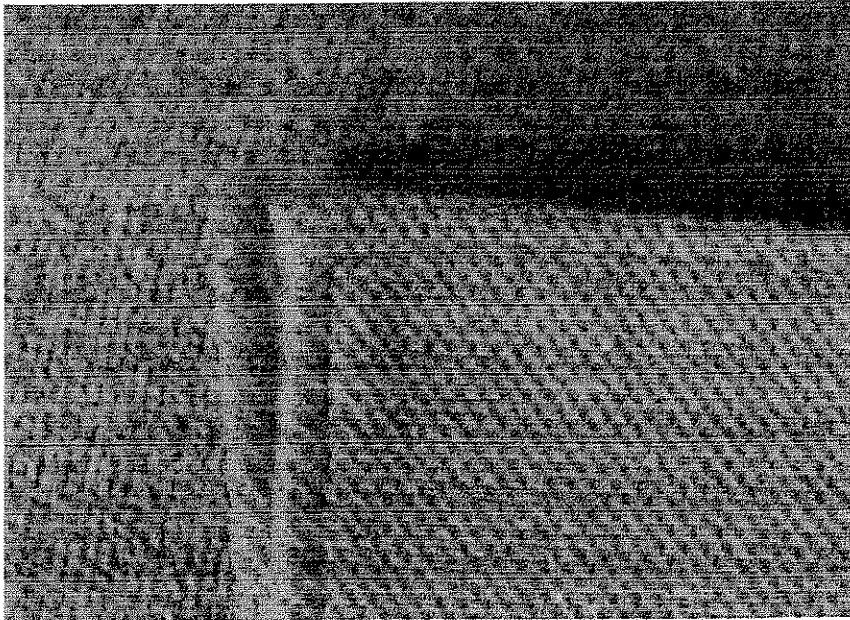
3-2 Tracksuit bottom:

Plan for production quantity =  $\frac{9 \times 60 \times 60 \times 6 \times 0.85}{2150 \times (1 + 0.20)}$

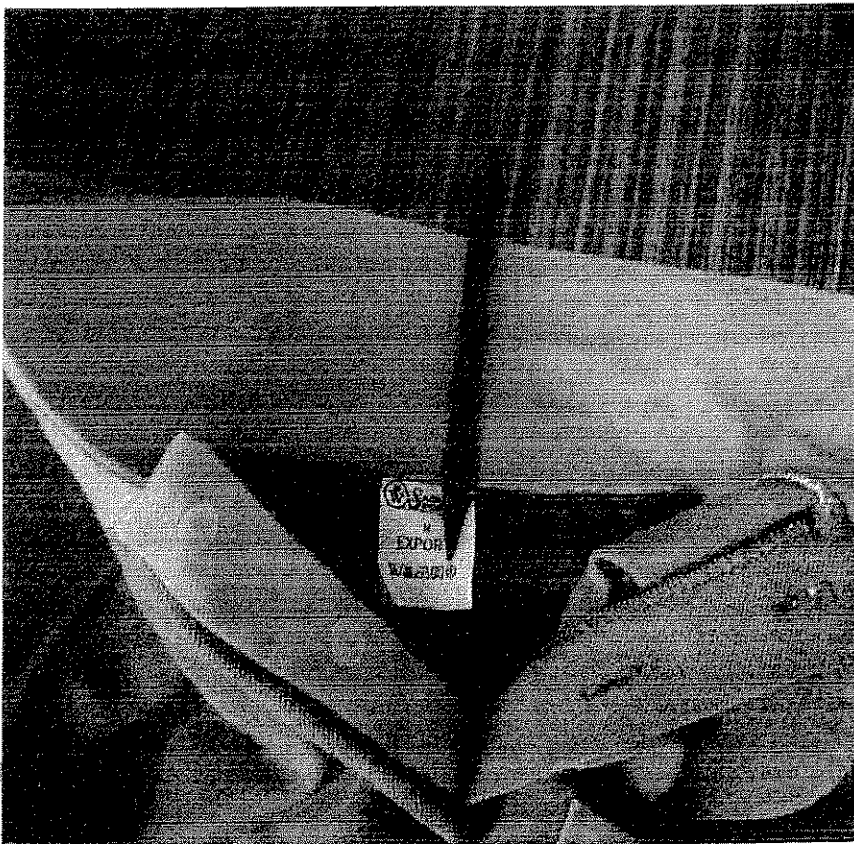
$$\begin{aligned} &= 64 \text{ sets/day} \end{aligned}$$

The above method is introduced to evaluate the production targets using the actual figures measured.

Inequality of Collar Points



Woven Name is not in the center of collar



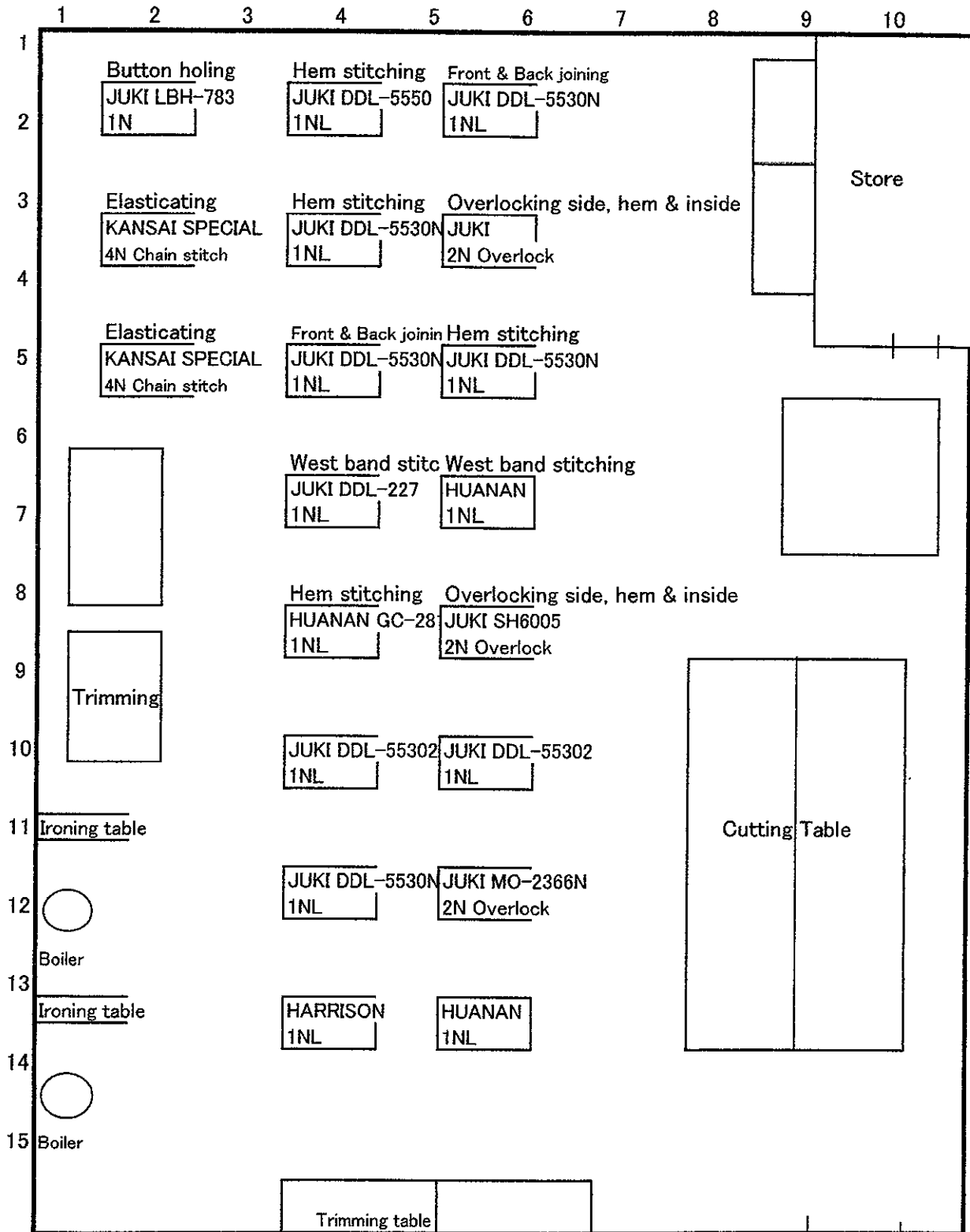




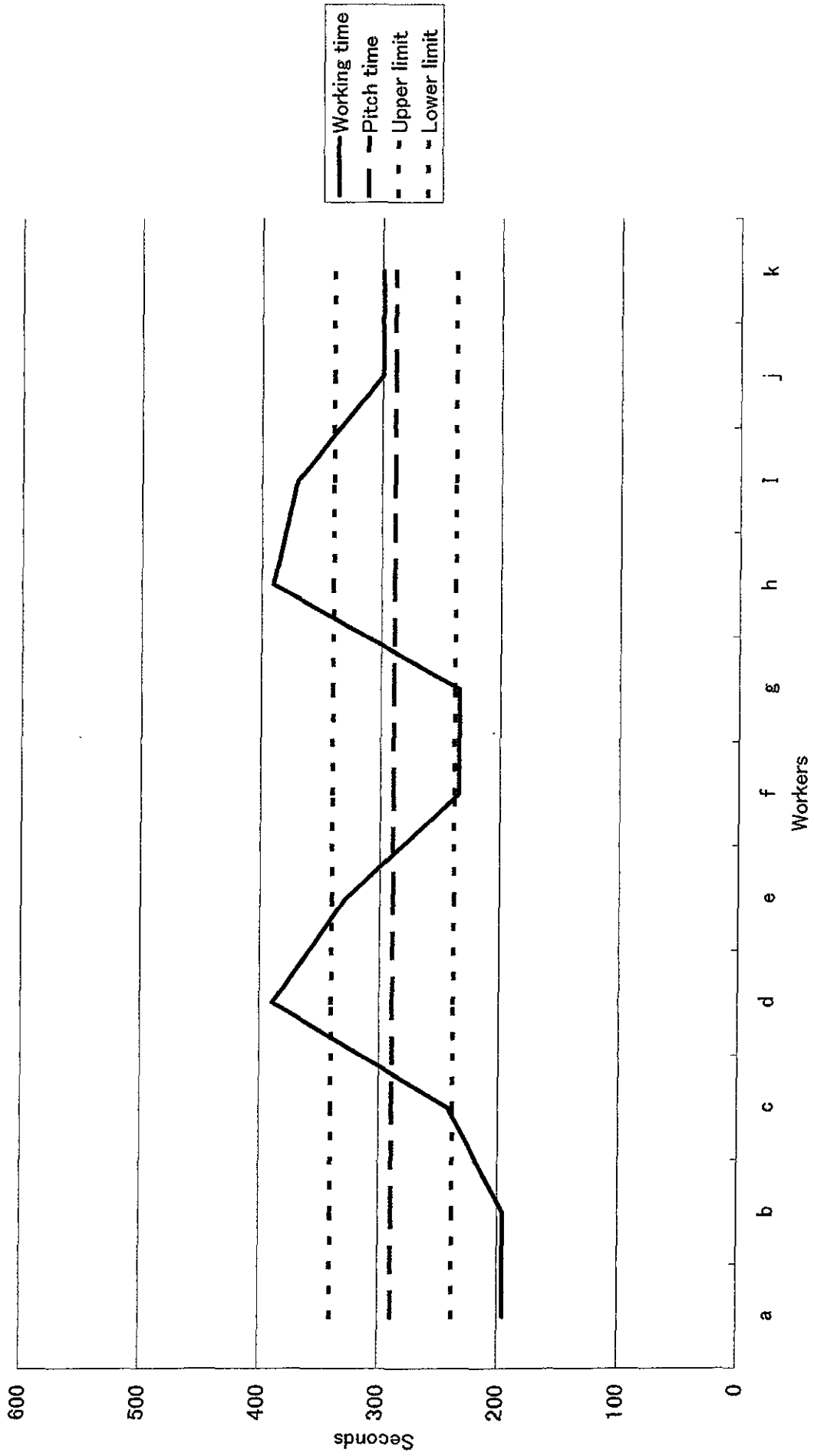
Short Pants

# Layout

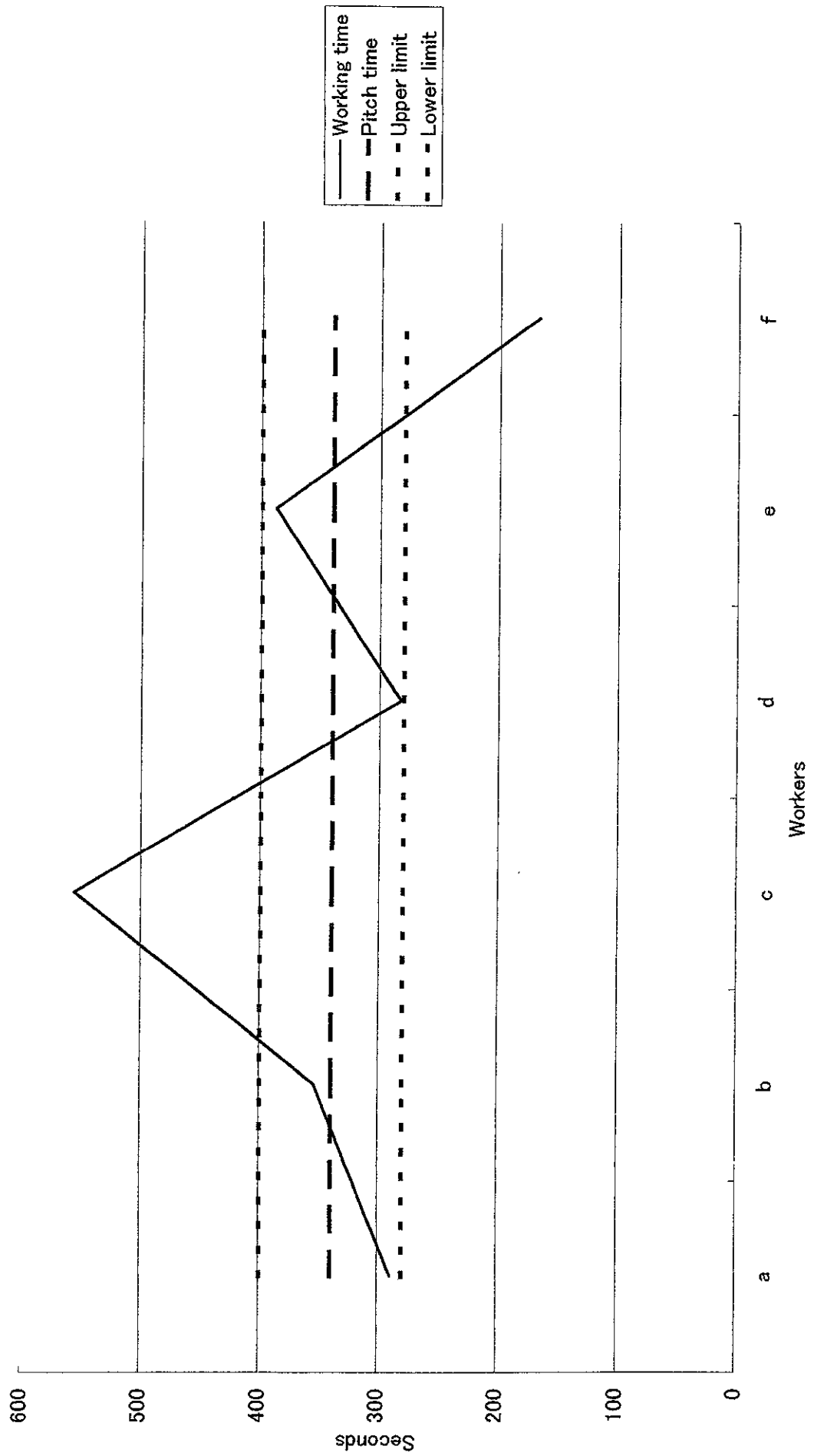
(Unit: meter)



Track Suit Top



Track Suit Bottom



	Top	Sewing Machine	Time	Sec.	Operator
1	Pocket flap stitch on	Lock stitching	0:01:21	81	2
2	Flap catch & Close pocket	Lock stitching	0:05:10	310	
3	Stitch sleeve to back	Overlock stitching	0:00:46	46	
4	Stitch sleeve to front	Overlock stitching	0:00:53	53	1
5	Join side seams of front & back	Safety Overlock	0:02:23	143	
6	Join yoke to front & back	Lock stitching	0:04:16	256	1
7	Join shoulder seams	Lock stitching	0:02:13	133	
8	Prepare collar & label	Lock stitching	0:01:18	78	1
9	Sew collar & facing on	Lock stitching	0:03:25	205 *	
10	Stitch zip on & top stitch collar	Lock stitching	0:07:48	468	2
11	Sew on elastic waist & sleeves	Lock stitching	0:06:30	390	1
12	Elasticate waist & sleeves	Lock stitching	0:01:53	113	1
13	Sew lining to facing	Elasticator	0:01:18	78 +	
14	Sew lining on to garment	Overlock stitching	0:09:58	598 *	2
15	Close lining opening	Lock stitching	0:00:45	45 *	
16	Prepare lining	Overlock stitching	0:02:59	179 +	
			0:52:56	3,176	11
		<b>Total production time:</b>	<b>3,176 sec</b>		<b>289 sec Pitch Time</b>
	Bottom				
1	Prepare pocket	Lock stitching	0:04:49	289	1
2	Prepare side piece	Lock stitching	0:02:38	158 **	1
3	Join front & back seams	Lock stitching	0:01:30	90 **	
4	Press seams	Presser	0:01:58	118	
5	Join side seams	Lock stitching	0:07:18	438	1
6	Join inside seams	Lock stitching	0:01:46	106 **	
7	Sew lining on	Lock stitching	0:04:42	282	1
8	Sew elastic on	Lock stitching	0:06:28	388	1
9	Prepare lining	Overlock stitching	0:02:47	167	1
10	Elasticate waist & legs	Elasticator	0:01:54	114	
			0:35:50	2150	6
		<b>Total production time:</b>	<b>2,150 sec</b>		<b>358 sec Pitch Time</b>

**Track Suit Top**

	<b>Worker</b>	<b>Working time</b>	<b>Pitch time</b>	<b>Upper limit</b>	<b>Lower limit</b>		
1	a	196	289	340	238		
2	b	196	289	340	238	Pitch Time:	289
3	c	242	289	340	238		
4	d	389	289	340	238	Formation efficienc	74%
5	e	328	289	340	238		
6	f	234	289	340	238	Control Basis	
7	g	234	289	340	238	Upper limit	340
8	h	390	289	340	238	Lower limit	238
9	I	370	289	340	238		
10	j	299	289	340	238		
11	k	299	289	340	238		
		3,176					

**Track Suit Bottom**

	<b>Worker</b>	<b>Working time</b>	<b>Pitch time</b>	<b>Upper limit</b>	<b>Lower limit</b>		
1	a	289	339	399	279	Pitch Time:	339
2	b	354	339	399	279		
3	c	556	339	399	279	Formation efficienc	61%
4	d	282	339	399	279		
5	e	388	339	399	279	Control Basis	
6	f	167	339	399	279	Upper limit	399
						Lower limit	279
		2,036					
		without elasticator					

# Results of financial diagnostic study

{ Comment: }

- Positive Attitude and Quick Action Adopting Useful Advice
- Sales Activity at a Direct Store
  - Understanding of Customers' Trend
  - Increasing of Added Value

# PROFITABILITY

MARK	INDICATION	1996	1997	Japanese Index
A1	Operating Profit to Net Sales	<u>-1.6</u>	2.1	4.2
A2	Gross Profit to Net Sales	20.1	31.1	22.1
A3	Operating Profit to Working Capital	<u>-2.6</u>	4.6	7.4
A4	Operating Capital to Turnover	1.6	2.2	1.6
A5	Selling & Admin. Expense to Sales	21.7	29.0	17.9



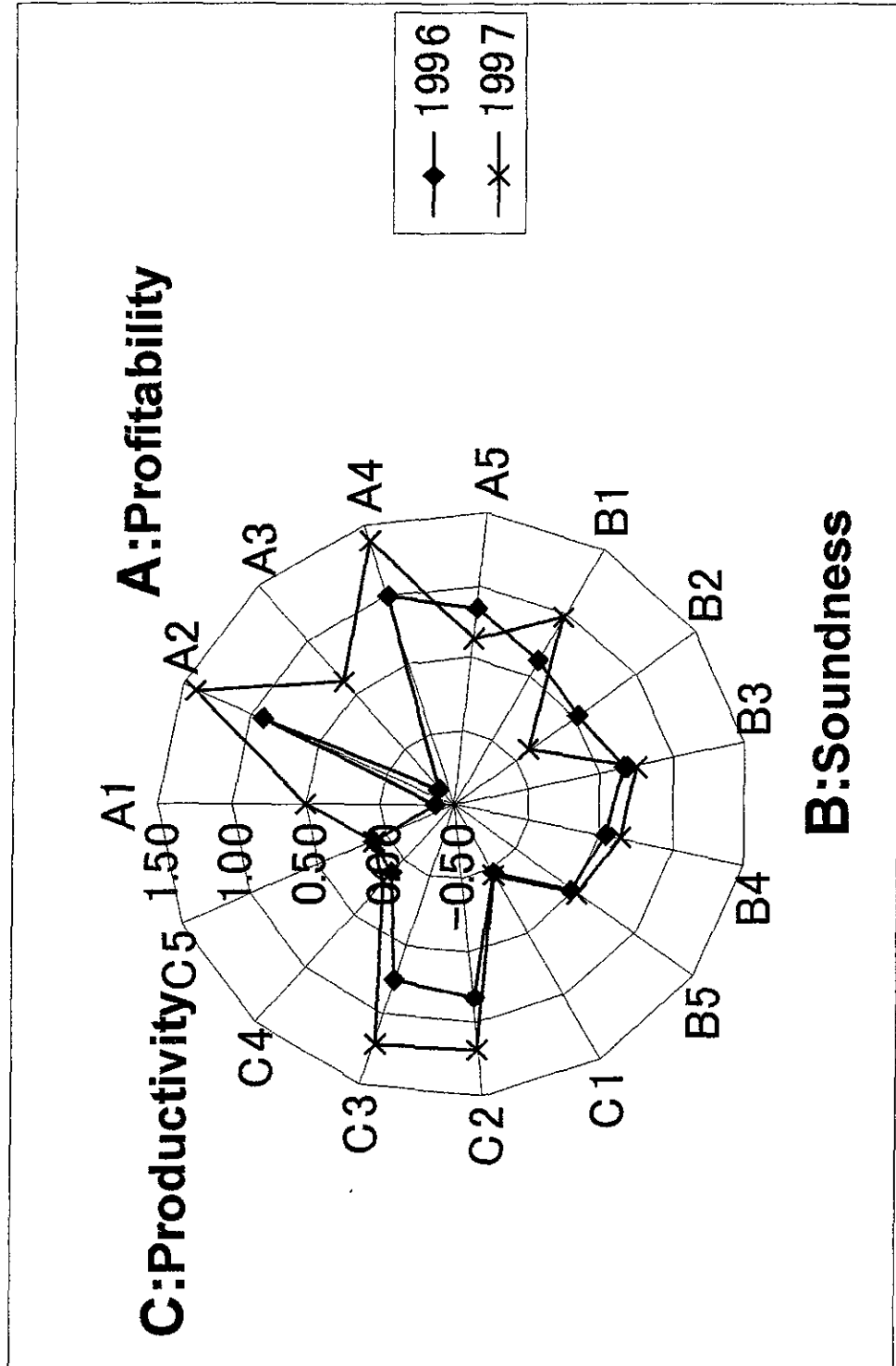
# SOUNDNESS

MARK	INDICATION	1996	1997	Japanese Index
B1	Net Worth to Total Capital	27.5	42.2	44.2
B2	Interest Paid to Sales	2.3	<del>8.9</del> 1.2	1.2
B3	Fixed Assets to Long Term Capital	102.9	92.0	69.4
B4	Current Ratio	97.0	117.9	180.7
B5	Quick Ratio	61.0	70.0	129.9

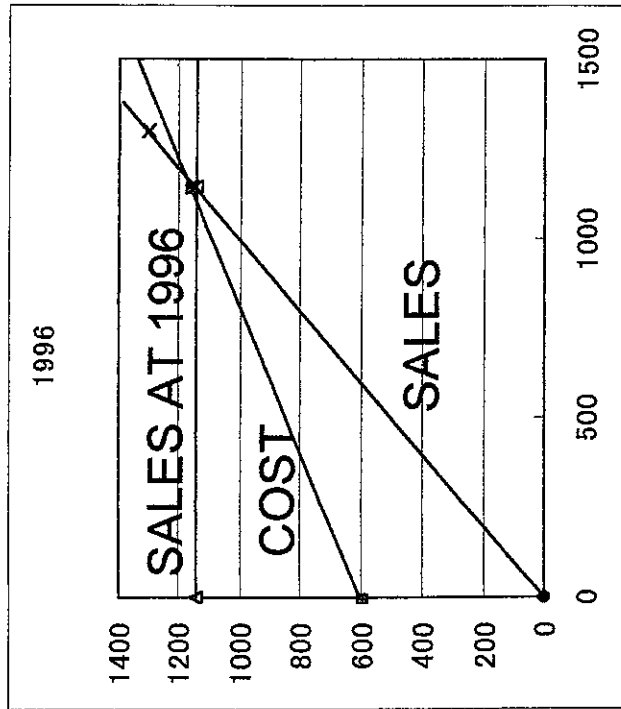
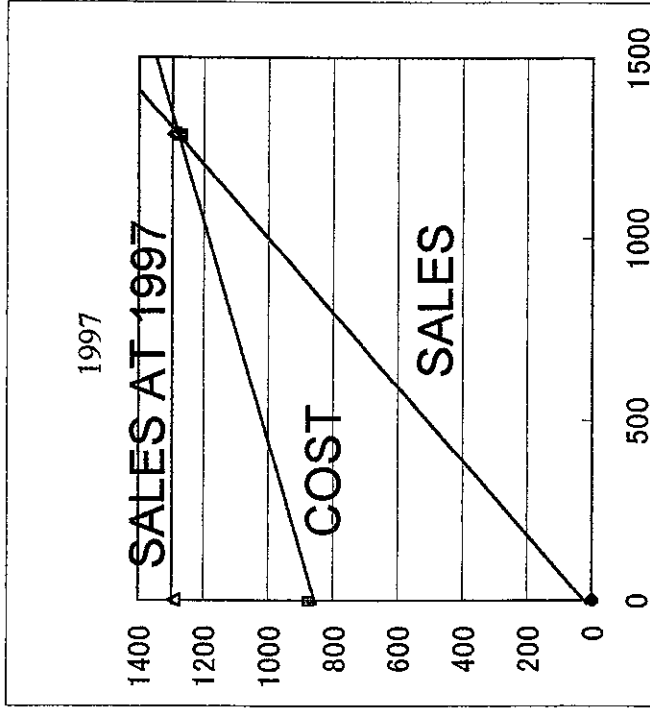
# PRODUCTIVITY

MARK	INDICATION	1996	1997	Japanese Index
C1	Annual Production per Head	155	256	6,822
C2	Personnel Expenses to Processed Amount	62.0	43.2	50.8
C3	Processed Amount to Net Sales	44.7	71.2	58.8
C4	Efficiency of Machinery Investment	1.5	2.5	11.9
C5	Machinery per Head	102	103	1041

# RADAR CHART



# BREAK EVEN POINT ANALYSIS



# RECOMMENDATION

- Accurate Financial Report Consistent with Each Page
- Improvement of Productivity Based Actual Observation and Rational Analysis

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
28-May-98	Bulawayo	TEX-8	M.D. Etal

Evaluation	Point*	
Technology	2	
Quality of Production	3	
Profitability	2	
Marketing	4	
Labor	3	

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 32,000.

Sales: Z\$: 7,200,000.

No. of Employee: 36

### 2. Activity of Company

- 13% of products are exported.
- The GM is willing to invest yarn dyeing facilities, with which he expects to expand export markets. He is planning to go to USA on June to negotiate about the yarn dyeing machines. He has a confidence about the facilities since he attended most of the international exhibitions held at overseas.
- He is eager to get an approval of ISO9001 to have a better opportunity to expand their ability for exports and European advisors for the ISO are working for the preparation.
- The company wanted the technical assistance from abroad.

### 3. Facts found and analysis

- Less than a half of the machines, out of 14 machines, are operated when entered the factory by 5 workers, operators and technicians.
- Both productivity and quality appear to be not high.
- The working attitude of workers was not as good as that of ASEAN countries.

- The facilities in the factory are not so old, rather modern, though the workmanship doesn't seem to be matching the levels of facilities.

#### 4. Advice

The following advice is made, namely:-

- No advice is made.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
28-May-98	Bulawayo	TEX-9	M.D. Etal

Evaluation	Point*	
Technology	2	
Quality of Production	2	
Profitability	4	
Marketing	4	
Labor	2	

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 50,000.

Sales: Z\$: 480,000.

No. of Employee: 16

### 2. Activity of Company

- Main customers are hawkers.
  - Main products are nighties and bedclothes.
  - Raw materials for nighties are local made polyester knitted fabrics of which costs are set low.
  - None is competing with the company in this field and she monopolized the market.
  - Machinery is set in a very small space and the raw materials are piled up here and there.  
And sponges used mainly for bedding are also piled with a huge volume.
  - The owner realizes that the current market is a very profitable market and also she thinks she has to prepare for incoming competitors by discriminating their products.
- The facilities were bought and started last year, so the machinery in the factory does not contain all types required and numbers. She is willing to invest more machinery gradually.

### 3. Facts found and analysis

- The space of factory is too small to consider both for the efficiency and for productivity.
- The quality of products are not evenly made because of lack of proper machinery.



- The products are planned by themselves since the main customers are hawkers.
- It will be difficult for them to maintain the high profit when they have competitors.

#### 4. Advice

The following advice is made, namely:-

- None

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
29-May-98	Bulawayo	TEX-10	M.D. Etal

Evaluation	Point*	
Technology	3	
Quality of Production	3	
Profitability	3	
Marketing	2	
Labor	2	

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital: 32,000.

Sales: Z\$: 552,000.

No. of Employee: 20

### 2. Activity of Company

- The company was bought and started two years ago by the current owner.
- The owner did not know about this type of business when it started, and he employed one technician to manage the factory.
- His wife is working in the factory as a manager and a cutter.
- Workers can start and finish works punctually though the speed of works during the time is slow.
- The capacity utilization of factory is about 50% and the sizes of orders are not big quantity, which makes the continuous operation difficult.  
Orders placed by big stores, shops and etc. are not covering the capacity of the company. So they have to sell the products to rural area by themselves.
- They are looking for good suppliers of raw and sub-materials since it has been difficult for them to get it locally.
- The working capital is lacking, too. When we visited the company, some came to cut electric power since no payment seems to have made until recently.
- They explained that a borrowing money from banks were difficult because of banks' conditions.
- Embroidering and printing to the garments was outsourced, which didn't make their products

competitive.

- They wanted to invest embroidering machines and printing equipment.

### 3. Facts found and analysis

- The sound of sewing machines were not big compared to numbers of machines when entered into the factory, which shows the low productivity.
- There was no button holing machine, which causes unevenness of qualities.
- They don't have enough working capital.
- They don't have enough suppliers of raw and sub-materials.
- The orders are not covering the capacity of machines.

### 4. Advice

The following advice is made, namely:-

- The work motion of employees is better than an average of factories visited though there is some rooms to improve it.
- To improve quality of products, the concept of "to dispose of useless articles, to put in order, to clean & inspect equipment, to keep cleanliness and to instill to keep to the rules" should be gotten into habit of workers as an example of promoting quality consciousness.
- As an example of preventing same mistakes in the production, how workers should improve quality consciousness, is taught that many companies in ASEAN countries adapt the repairing works after working time by the person made it.
- As roles of leaders, the preparation for tomorrow and works uncompleted by workers in the day should be finished.  
  
by the leaders, which may promote work efficiency and the responsibility of employees.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
1-Jun-98	Masvingo	TEX-11	M.D. Etal

Evaluation	Point*
Technology	3
Quality of Production	2
Profitability	4
Marketing	3
Labor	3

(\*1-Very Bad, 2- Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Outline of Company

Capital:

Sales: Z\$: 736,000.

No. of Employee: 9

### 2. Activity of Company

- The factory premises are divided into two, one for shop and the other for factory.  
And the shop is facing to main street of Masvingo and the factory is behind of it.
- The main product is Java on which fabrics are printed and embroidering an African design colorfully.
- The products are sold at their shop.
- The fabrics are not only printed but tie and dye by a woman in the backyard of the factory.  
The tie and dye applied is a very primitive method, squeezes the cloth on the concrete floor, pours bleaching liquid and washes by water or pours color dyes.
- The scale of factory including the shop is very small with 9 workers.
- Machines in the factory are too old and are not industrial use but house-use.
- The owner wishes to renovate the facilities as soon as possible.
- The profit from the sales and production seems high since they do it by themselves.
- The shortage of working capital prevents them from supplying and exporting the products which are popular and salable even in South Africa.
- The products are highly value added, such as the tie and dye, printed, embroidering and sales by themselves, which definitely has very high margin and profit.

### 3. Facts found and analysis

- The space is too small to consider the efficiency of production.
- The uniformity of products is not seen because of machinery installed.
- The production lot in the factory is mainly only one piece, so they will not be able to produce the mass production which needs uniformity of products.

### 4. Advice

The following advice is made, namely:-

- None

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
01-Jun-98	Gutu	TEX-12	Director Etal

Evaluation	Point*	
Technology	3	
Quality of Production	3	
Profitability	2	
Marketing	2	
Labor	3	

(1-Very Bad, 2-Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$32,000.      Sales: Z\$1,260,000.      No. of Employee: 35

### 2. Activities of the Company

- The company was built at the growth point in Gutu, the owner's hometown.  
The factory started and equipped with Juki sewing machines from the beginning, however the capacity has not been filled with enough amounts of orders since the starting.
- Buyers' offices are located in Harare so that the owner has to come to see them there.  
And they have to bring the raw materials for orders from Harare to Gutu.
- Problems of locating in Gutu are as follows:
  - 1) The market in Gutu are too small for the size of industry.
  - 2) Highly educated or trained human resources are limited in this area.
  - 3) The minimum wage is decided to a same amount everywhere in the country by the Government.
  - 4) The tax holiday incentive for 5 years is given to the company, though this has not been materialized because the company has made no profit since the starting.
  - 5) There are no attractive aspects or incentives for highly educated or trained young generation

to keep them in this area.

- The company may create profits for this year since they succeeded to receive orders from the Government for this year.
- The interest rates, 25% to 36%, for the borrowings amounting to about Z\$2mil., seem to be too heavy for the company even if the turnover would become double of that of the previous year.

### 3. Findings and Analysis

- Education and training of human resources for the employees have not been made since the company failed to employ such human resources.
- The employees seem to be satisfied with the present state of no motivation of improvement, which might be caused by having no competitors near this company.  
As a result, the productivity of the company is low.
- The machines invested have not been in full operation since the investment had not been based on the orders but a plan.
- The raw materials' supplier for the company is only one and the prices are set high, which leads no competitiveness in the market.
- The education for the employees is not enough.
- The package of pensioning scheme has been very heavy burden for the company.
- It has been too heavy for the company to pay all the education expenses for the employees.
- The wholesaler who is the supplier of the raw materials, is the buyer at the same time is the manufacturer and the competitor of the company.  
So, the buyer tends to cheat the order prices of CMT basis.

### 4. Advice

- Concept of "To dispose of useless articles, To put in order, To clean and inspect equipment, To keep cleanliness & To instill the need to keep the rules" must be introduced.

The current state of storing raw and sub-materials is not so neat.

- Three quality inspectors inspect the quality of garments at the final stage of the process, where the garments are on hangers. However, the collar balance of the garments has not been inspected and found some inferior quality products, unbalanced collar.

This must be a routine work for the inspectors since the collar is a critical point of the garments.

- Garments with swollen collar points are found in the process of stitching.

It was advised that the excess cloth of the collar point should be cut before turning it.

- Production targets have not been set properly since the time study of the works has not been carried out sufficiently, which affected the productivity of the production, too.

The time study and the analysis of work motion have to be carried out.

- Proposals for new garment patterns have been relied on the samples and patterns sent by buyers, which may be proposed by the supplier after studying fashion trend.

The fashion magazines are going to be introduced at next visit.

- The employees have to be educated and be trained by everyday basis since the causes of inferior quality of garments are from the carelessness of employees.

- The machinery invested at the beginning are mainly second handed so that they needed the latest machine catalogue.

The catalogue may be introduced at the next visit.



## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
02-Jun-98	Kwekwe	TEX-13	Sales Rep. Etal

Evaluation	Point*	
Technology	2	
Quality of Production	2	
Profitability	2	
Marketing	3	
Labor	2	

(1-Very Bad, 2-Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$3,900.      Sales: Z\$210,000.      No. of Employee: 9

### 2. Activities of the Company

- The company was established in 1978 as a training center of sewing technique.  
The business is continued and there are 9 trainees studying for the sewing technique at present other than 9 employees of the company.
  
- The owner was making patter for cutting section when we visited.  
The owner is a technician of cutting and the plant manager of the factory.
  
- The shareholder is composed of about 10 people.
  
- A new factory is being scheduled to construct by the investment from the shareholder and loan from banks.  
The drawing of the factory has already prepared and the plan has also permitted by the city council of the town.  
The new factory will be built soon after finding the creditor of Z\$500,000 for the cost of building.

- The present factory equipment is old fashioned and the work speed of employees is slow.
- The quality of the product is not good.
- The lack of working capital prevents from the utilization of capacity of facilities.  
The owner mentioned that there are enough amounts of works if the owner would want.
- The factory faces the high cost of transportation for bringing in raw and sub-materials and for delivering their products to customers.  
To minimize the costs of transportation the owner is going to procure a car in the near future, however, the cost of maintenance for the car has not been calculated yet.

### 3. Findings and Analysis

- The work environment for the factory especially the lighting is not good since a garage space was utilized for the factory and put no additional investment for it.
- The education and training for the workers are not sufficient.
- The inspection work of the products has been made by the owner and there is no other inspector, which is difficult to give enough inspection to their products.

### 4. Advice

- It was persuaded that the work motion should be studied since the speed of work in the factory seemed very slow.
- It is important for the employees to improve the quality by motivating the quality consciousness of the entire factory.
- Concept of "To dispose of useless articles, To put in order, To clean and inspect equipment, To keep cleanliness & To instill the need to keep the rules" must be introduced.

- The behavior of workers after completing jobs of the day was discussed with the owner and was explained some cases of East Asian Countries.  
The workers start cleaning the surroundings including the machine used after finishing the day's job.
  
- The following methods of preventing the repeated defective products applied in Asian countries including Japan are introduced to the company.  
The repair works of the defective products are made by the worker caused the problem after finishing the day's job together with the work leader without overtime payment.
  
- The role of work leaders in other countries is introduced as follows:  
The next day's preparation work should be surely done at the previous day.  
The remainder of works for individual workers should be completed by the work leaders after finishing the day's job.  
It was advised that the efficiency of works and the motivation of works might be improved through those activities.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
03-Jun-98	Gweru	TEX-14	M.D. Etal

Evaluation	Point*	
Technology	4	
Quality of Production	3	
Profitability	3	
Marketing	4	
Labor	4	

(1-Very Bad, 2-Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$32,000      Sales: Z\$20,000,000      No. of Employee: 130

### 2. Activities of the Company

- The company is owned by an Indian who intends to export their products.  
Present ratio of export is about 60% and the company is applying for EPZ.
- The factory is well managed and the employees are also well controlled.
- Raw materials are procured from local manufacturers mainly and the factory is able to import materials from Malaysia, China and etc. directly.
- The size of the factory is comparatively big and they have an ability of producing large quantity of orders, in fact, they got a big order from a factory in Kwekwe of mining town.
- However, it has been difficult for them to get orders for this year unlikely to the previous year, which reflects the stagnation of economy of this year in the country.

- Present operation rate of the facilities has lowered to 60%.
- The imported raw and sub-materials are put on an average import cost of about 30% including sur charges, for example, raw materials 30% and sub-materials from 13 to 50%.
- It takes one week to 10 days to clear the goods at the customs.
- The company lacks working capital so that they have to borrow the money from banks with the interest rates of 35 to 37% which is very high.
- The factory needs the technical assistance from Japan since their machinery is all from Japan.
- The agent of sewing machine in this country has not been servicing the customers properly. Therefore, they had to use an agent of sewing machine in South Africa, though the spare parts for the sewing machines have not been supplied enough.

### 3. Findings and Analysis

- Acquisition of working capital for the company has not been enough.
- The workers of this factory have not been trained sufficiently.
- It has been difficult to procure the spare parts for sewing machines.
- There isn't a person in charge for maintenance of machinery in the factory.
- The export incentives have not been given to the company.

### 4. Advice

- The speed of work motion for the workers are rather good, though there is a room for improvement.

- The needs of time study and work motion analysis was discussed and recommended to practice them in the factory.
  
- It is explained that the following concept influences greatly to grade the quality of products up. The concept is " To dispose of useless articles, To put in order, To clean and inspect equipment, To keep cleanliness & To instill the need to keep the rules"
  
- As an example to prevent relapsed inferior products, the following way of which is used in East Asian countries including Japan is introduced.  
The repairing works should be made after the day's work by the person caused the problem together with work leaders.
  
- It is one of the work leaders' jobs to make preparation work for tomorrow, which is recommended at the meeting with work leaders.
  
- It is also recommended to complete the jobs remained by workers at the end of day's work by work leaders. This may give ideas for the workers to try to complete jobs before leaving the factory.  
It is advised that the efficiency of works and the motivation of works should be improved through those activities.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
03-Jun-98	Gweru	TEX-15	Manager Etal

Evaluation	Point*	
Technology	4	
Quality of Production	4	
Profitability	3	
Marketing	2	
Labor	3	

(1-Very Bad, 2-Bad, 3-Agerage, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$32,000      Sales: Z\$3,229,000      No. of Employee: 157

### 2. Activities of the Company

- The company was established in 1959 and this was bought by the present owner in 1988.
- The company was approved ISO9002 in 1995.
- The materials and machinery in the factory are neatly arranged and put in order.
- The company sales and produce the products starting from the designing to the finished products for domestic high fashion retailers.
- The orders for the company have a seasonal imbalance, such as for winter production start from February to May, for summer from July to September and Christmas from October to December.

The months of January and June are quiet seasons for the production and the present operation rate of the facilities is 75%.

### 3. Findings and Analysis

- An acquisition of working capital has been difficult.
- CTDI, training organization for new comers especially for this company sponsored by Danish, stopped the activities last year.
- Procurements of parts and maintenance services for the machinery have been difficult.
- Procurements of raw and sub-materials especially for fine fabrics of synthetic fibers have been difficult for them.  
Ex. polyester 100% striped crape, micro fiber printed fabrics, satin sharmuse, lawn, etc.

### 4. Advice

- The company who can supply raw and sub-materials is introduced to them.



## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
03-Jun-98	Gweru	TEX-16	Director Etal

Evaluation	Point*	
Technology	2	
Quality of Production	2	
Profitability	4	
Marketing	4	
Labor	3	

(1-Very Bad, 2-Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$64,000      Sales: Z\$2,500,000      No. of Employee: 23

### 2. Activities of the Company

- The owner started the factory with two sewing machines.
- The machinery are set in 8 rooms of a residential house, which is not efficient for the production.
- The cutting table are set at a very narrow veranda of the house which is out of question in terms of efficiency of work.
- The company lacks working capital, which affects the procurement of raw materials.
- It has been difficult for them to borrow the working capital from a bank since the factory premise is a rent and have no sufficient mortgage facilities.
- It seems that they have enough orders. And workers are hard working under the

circumstances of dark lightning.

- It has been difficult for them to educate and train the employees since no such facilities near the place.

### 3. Findings and Analysis

- An acquisition of working capital has been difficult and the high interest rate made it more difficult, too.
- The education and training of the employees have not been sufficient.
- They have no proper suppliers of spare parts and mechanics who can repair machines.
- The export incentives have not been given to the company.
- The current building of the factory is not suitable as a factory and too small for them.

### 4. Advice

- To promote the employees' quality consciousness the following cases are introduced.
  - 1) How to practice the concept of " To dispose of useless articles, To put in order, To clean and inspect equipment, To keep cleanliness & To instill the need to keep the rules".
  - 2) How to act after the day's job.
- The following methods of preventing the relapsed defective products applied in Asian countries including Japan are introduced as an example of promoting quality consciousness of employees.
- The role of work leaders in other countries is introduced as follows:

The next day's preparation work should be surely done at the previous day.

The remainder of works for individual workers should be completed by the work leaders after finishing the day's job.

It was advised that the efficiency of works and the motivation of works might be improved through those activities.

- The working attitude of workers in this factory is rather good in the country. However, there is a room for improvement. Therefore, we explained and persuaded the necessity of the work motion study.

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
05-Jun-98	Mutare	TEX-17	M.D. Etal

Evaluation	Point*	
Technology	3	
Quality of Production	3	
Profitability	3	
Marketing	4	
Labor	4	

(1-Very Bad, 2-Bad, 3-Agerage, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$32,000      Sales: Z\$36,000,000      No. of Employee: 130

### 2. Activities of the Company

- The factory is owned by a white, and the present managing director is a son of the founder.
  
- The sound of machinery in the factory is very big and the workers are moving busily.  
This is one of the best factory among the factories visited this time in terms of activities of workers. Patterners are sent to a college for training sometime, and the time study is regularly made so that the work movements of workers are good and unnecessary behavior is not seen.
  
- The factory procures raw and sub-materials from local markets with no difficulty.  
Polyester fabric is imported from Taiwan and most of raw and sub-materials are procured from local markets, Harare, Kadoma, Bulawayo, Gweru, etc.
  
- Overall for farmers is one of the main products for this factory, however the income for the farmers relied on the international market price of tobacco a lot.  
The current market price of tobacco leaves is affected by recent decline of international

market, though it has regained a little.

- The maintenance works for machinery in the factory are made by themselves with no problem.
- They have been importing machinery from a company in Osaka and maintaining a good relationship.

### 3. Findings and Analysis

- An acquisition of working capital has been difficult and the high interest rate, 38%, made it more difficult, too.
- The transport cost of their products which depend on transporters is high.
- It has been very difficult to collect bills from debtors.

### 4. Advice

- Nothing particular

## FIELD SURVEY REPORT - TEXTILE

DATE	LOCATION	COMPANY CODE	INTERVIEWEE
05-Jun-98	Mutare	TEX-18	M.D. Etal

Evaluation	Point*	
Technology	2	
Quality of Production	2	
Profitability	2	
Marketing	2	
Labor	2	

(1-Very Bad, 2-Bad, 3-Average, 4-Good, 5-Very Good)

### 1. Out line of Company

Capital: Z\$32,000      Sales: Z\$148,000      No. of Employee: 12

### 2. Activities of the Company

- Three members of the owner's family manage the company of 12 workers.
- The main job for the company is sewing clothes from a broker on CMT basis.
- It seems difficult for the company to make profits since the CMT prices are set low.
- The town office had been placing orders to the company, but the company obliged to get orders from other customers since they are unable to procure raw materials because of insufficient working capital position since the beginning of this year.
- The company rents a part of their rent to a person who owns a business.
- The company recycles second hand furnitures after repairing.

- The managing director has a strong desire to enlarge his business and calculate the profit and loss about orders every time.
- Most of machinery and other equipment are also old fashioned. The facility they have is not sufficient enough for the production.  
Some of the machinery are by lease contract on hourly basis.

### 3. Findings and Analysis

- An acquisition of working capital has been difficult and the high interest rate, 38%, made it more difficult, too.  
It has been so difficult for them to get the fund even if applied for.
- They are unable to receive orders directly because of lack of fund to procure raw materials.
- They don't have designers, which makes them difficult to propose their own ideas to customers.

### 4. Advice

- It is explained that the following concept influences greatly to grade the quality of products up. The concept is "To dispose of useless articles, To put in order, To clean and inspect equipment, To keep cleanliness & To instill the need to keep the rules"
- As an example to prevent relapsed inferior products, the following way of which is used in East Asian countries including Japan is introduced.  
The repairing works should be made after the day's work by the person caused the problem together with work leaders.  
And repeating this type of method promotes the quality consciousness of workers.
- It is one of the work leaders' jobs to make preparation work for tomorrow, which is reconfirmed at the meeting with work leaders.

- It is also recommended to complete the jobs remained by workers at the end of day's work by work leaders. This may give ideas for the workers to try to complete jobs before leaving the factory.
  
  - The standard of the factory is very low. The factory needs training and education in every field.
- The managing director is willing to study very hard.



## **5. FURNITURE**



## LIST OF FACTORIES VISITED-FURNITURE

DATE	COMPANY CODE	INTERVIEWEE	COMPANY'S PROFILE		ASSESSMENT	
20-May	FUR-1	Marketing Director	LOCATION	Harare	Technology	3
			Capital		Qty of Production	3
			Sales amount	Z\$ 500.	Productivity	4
			No. of employee	14	Marketing	4
					Labor	3
					Total points:	17
20-May	FUR-2	Factory Manager	LOCATION	Harare	Technology	2
			Capital		Qty of Production	2
			Sales amount		Productivity	2
			No. of employee	12	Marketing	2
					Labor	3
					Total points:	11
21-May	FUR-3	Factory Manager	LOCATION	Harare	Technology	3
			Capital	Z\$ 4,500,000.	Qty of Production	3
			Sales amount	Z\$ 2,500,000.	Productivity	4
			No. of employee	90	Marketing	3
					Labor	4
					Total points:	17
21-May	FUR-4	Manager	LOCATION	Harare	Technology	4
			Capital	Z\$ 4,000,000.	Qty of Production	4
			Sales amount	Z\$ 1,200,000.	Productivity	3
			No. of employee	90	Marketing	4
					Labor	3
					Total points:	18
21-May	FUR-5	Managing Director	LOCATION	Harare	Technology	3
			Capital		Qty of Production	3
			Sales amount	Z\$ 3,000,000.	Productivity	4
			No. of employee	85	Marketing	4
					Labor	3
					Total points:	17
22-May	FUR-6		LOCATION	Harare	Technology	4
			Capital	Z\$ 4,000,000.	Qty of Production	4
			Sales amount	Z\$ 300,000.	Productivity	4
			No. of employee	10	Marketing	4
					Labor	4
					Total points:	20
22-May	FUR-7	General Manager	LOCATION	Harare	Technology	3
			Capital	Z\$ 10,000,000.	Qty of Production	1
			Sales amount		Productivity	4
			No. of employee	54	Marketing	3
					Labor	4
					Total points:	15
26-May	FUR-8	Managing Director	LOCATION	Bulawayo	Technology	4
			Capital	Z\$ 729,000.	Qty of Production	4
			Sales amount	Z\$ 4,250,000.	Productivity	3
			No. of employee	50	Marketing	3
					Labor	4
					Total points:	18
27-May	FUR-9	Director	LOCATION	Bulawayo	Technology	3
			Capital	Z\$ 40,000.	Qty of Production	3
			Sales amount	Z\$ 240,000.	Productivity	3
			No. of employee	33	Marketing	2
					Labor	3
					Total points:	14

DATE	COMPANY CODE	INTERVIEWEE	COMPANY'S PROFILE		ASSESSMENT	
27-May	FUR-10	Managing Director	LOCATION	Bulawayo	Technology	4
			Capital	Z\$ 3,000,000.	Qty of Production	3
			Sales amount	Z\$ 5,000,000.	Productivity	4
			No. of employee	50	Marketing	4
					Labor	4
		Total points:	19			
28-May	FUR-11	Manager	LOCATION	Bulawayo	Technology	3
			Capital	Z\$ 800,000.	Qty of Production	3
			Sales amount	Z\$ 3,031,000.	Productivity	4
			No. of employee	40	Marketing	4
					Labor	4
		Total points:	18			
28-May	FUR-12	Financial Controller	LOCATION	Bulawayo	Technology	4
			Capital	Z\$ 2,965,000.	Qty of Production	5
			Sales amount	Z\$ 3,023,000.	Productivity	4
			No. of employee	55	Marketing	4
					Labor	4
		Total points:	21			
29-May	FUR-13	Production Manager	LOCATION	Bulawayo	Technology	3
			Capital	Z\$ 5,000,000.	Qty of Production	2
			Sales amount	Z\$ 7,684,000.	Productivity	3
			No. of employee	92	Marketing	4
					Labor	3
		Total points:	15			
2-Jun	FUR-14	Chairman Manager	LOCATION	Kwekwe	Technology	3
			Capital	Z\$ 78,000.	Qty of Production	2
			Sales amount	Z\$ 148,000.	Productivity	3
			No. of employee	12	Marketing	3
					Labor	3
		Total points:	14			
2-Jun	FUR-15	Manager	LOCATION	Kwekwe	Technology	3
			Capital	Z\$ 300,000.	Qty of Production	2
			Sales amount	Z\$ 700,000.	Productivity	3
			No. of employee	19	Marketing	3
					Labor	3
		Total points:	14			
3-Jun	FUR-16	Chief Executive	LOCATION	Gweru	Technology	3
			Capital	Z\$ 395,000.	Qty of Production	2
			Sales amount		Productivity	3
			No. of employee	26	Marketing	3
					Labor	3
		Total points:	14			
3-Jun	FUR-17	General manager	LOCATION	Gweru	Technology	3
			Capital		Qty of Production	3
			Sales amount		Productivity	4
			No. of employee	200	Marketing	4
					Labor	4
		Total points:	18			
5-Jun	FUR-18	Director	LOCATION	Mutare	Technology	4
			Capital	Z\$ 3,000,000.	Qty of Production	4
			Sales amount	Z\$ 12,000,000.	Productivity	4
			No. of employee	70	Marketing	4
					Labor	4
		Total points:	20			
5-Jun	FUR-19	Director	LOCATION	Mutare	Technology	
			Capital		Qty of Production	
			Sales amount		Productivity	
			No. of employee	100	Marketing	
					Labor	
		Total points:	0			