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VI/2008/13637/93

Date 4th Dec.1993

Industrial Development Bank of India
Rehabilitation Finance Dept.
IDBI Tower, Cuffe Parade
Bombay 400 005.

Dear Sirs,

Kind attn : Sri C.K.Makhija,Manager
Rehabilitation Finance Dept.

Sub : Techno-Economic Viability Study of
Textile Division of Binny Ltd. - reg.

This has reference to the above study undertaken by SITRA recently. We are pleased to enclose 2 copies of the report 'Techno-Economic Viability of Binny Ltd., Textile Division'.

Kindly acknowledge the receipt of this letter.

Yours faithfully,

(Ms.Indra Doraiswamy)
Deputy Director

Enc : as above

Copy to : Binny Limited
65, Armenian Street
Madras 600 001.
(2 copies of the report)

TECHNO ECONOMIC VIABILITY OF BINNY LIMITED TEXTILE DIVISION

THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION
V.38.G.34 COIMBATORE DECEMBER 1993

TECHNO ECONOMIC VIABILITY OF BINNY LTD., (TEXTILE DIVISION)

1. INTRODUCTION

Industrial Development Bank of India, Bombay retained SITRA, as desired by BIFR, to conduct a Viability Study of Binny Ltd., (Textile Division) and suggest measures to make the operation of this division a viable one. Subsequently, a team of officers of SITRA visited the mills at Bangalore and Madras, collected necessary data and observed the condition and working of the machines. Detailed discussions were held with the Executives of the Mills.

This report discusses the envisaged modernisation scheme and cost of production and profitability. The profitability has been worked out at gross profit level for the full year of implementation.

SITRA would like to express its sincere thanks to the staff of Binny Ltd., (Textile Division) for their excellent co-operation during the study period.

2.RESUME OF CURRENT WORKING

2.1 Financial Performance

The financial performance of the Textile division is discussed in the following pages:

B W Mills, Bangalore Amount: Rs.in lakhs

Particulars	July 1990-June 1991 (12 months)	July 1991-Sep. 1992 (15 months)	Oct 1992-Mar.1993 (6 months)
Gross profit	318.69	46.04	-730.76
Interest	275.52	607.26	297.57
Depreciation	62.61	138.80	60.14
Net profit	-19.44	-700.02	-1088.47
Sales turnover	5334.36	7161.51	2597.65

B & C Mills, Madras(Amount Rs. in lakhs)

Particulars	July 1990- June 1991 (12 months)	July 1991- Sept.1992 (15 months)	Oct.1992 March'93 (6 months)
Gross profit	586.38	-298.45	67.50
Interest	525.28	660.68	375.06
Depreciation	119.29	109.83	59.31
Net profit	-58.19	-1068.96	-366.87
Sales turnover	8488.05	5775.94	5127.14

Note: -ve sign indicates loss

It can be seen that net losses range from about Rs. 58 lakhs to 1069 lakhs during 1990- 1993 in Madras unit and in Bangalore unit net losses range from about Rs.19 lakhs to Rs.1088 lakhs. The Bangalore unit has incurred a gross loss of Rs.731 lakhs during 1992-93 (6 months) whereas the madras unit has incurred a gross loss of Rs.298 lakhs during 1991-1992 (15 months).

As reported by the Mill,Textile Division has an accumulated loss of Rs.11764 lakhs as on 31.3.93. Of this, the loss from Madras unit is reported to be Rs.7172 lakhs and the remaining amount of Rs.4592 lakhs is reported to be from Bangalore unit.

The major causes for the poor financial performance are low sales turnover and higher input cost.

The Binny Textile Division has a secured loan of Rs.128 crores as on 31-3-93 (Madras unit: Rs.87 crores; Bangalore Unit: Rs. 41 crores). Since the profitability after modernisation has been estimated upto gross profit level, the following liabilities have not been considered.

1. Interest commitments due to the past liabilities
2. Cash losses during implementation period .
3. Amount required for the retrenchment of excess operatives and staff.

2.2Technical Performance

B W MILLS BANGALORE

Spinning

The mill has 46500 spindles and 2304 rotors. The counts normally spun are 10s to 20s in OE machines and 10s to 80s including polyester, wool,viscose, cotton blended yarns in ring spinning.

The overall condition of machinery is not satisfactory excepting OE frames and a few preparatory and ring spinning machines. The production per spindle which is one of the important factors affecting the input cost is low at 66 g. per 8 hours adjusted to 40s count (SITRA standard : 88.8 g). The overall capacity utilisation is very low at about 31% in ring spinning and good at 92% in OE spinning.

Weaving

The weaving section of the mill has 742 looms of different makes and widths. The general condition of Northrop, Hattersley, and Picanol looms is not satisfactory whereas the condition of Ruti looms is rated about average. The loom utilisation is low at 75%. The mill produces drill, casement, polyester blended suiting and shirting, cots wool, angola etc.

Wet Processing

The mill has a wet processing section which can process about 1,00,000 metres of cloth per day. This division has facilities to dye silk fabrics, cotton/wool blends, 100% cotton and polyester blended fabric and yarn. Most of the machineries available in this section are old and in average to below average condition. The value loss in this mill is high at 6.6%.

Silk mill at Hebbal

Binny, Bangalore has a Silk Weaving Unit at Hebbal in Bangalore. The unit has 76 looms of different makes and types which can produce sarees with Jari borders, dhoties and dress materials. The general condition of machinery in this section is satisfactory.

The Binny, Bangalore has 2698 permanent operatives and 317 staff on roll in various departments including silk mill.

B & C Mills, Madras.

Spinning

This mill has two spinning sections; Buckingham Mill and Carnatic Mill.

The Buckingham Mill has 29,200 spindles. Excepting a few preparatory machinery, most of the machines are very old and poor in condition. The mill spins normally 10s to 24s counts in these machines. The overall production rate is very low at 65 g./spindle/8 hours adjusted to 40s.

The Carnatic mill has 39824 spindles which can produce cotton and blended yarns. The mill normally spins 16s to 80s counts including blended yarns. The general condition of ring frames is rated average to below average whereas that of preparatory machinery is above average. The overall production rate is low at 76 g. per spindle shift adjusted to 40s count.

The capacity utilisation of spinning sections is low at 75%.

Weaving

The mill has got 1816 looms of Northrop, NMM Ruti, Lakshmi Ruti and Cimmco makes with necessary preparatory machines. Loom width varies from 105 cm. to 220 cm. The mill produces drill, casements, shirting, suiting, dhoti, sheetings, terry towel, etc. The general condition of machinery is rated average to below average. The capacity utilisation is about 66%.

Wet Processing

The wet processing section of this mill has facilities to bleach, dye and print fabrics. The processing capacity is about 1.8 lakh metres of cloth per day. The general condition of machines is rated as just about average . The capacity utilisation is about 73%. The value loss is 4.5%.

The Binny Madras has 5314 permanent operatives and 691 staff on roll comprising of all departments.

3. Restructuring of the company

Restructuring of the company into various subsidiaries may be considered as this would enable the management to expand and promote the activities of the profit centres as well as to shrink the activities that are not viable. Also, if each major activity is treated separately instead of all operations being clubbed together, then it would be possible to exercise closer controls. Another advantage is that the problems in one unit may not affect the other units.

4. MODERNISATION REQUIREMENT

The modernisation scheme envisages the following nature and level of activity.

4.1 B & C MILLS, MADRAS.

The activity should be limited to a capacity of 51089 spindles to be located at Carnatic Mills and 808 Looms. The entire Northrop looms except for 24 looms earmarked for canvas production should be scrapped as they have outlived their useful life. There should be no dyehouse activity.

It is proposed to shift 14 Ring frames (Kunal conversion), one comber and one Trutzchler Blow room line from BW Mills and instal in B&C Mills.

Of the total yarn production of 15195 Kg per day, about 3585 Kg of yarn (Polyester Blended)per day is earmarked for sale. This will enhance the flexibility of operations in spinning.

The total output of grey cloth will be 85805 metres per day. The Mill should provide for back log of maintenance and should install new ringframes wherever necessary . This approach will help running the mill operations viable. An amount of Rs. 1403 lakhs has been provided towards modernisation of B & C Mills. (Table 1 a).Details of modernisation are given in Appendix I

4.2 B.W.M.,BANGALORE

It is imperative to scrap the entire ring spinning activity, Northrop looms,Ruti 180 cm looms and the dye-house activity, since the continuance of these operations have jeopardised the financial condition of the mill.

The activity should be limited to 12 Open End machines (2304 Rotors), Ruti 110 cm and Ruti 220 cm Looms numbering 288 with a production of about 10120 Kg of yarn per day and 33975 metres of cloth per day . Of the total O.E.yarn production, about 4021 kg of yarn is earmarked for Terry Towel conversion i.e., a production of 16893 metres per day (Job work). As regards Silk fabric Weaving and Processing, the existing activities will be retained. The loom capacity will be 76 and fabric processing capacity will be 1300 metres per day.

The total modernisation cost for this mill including silk unit will be about Rs. 294 lakhs (Tables 1 b & 1 c). Details of modernisation of B W Mills are given in the Appendix I.

Appendices II and III give the Loom Plans and Spin plans of B & C Mills and B W Mills respectively.

4.3 CENTRALISED PROCESS HOUSE

At present the Textile Division of the Company is operating two Process Houses, one at B &C Mills, Madras and the other at B.W.M, Bangalore. The Process House at Madras has an installed capacity of about 1.80 lakh metres per day. Being situated in the heart of the city, the mills have to face serious pollution problem. It is well known that the city suffers from acute shortage of water, as a result of which the mills are forced to use the sewage canal water after incurring heavy cost of treatment. Even then the quality of treated water from technological point of view leaves much to be desired in terms of parameters relating to hardness, T.D.S. etc.,.

In addition, the mills also buy large quantity of tanker water at high cost,which further enhances the cost of processing. As is well known the supply of coal which is a basic input for the process house (for steam generation) in addition to water, is also sporadic with varying calorific value which causes fluctuation in steam pressure thus affecting the quality of processed fabric, apart from higher freight charges incurred in transportation of coal from Western collieries.

The process house at Bangalore has an installed processing capacity of around 1.00 lakh metres per day. It is not possible to dye wide width polyester-cotton/cotton fabrics such as suitings since it is not equiped with widewidth merceriser. Similar to the process house at Madras, the process house at Bangalore also faces the problems of pollution, water scarcity, quality and inadequate supply of coal etc.,.

The problems are further compounded by running both the process houses at sub-optimal capacity, resulting in high operating cost.

It has, therefore, become necessary to centralise the process house at one location to overcome the above constraints in processing, with the added advantage of holding inventory of expensive dyes & chemicals, stores and spares at reduced level. Since the place called Bhuvanagiri, which is about 240 kms from madras, is reportedly having adequate ground water in terms of quantity and quality and availability of natural gas, the Mill could consider to setup the centralised process house at this place.

The following are the advantages expected on account of shifting/setting up a centralised process house at Bhuvanagiri.

1. Availability of clean ground water.

2. Availability of natural gas at cheaper cost compared to coal.

3. Effective pollution control by installing an effective effluent treatment plant.

4 . Availability of cheap labour since the location is in the backward area of South Arcot District of Tamilnadu.

5. Layout of machinery commensurate with sequence of processing resulting in speedy movement of material, reduced process cycle time, non-productive labour and enormous savings in cost.

6. Installation of machines with up-dated technology leading to possible reduction in the consumption of dyes and chemicals as well as labour strength significantly.

7. Improvement in fabric realisation and consequent reduction in value loss.

8. Reduction in power tariff and exemption from power cut applicable to backward areas.

Bhuvanagiri process house will be a separate profit centre and a separate company with a view to cater to the needs of both B.W.M, Bangalore and B & C Mills, Madras, separate subsidiary companies under Binny Limited, the holding company, and to utilise the further spare capacity for job-processing to augment further income/increasing profitability. This processing company will be, for all practical purposes, a separate entity anologous to other companies engaged in textile processing viz., United Bleachers, Pioneer Processing etc.,. so as to stand amidst competition and to continue to sustain its viability.

The approximate cost of setting up a processing unit at Bhuvanagiri is given in Table 1 d. Details of machinery to be shifted from B W Mills and B & C mills and New machinery to be purchased etc,. are given in.Appendix IV.

In order to meet the power requirement during power shutdown the Mill will require a generator and hence the company could consider shifting 1 No of 860 K V A generator from Bangalore Mills.

The available Dyehouse mechanical shop machineries in Madras and Bangalore may be shifted to the Centralised Processing Unit.

TABLE 1 a

COST OF MODERNISATION – B & C MILLS, MADRAS

DESCRIPTION	AMOUNT Rs. IN LAKHS
Carding & Spinning including doubling	929.62
Weaving Preparatory	33.59
Weaving	222.90
Grey Ware House	5.04
Engineering	88.00
Testing equipments	102.16
Others	22.00
TOTAL	1403.31

TABLE 1 b

COST OF MODERNISATION - B W MILLS, BANGALORE.

DESCRIPTION	AMOUNT RS. IN LAKHS
O.E Spinning	101.10
Weaving Preparatory	11.80
Weaving	72.00
Engineering	47.00
General	10.00
TOTAL	241.90

TABLE 1 c

COST OF MODERNISATION - SILK MILL, BANGALORE.

DESCRIPTION	AMOUNT Rs. IN LAKHS
Weaving Preparatory	1.00
Weaving	10.50
Dyehouse	40.50
TOTAL	52.00

TABLE 1 d

COST OF THE PROJECT- PROCESS HOUSE - BHUVANAGIRI.

DESCRIPTION	AMOUNT Rs. IN LAKHS
Land (70 acres) & building (222000 Sq.Ft)	1299.46
Engineering machinery	1098.81
Dyehouse machinery	1584.50
Finished Warehouse machinery	49.73
TOTAL =	4032.50

TABLE : 2 a

OPERATIVES REQUIREMENT & SURPLUS - B & C MILLS , MADRAS.

DEPARTMENT	Requirement per day	7 th day Working	Total
OPERATIVES			
Carding & Spinning	656	110	766
Preparation	616	103	719
Weaving	755	126	881
Grey warehouse	130	-	130
Engineering	103	17	120
Services	90	15	105
Total	2350	371	2721
Muster strength as on 1-11-93			5314
Surplus Men			2593

TABLE : 2 b

OPERATIVES REQUIREMENT & SURPLUS - B W MILLS , BANGALORE.
(INCLUDING SILK MILL)

DEPARTMENT	Requirement per day	7 th day Working	Total
OPERATIVES			
Carding & Spinning —	157	27	184
Preparation	64	11	75
Weaving	244	41	285
Grey warehouse	38	—	38
Engineering } Services }	96	16	112
Silk Mill(Including dyehouse & Warehouse	401	51	452
Total	1000	146	1146
Muster strength as on 1-11-93			2698
Surplus Men			1552

TABLE 2 c

OPERATIVES REQUIREMENT PROCESS HOUSE- BHUVANAGIRI.

DEPARTMENT	Requirement per day
OPERATIVES	
Dyehouse	420
Warehouse	327
Engineering	70
Services	30
Total	847

** NOTE :- PROCESS HOUSE WORKS FOR 6 DAYS A WEEK ONLY

The Mill could consider to go in for new crabbing machine, Computer Aided Design System and Loop Steamer (Wide Width) at a later stage.

Pattern of cloth processing envisaged in the Centralised processing unit is given in Appendix V.

4.4 TOTAL COST OF MODERNISATION

The total cost of modernisation including Centralised processing Unit at Bhuvanagiri will be as follows.

ITEM	AMOUNT (Rs. In lakhs)
B & C Mills	1403.31
B W Mills	241.90
Silk Unit	52.00
Processing House	4032.50
Total	5729.71

5.OPERATIVES AND STAFF REQUIREMENT AFTER MODERNISATION

The operatives requirement have been worked out based on the work assignments suggested by SITRA expert committee report recently to the mills.Wherever new machinery are considered, SITRA norms for work assignments have been taken. Tables 2a,2b and 2c give the operatives requirement in each mill after modernisation.

The number of management and clerical staff required after modernisation, as reported by the mill, has been taken for the cost of production calculations and the same are given below:

Mill	Total Number of Staff Incl.clerical
B & C MILLS	217
B W MILLS (INCL.SILK UNIT)	125
CENTRAL PROCESS HOUSE	128

In the case of B & C mills, the staff requirement,by and large, tallies with the industry average.As regards Central Process House, the staff requirement is comparable with the norms. Since, the Central Process House is a new unit, this may be possible to achieve.

In the case of B W mills (including Silk unit), the total staff requirement is about 20% higher than the industry. The mill could explore the possibilities of reducing the same.

6. COST OF PRODUCTION AND PROFITABILITY

The profitability assessment in textile industry is very difficult since it depends upon the relative position of trading conditions. The following assumptions have been made in working out the cost of production and profitability.The cost of production has been worked out for full year of working (after the implementation of the envisaged modernisation Project) separately for B & C Mills, B W Mills (Silk Unit separately) and Central Processing Unit

1. Sale value of yarn and cloth and raw material rates ; weighted average realised prices recently.

2. Processing charges : market rates

3. Wages : Based on actual labour requirement and current wage rates.

4. Power, fuel and water : Actual requirement and current tariff rates. Total power requirement will be met entirely from EB power.

For detailed assumptions, Appendices VI , VII , VIII & IX may be referred.

Tables 3 to 6 give the cost of production and profitability for different Mills under Binny Ltd.(Textile Division)

It could be seen from Tables 3 to 6 that the Units would make a total gross profit - profit before interest and depreciation of Rs. 2529 lakhs.

UNIT	GROSS PROFIT (Rs. In lakhs/Year)
B & C Mills, Madras	817
B W Mills, Bangalore	267
Silk Mill, Bangalore	304
Central Processing Unit	1141
Total	2529

TABLE : 3

COST OF PRODUCTION AND PROFITABILITY - B & C MILLS, MADRAS.
(FULL YEAR OF WORKING AFTER THE IMPLEMENTATION OF THE PROJECT)

	Particulars	Amount Rs.in lakhs	% of sales
1	Rawmaterial		
	Cotton and Fibre	3716	29.6
	Purchased Yarn	1282	10.2
2	Wages and Salaries	1201	9.6
3	Power,Water and Fuel	808	6.4
4	Stores,Spares,Sizing materials Packing material etc.,	560	4.5
5	Processing Charges	2533	20.2
6	Yarn Duty	352	2.8
7	Overheads	1303	10.4
	Sub-Total (A)	11755	93.7
8	Sale Value of Production		
	Cloth (Less Rs.106 Lacs towards prov-ision for discount on special supplies and stock disposal)	11038	87.8
	Yarn	1329	10.6
	Other Income	205	1.6
	Sub-Total (B)	12572	100.0
	Gross Profit-Profit before interest and depriciation. (B-A)	817	6.3

Note :- 1.Overheads include F&I on grey cloth, Cash Discount, Quantity incentive etc.,.
2. Cost of packing materials includes only those for market yarn.

TABLE: 4

COST OF PRODUCTION AND PROFITABILITY - B W MILLS BANGALORE.
(FULL YEAR OF WORKING AFTER THE IMPLEMENTATION OF THE PROJECT)

	AMOUNT RS.IN LAKHS	% OF SALES
1.RAW MATERIALS	1086	29
2.WAGES AND SALARIES	297	8
3.POWER,WATER AND FUEL	236	6
4.STORES,SPARES,SIZING MATERIALS & PACKING ETC.	138	4
5.PROCESSING CHARGES (INCLUDING TOWEL CONVERSION CHARGES & DOUBLING CHARGES)	1307	34
6.YARN DUTY	43	1
7.OVERHEADS	433	11
SUB TOTAL (A)	3540	93
8.SALE VALUE OF PRODUCTION:		
CLOTH AND TOWELS	3779	99
MISC.INCOME	28	1
SUB TOTAL (B)	3807	100
GROSS PROFIT-PROFIT BEFORE DEPRECIATION AND INTEREST-(B-A)	267	7

TABLE:5

COST OF PRODUCTION AND PROFITABILITY - B.W.M SILK UNIT
(FULL YEAR OF WORKING AFTER IMPLEMENTATION OF THE PROJECT)

	AMOUNT RS.IN LAKHS	% OF SALES
1.RAW MATERIAL	687	52
2.WAGES & SALARIES	168	13
3.POWER, WATER & FUEL	18	1
4.STORES , SPARES& PACKING MATL.	10	1
5.DYES AND CHEMICALS	15	1
6.OVERHEADS	124	9
TOTAL COST (A)	1022	77
SALE VALUE OF PRODUCTION (B)	1326	100
GROSS PROFIT-PROFIT BEFORE DEPRECIATION AND INTEREST-(B-A)	304	23

TABLE 6

COST OF PRODUCTION AND PROFITABILITY

PROCESSING UNIT, BHUVANAGIRI

(Full year of working after the implementation of the project)

Particulars	Amount Rs.in Lakhs.	% of Income
Dyes & Chemicals	1427	41
Wages & Salaries	230	7
Power Water Fuel	511	15
Stores,Spares and packing materials	202	6
Overheads	50	1
Total Expenses	2420	70
Processing Charges from B & C Mills,Madras.	2533	73
Processing Charges from B W M ,Bangalore.	923	27
Income from processing	3456	100
Gross Profit	1036	30
Gross profit from Job-processing	105	
Overall Gross Profit - Profit before interest and depreciation	1141	

7. CONDITIONS TO BE FULFILLED

As can be seen, about 45 % of the profits come from Central processing Unit, about 30 % from B & C Mills (Madras), and about 10 % each from B W Mills (Bangalore) and Silk Mill (Bangalore).

The various conditions to be fulfilled by the Mills for realising the above profits and the rationale for these are as follows .

The present level of modernisation of machinery in most of the departments is much below the levels needed for good productivity and quality. However, if all the departments were to be modernised, then not only the required capital outlay will be very high, but the overall returns from such a heavy investment would also be lower since some of the departments / Processes would not contribute to profitability commensurate with the investments made although overall productivity and quality might improve.

On the other hand, modernisation of some selective and key departments would yield higher returns from investment. Keeping this in mind, establishment of a fully modern Central processing unit at Bhuvanagiri has been suggested, as the highest possible value addition is made only at chemical processing stage. Bhuvanagiri has been chosen for the advantages of plentiful availability of water and fuel, which together constitute a major cost input. As for the modernisation of other departments the following is suggested : Some very minor modifications in weaving, plus renovation and replacements of some ring frames in Ring spinning.

In order that the projected levels of profits are attained, the commercial efficiency in buying raw materials as well as that in selling finished products must obviously be of very high order. Any deficiency in these areas will drastically reduce the estimated profits. The raw materials costs and selling prices of finished goods are based on the mills own figures which prevailed recently. If there is any increase in the raw material costs or short-fall in raw material availabilities or drop in selling rates, then the profits projected will proportionately come down. Furthermore, the mill must also be able to market all the quantities produced.

Production rates and work assignments taken are such as achievable for the prevailing levels of modernisation in different departments. However, it is crucial to ensure that the suggested work assignments are implemented and the production rates are actually attained, combined with the machine utilisation specified in the report. Any failure in achieving these would push up the labour cost and reduce sales turnover, both of which would have adverse effects on profitability.

All other conversion costs should also be controlled to within the levels indicated in the report.

A very high machine utilisation of 95 % has been assumed for various departments. Unless very special efforts are made, it would be difficult to maintain such high utlisation. As machine utilisation is a major contributory factor to profits, the need for achieving in actual practice such high machine utlisation need hardly be overemphasised.

About 50 % of the profits are generated from the Central Processing unit. All cost figures and processing charges used for arriving the profit are based on figures prevailing in similar units in the industry. Clearly, if the assumed figures are not realised, then the profits will differ accordingly. The value loss at central processing unit is assumed to be what is prevailing in good mills and it is imperative for the mill to reach these levels as otherwise the cost of production would be higher than that estimated.

Above all, to achieve atleast the projected profits the mills should have competent and devoted personnel so that it would be possible to implement the various measures suggested and attain the high level of commercial and operational efficiency required.

APPENDIX – I

COST OF MODERNISATION – B & C MILLS, MADRAS

DEPARTMENT	DETAILS	AMOUNT Rs.In Lakhs
BLOW ROOM	Renovation of LR blow room line with the replacement of the worn out parts.	2.85
	Purchase of two scutchers and renovation of Trutzchler Line	20.00
CARDING	Renovation of SHP cards with replacement of metalic clothing and worn out parts.	38.00
	Purchase of 3 New high speed LR cards	37.80
DRAWING	Overhauling of LR drawframes.	4.00
COMBERS	Overhauling of 12 LR combers with the replacement of the worn out parts.	10.00
FLY FRAMES	Renovation of 6 LR G.S Fly frames with the replacement of top arm, bottom rollers etc,.	13.00
	Overhauling of 6 LR G.S fly frames with the Replacement of worn out parts.	1.00
RING FRAMES	In LR Rings frames replacement of rings in 44 frames, spindles in 34 frames, top arm with bottom rollers in 6 frames.	69.42
	Overhauling of LR ring frames with reconditioning of Top arms and replacement of worn out parts.	10.00
	Purchase of 55 New Ring frames each having 480 spindles per frame.	610.50
	Providing 17 Nos. overhead cleaners for 44 LR and 55 New frames.	21.25
	Sub Total Upto Spinning	837.82

APPENDIX - I (Contd..)

COST OF MODERNISATION - B & C MILLS, MADRAS

DEPARTMENT	DETAILS	AMOUNT Rs. In Lakhs
DOUBLING	Replacement of Rings in 50 frames and spindles in 60 frames	77.80
	Overhauling of 60 frames with the renovation of delivery rollers and replacement of worn out parts.	14.00
	Sub Total-Doubling	91.80
WEAVING PREPARATORY		222
	Replacement of Yarn clearers for 6 Roto winding machines and overhauling.	5.00
	7 Units of Overhead clearer fan for winding	8.64
	Pressure cooker vessels.	3.00
	Ambika Sow boxes - 2 Nos.	5.36
	Ambika Drive conversion - 3 Nos.	6.48
	Oscillating fan for warping	1.03
	Purchase of barrel and flanges for Ruti 180cm, Cimmco 48/72".	4.08
	Sub Total- Weaving Preparatory	33.59
WEAVING	Overhauling of 720 Ruti - B looms and 60 Cimmco Looms with replacement of worn out parts and conversion of side weft fork to centre weft fork in 100 Looms	196.66
	Purchase of 2 Nos. of Knotting machines.	26.24
	Sub Total- Weaving	222.90

APPENDIX – I (Contd..)

COST OF MODERNISATION – B & C MILLS, MADRAS

DEPARTMENT	DETAILS	AMOUNT Rs.In Lakhs
GREYWARE HOUSE	Overhauling of machines and material handling equipments.	5.04
ENGINEERING	Reparing of roofs, H & V plants, ICC – boilers and DM plants.	40.00
	Replacing of existing washers with ATIRA type	18.00
	Electrical works	10.00
	Re erection of machines	20.00
	Sub Total- Engineering	88.00
TESTING EQUIPMENTS	Purchase of Uster Classimat, Uster Evenness Tester, Spinlab, Stellometer with Balance, Trash seperator and microscope.	102.16
OTHERS	Waste water treatment for B & C Mills and overhauling works such as drainage connections, pipings etc,.	22.00
	TOTAL – B & C MIILLS	1403.31

APPENDIX - I (Contd..)

COST OF MODERNISATION - B W MILLS, BANGALORE.

DEPARTMENT	DETAILS	AMOUNT Rs.In Lakhs
BLOW ROOM	Overhauling of NSE and LR blow room lines.	5.00
	Purchase of 2 micro dust extractors.	14.00
CARDING	Renovation of 24 IR HP and 12 Toyoda cards	15.00
DRAWING	Overhauling of 10 Nos. draw frames.	2.50
O.E SPINNING	Overhauling of 12 O.E machines with replacement of opening rollers and rotors.	64.60
	Sub Total Upto Spinning	101.10
WEAVING PREPARATORY	Overhauling of warping machines with replacement of worn out parts	2.00
	Overhauling of Sizing machines	6.50
	Overhauling of pirn widning machines	3.30
	Sub Total - Weaving Preparatory	11.80
WEAVING	Overhauling of 288 Ruti looms with replacement of worn out parts	72.00
ENGINEERING	Provision for conversion to 11 KVA from 4.6 KVA distribution system(statutory requirement)	35.00
	Replacement of over load relays for 200 looms, lighting etc,.	10.00
	Overhauling of Humudification plants	2.00
	Sub Total- Engineering	47.00
GENERAL	Shifting of Ruti 220 cm looms and re erection	10.00
	TOTAL - BWM MIILLS	241.90

APPENDIX - I (Contd..)

COST OF MODERNISATION - SILK MILL, BANGALORE.

DEPARTMENT	DETAILS	AMOUNT Rs.In Lakhs
WEAVING PREPARATORY	Overhauling of Pirn winding machines and Twisting machines with replacement of worn out parts	1.00
WEAVING	Mechanical warp stop motions for 76 looms	4.00
	Overhauling of 20 William looms	2.00
	Purchase of looms accessories like shuttles,reeds etc.	3.50
	Material Handling equipements	1.00
	Sub Total- Weaving	10.50
DYE HOUSE	Renovation of stenter	8.00
	Purchase of 2 Nos. Dyeing tubs, 5 Nos. CP tubs and 1 Hydro extractor	1.00
	Purchase of 1 hank dyeing machine	6.00
	Purchase of 1 cylinder dryer	8.00
	Purchase of 1 emerising machine	15.00
	Purchase of 2 printing tables, one ager and 24 Nos. screen frames.	2.50
	Sub Total- Silk Dyehouse	40.50
	TOTAL - SILK UNIT	52.00

APPENDIX - I (Contd..)

DETAILS OF COST OF THE PROJECT - PROCESS HOUSE - BHUVANAGIRI.

DEPARTMENT	DETAILS	AMOUNT Rs.In Lakhs
DYEHOUSE	1 No singeing machine 2200 mm.	51.34
	1 No cont. scouring and bleaching equipement	348.32
	1 Nos.washing machine (6 coompartments)2200mm	46.23
	2 Nos'. Super Jumbo JT 10	27.11
	1 No hot flue drier with pading mangle 1800mm	38.66
	1 No pad steam - 2200 mm	148.3
	1 No computerised hydraulic jigger - 2200 mm	48.51
	1 No hydraulic Kuster pading mangle - 1800 mm	79.61
	1 No dye alkali mixer and 6 Nos. batching trolleys	25.64
	3 Nos. Super Rapid Jet dyeing machine - 200 Kg capacity	62.37
	1 no detwister	6.93
	1 No chainless padless merceriser - 2200 mm	95.98
	1 No quatruple effect caustic evaporator	23.84
	3 Nos. stenter (thermic fluid heated) 1800 mm	204.62
	1 No polymeriser - 2200 mm	14.94
	3 Nos thermopack unit - 1500 U(gas for oil fired)	51.68
	1 No cylinder drying range - 2200 mm	37.98
	1 No terry towel drying machine - 100 Kg capacity	9.01
	1 No terry towel drying machine - 50 Kg capacity	4.5
	2 Nos hydro extractors	3.94
	1 No automatic exposing machine	7.9
	1 No automatic lacquaring machine	4.71
	2 No roboto rollers - 2000 mm	3.96
	Sub Total	1346.08

DETAILS OF COST OF THE PROJECT - PROCESS HOUSE - BHUVANAGIRI.

DEPARTMENT	DETAILS	AMOUNT Rs.In Lakhs
	1 No roboto rollers - 1800 mm	1.8
	20 Nos sewing machines	1.25
	200 Nos FRP bandies	25.78
	90 Nos batchiing trolleys	12.34
	40 Nos meter counters	0.83
	8 Nos. digital elctronic balance	9.2
	1 No xeno tester	17.19
	Lab equipments(Jigger dyeing m/c, mini stenter etc,.	41.58
	Online intruments such as solinoid/steam meter pressure gauges etc,.	6.93
	3 Nos battery operated trucks	4.78
	2 Nos dry homogenisers	1.28
	3 Nos ball mills	2.08
	modifications/Repair for pre shrinking range, merceriser.	16.63
	Air compressors and accessories	30.00
	1 No Milling machine	12.47
	1 No semi continuous decatising machine	19.28
	New ager and pre heater for carbonising range	15.00
	New ager for pad steam and repairs for raising m/c	15.00
	Conversion of washing machines	5.00
	Sub Total	238.42
	TOTAL - PROCESS HOUSE - BHUVANAGIRI	1584.50

APPENDIX - I (Contd..)

DETAILS OF COST OF THE PROJECT - PROCESS HOUSE - BHUVANAGIRI.

DEPARTMENT	DETAILS	AMOUNT Rs.In Lakhs
ENGINEERING	Land	75.00
	Site Developemnt	60.00
	Building Cost	1164.46
	F B C Boiler	504.49
	Sub station	154.00
	Resiting of Dyehouse machinery	55.00
	Effluent plant	185.12
	Water Softening plant	79.20
	Bore wells pumps and over head tanks etc,.	49.50
	Sprinklers,diesal pumps material handling	71.50
	Sub Total- Engineering	2398.27
FINISHED WAREHOUSE	4 Nos. wide width plating machines	6.93
	2 Nos. Narrow width plating machines	1.25
	4 Nos. double fold roll fold machine	1.88
	35 Nos. inspection tables	3.94
	4 Nos. roll folding / tube folding machine	1.25
	3 Nos. sample cuting machine	0.72
	4 Nos. high speed baling press.	22.50
	6 Nos. weighing scale - 500 Kg. capacity	9.38
	1 No. batching machine	1.88
	Sub Total- Finished Warehouse	49.73
	TOTAL - BHUVANAGIRI	4032.50

LOOM PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

SORT NO.	QUALITY NAME	WARP COUNT	WARP MIX	WEFT COUNT	WEFT MIX	REED	PPI	REED WIDTH	GREY WIDTH	FIN. WIDTH	ACTUAL EFF. (%)	UTILISA -TION %	UE %	METRES/ L.SH.	SPLIT IND.	NO.OF LOOMS /DAY	LOOMS SHIFTS /DAY	GREY MTRS. PER DAY
47" NORTHROP LOOMS (1 SH.) (164 PPM.)																		
S 7670	11 oz CANVAS	2/16s K	20	2/16s K	20	3/38	48	101.50	96.50	91.00	67	95	64	27.75	1	24	24	666
	# NORTHROP TOTAL #						48	101.50	96.50	91.00	67	95	64	27.75		24	24	666
RUTI-C 120 CM (3 SH.) (250 PPM)																		
S 22012	BARON/METEOR	50s	PC 67/33	84	DEN.	96	84	100.75	94.00	90.00	85	95	81	28.96	1	2	6	174
S 22915	NEW PRIYANKA	40s	PC 67/33	40s	PC 67/33	96	88	100.00	94.00	90.00	85	95	81	27.64	1	2	6	166
	# RUTI - C TOTAL #						86	100.38	94.00	90.00	85	95	81	28.30		4	12	340
RUTI 150 CM (3 SH.) (174 PPM)																		
S 8902	VARIETY 4 DRILL	14s K	20	10s K	12	4/50	48	81.50	78.50	72.00	74	95	70	30.65	1	19	57	1747
TC 3089	20s x 20s COT.SHTG. TWILL	20sK	20	20sK	20	4/52	56	129.50	124.00	120.00	82	95	78	29.15	1	4	12	350
TC 3090	30s x 30s COT.SHTG. TWILL	30sK	44	30sK	44	4/52	64	107.00	100.00	95.00	82	95	78	25.51	1	4	12	306
TC 3091	40sC x 40sC COT.SHTG. PLAIN	40sC	44	40sC	44	4/60	72	134.50	125.00	118.00	82	95	78	22.67	1	4	12	272
TC 3092	40sC x 40sC COT.SHTG. SATIN	40sC	44	40sC	44	5/44	76	135.00	125.00	117.00	82	95	78	21.48	1	4	12	258
S 9953	COTS WOOL PLAIN	2/28s	CW 57:43	28s	CW 57:43	4/36	74	101.60	95.50	89.00	82	95	78	22.06	1	13	39	860
	# SUB TOTAL #						69	101.94	96.44	88.50	79	95	75	26.34		48	144	3793
RUTI 160 CM (3 SH.) (164 PPM)																		
S 9002	B 17 DRILL	16s K	16	10s K	12	4/46	48	157.50	150.00	72.00	70	95	67	54.61	2	125	375	20479
S 8346	SATIN FURNISHING	20s K	20	16s K	20	5/36	56	156.25	148.00	138.00	66	95	63	22.05	1	4	12	265
S 8968	SUPER CONSUL	2/40s C	44	2/24s K	20	5/56	52	153.00	148.00	138.00	62	95	59	22.28	1	13	39	869
S 8974	HANAVA "W"	2/40s C	44	2/40s C	44	4/60	60	151.00	145.00	138.00	67	95	64	20.89	1	13	39	815
S 37695	BINNY STAR	16s	PC 42/58	16s	PC 42/58	56	52	157.70	143.00	138.00	87	95	83	31.42	1	39	117	3676
S 37128	SEOUL	16s	PC 67/33	16s	PC 67/33	56	52	157.40	143.00	138.00	87	95	83	31.42	1	16	48	1508
S 37366	DENVER	20s	PC 48/52	20s	PC 48/52	66	56	157.50	147.00	138.00	87	95	83	29.17	1	9	27	788
S 37367	COMMANDO	20s	PC 48/52	16s	PC 48/52	66	48	155.00	146.00	138.00	87	95	83	34.03	1	8	24	817
S 37359	NEW LOOK	16s	PC 48/52	16s	PC 48/52	56	52	157.50	144.50	138.00	87	95	83	31.42	1	25	75	2357
S 37039	MARLBOROUGH	2/32s	PC 67/33	2/32s	PC 67/33	56	48	154.85	144.00	138.00	90	95	86	35.22	1	45	135	4755
S 37085	AIRMARSHAL	2/30s	PC 67/33	2/30s	PC 67/33	60	46	153.50	145.00	138.00	90	95	86	36.75	1	37	111	4079
S 37315	MARATHON	2/32s	PC 48/52	2/32s	PC 48/52	56	48	154.00	145.00	138.00	90	95	86	35.22	1	39	117	4121
TC 3093	AS MARATHON	2/32s	PC 48/52	2/32s	PC 48/52	56	48	167.50	158.00	147.32	90	95	86	35.22	1	8	24	845
S 37295	VICTORIASUPREME	2/32s	PV 48/52	2/32s	PV 48/52	56	48	161.25	151.00	138.00	90	95	86	35.22	1	14	42	1479
S 37141	TRIBUTE	2/32s	PV 64/36	2/32s	PV 64/36	56	52	175.00	162.00	147.32	90	95	86	32.51	1	9	27	878
S 37056	INSPECTOR GENERAL	2/50s	PC 67/33	2/32s	PC 67/33	80	48	149.25	144.00	138.00	90	95	86	35.22	1	11	33	1162
S 27455	BM 6000	2/80s	PC 67/33	2/80s	PC 67/33	96	88	154.25	146.40	137.00	66	95	63	14.03	1	5	15	210
S 1148	CARNABY	2/50s	NMPW 55/45	2/50s	NM PW 55/45	4/34	68	162.60	152.50	141.00	90	95	86	24.86	1	7	21	522
S 1291	VARSITY	2/28s	PW 55/45	2/28s	PW 55/45	4/25	50	161.30	149.50	137.50	90	95	86	33.81	1	3	9	304
S 1828	BENHUR (PW 70:30)	2/18s	PW 70/30	2/18s	PW 70/30	34	42	175.26	157.00	142.00	90	95	86	40.25	1	2	6	242
	# SUB TOTAL #						49	156.81	147.23	111.42	82	95	77	38.71		432	1296	50171

LOOM PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

SORT NO.	QUALITY NAME	WARP COUNT	WARP MIX	WEFT COUNT	WEFT MIX	REED	PPI	REED WIDTH	GREY WIDTH	FIN. WIDTH	ACTUAL EFF. (%)	UTILISA -TION %	UE %	METRES/ L.SH.	SPLIT IND.	NO.OF LOOMS /DAY	LOOMS SHIFTS /DAY	GREY MTRS. PER DAY
RUTI 220 CM (3 SH.) (152 PPM)																		
S 4385	LUSTALIN	40s C	44	40s C	44	4/56	80	200.80	192.00	90.00	67	95	64	29.05	2	13	39	1133
S 8714	MARLENE	34s K	44	34s K	44	4/50	80	202.00	192.00	90.00	72	95	68	31.25	2	12	36	1125
S 4775	BD401	20s K	20	14s K	16	4/32	48	189.00	182.00	84.00	82	95	78	59.42	2	28	84	4991
S 38040	EARL	2/40s	PV 64/36	2/40s	PV 64/36	72	64	158.75	151.00	138.00	90	95	86	24.48	1	24	72	1763
S 38295	VICTORIASUPREME	2/32s	PV 48/52	2/32s	PV 48/52	56	48	161.25	151.00	138.00	90	95	86	32.64	1	18	54	1763
S 28915	NEW PRIYANKA	40s	PC 67/33	40s	PC 67/33	96	88	206.00	188.00	90.00	77	95	73	30.41	2	12	36	1095
S 28409	CLASSMATE	2/40s	PC 48/52	2/32s	PC 48/52	52	44	208.24	200.00	90.00	77	95	73	60.82	2	18	54	3284
S 1194	SCHOOLMATE	2/50s	PC 48/52	2/32s	PC 48/52	60	42	216.00	207.00	90.00	77	95	73	63.71	2	12	36	2294
S 28578	PRIYANKA	2/80s	PC 67/33	2/80s	PC 67/33	96	88	201.00	186.00	90.00	77	95	73	30.41	2	33	99	3011
S 28058	SILVERLEGEND	2/80s	PC 67/33	50s	PC 67/33	96	72	206.50	194.00	90.00	77	95	73	37.17	2	10	30	1115
S 1362	ANGOLA	2/22.5s	WC 48/52	11s	WC 48/52	4/23	48	182.00	168.30	77.50	77	95	73	55.75	2	5	15	836
S 28012	BARON/METEOR	50s	PC 67/33	84	DEN.	96	84	201.50	188.00	90.00	77	95	73	31.86	2	6	18	573
S 758	NEW APSARA	2/80s	PC 67/33	84	DEN.	4/56	84	197.40	187.00	89.50	77	95	73	31.86	2	24	72	2294
S 922	APSARA SUPREME	2/60s	PC 46/54	84	DEN.	4/50	84	200.66	189.00	90.00	77	95	73	31.86	2	7	21	669
S 28916	NEW DEBONAIR	40s	PC 67/33	150	DEN.	96	72	202.00	188.00	90.00	77	95	73	37.17	2	4	12	446
S 28652	PLAYMATE	2/80s	PC 48/52	150	DEN.	80	72	205.75	180.00	90.00	77	95	73	37.17	2	14	42	1561
	# SUB TOTAL #						64	193.75	182.12	94.57	79	95	75	38.82		240	720	27953
	# RUTI- B TOTAL #						55	165.46	155.47	104.61	81	95	76	37.92		720	2160	81917
CIMMCO 48"/50" (3 SH.) (144 PPM)																		
S 29451	CHECK N CHECK	2/50s	PC 67/33	50s	PC 67/33	60	72	105.50	97.50	90.00	82	95	78	18.76	1	12	36	675
S 9955	COTS WOOL CHECK	2/28s	CW 57:43	28s	CW 57:43	4/38	74	101.60	95.50	90.00	62	95	59	13.75	1	12	36	495
	# SUB TOTAL #						73	103.55	96.50	90.00	72	95	68	16.26		24	72	1170
CIMMCO 68"/72" (3 SH.) (118 PPM)																		
S 29451	CHECK N CHECK	2/50s	PC 67/33	50s	PC 67/33	60	72	105.50	97.50	90.00	82	95	78	15.38	1	17	51	764
S 1829/30	PREFECT CHECK	2/60s	PC 48/52	45s	PC 48/52	60	68	105.70	96.50	90.50	82	95	78	16.28	1	19	57	928
	# SUB TOTAL #						70	105.61	96.97	90.27	82	95	78	15.86		36	108	1712
	# CIMMCO TOTAL #						71	104.78	96.78	90.16	78	95	74	16.02		60	180	2882
	# GRAND TOTAL #						55	159.89	150.12	103.30	80	95	76	36.11		808	2376	85805

YARN REQUIREMENT PER DAY AT SPINNING (KGS.)

		Warp			Weft			Warp + Weft		
Sl.No.	Count	Single	Double	Total	Single	Double	Total	Single	Double	Total
1	10s K				2010		2010	2010		2010
2	14s K	267		267	386		386	653		653
3	16s K	2378	145	2523	35	97	132	2413	242	2655
4	20s K	493	57	550	30		30	523	57	580
5	24s K					138	138		138	138
6	30s K (44sMIX)	30	1	31	17		17	47	1	48
7	34s K(44sMIX)	91		91	64		64	155		155
8	40s C (44sMIX)	143	462	605	86	89	175	229	551	780
9	16s PC 42/58	528		528	449		449	977		977
10	16s PC 48/52	339		339	379		379	718		718
11	20s PC 48/52	218		218	83		83	301		301
12	32s PC 48/52		723	723		939	939		1662	1662
13	40s PC 48/52		232	232					232	232
14	45s PC 48/52				36		36	36		36
15	50s PC 48/52		159	159					159	159
16	60s PC 48/52		52	52					52	52
17	80s PC 48/52		84	84					84	84
18	32s PV 48/52		481	481		375	375		856	856
19	60s PV 48:52		60	60					60	60
20	32s PV 64/36		148	148		120	120		268	268
21	40s PV 64/36		278	278		215	215		493	493
22	16s PC 67/33	217		217	184		184	401		401
23	30s PC 67/33		683	683		460	460		1143	1143
24	32s PC 67/33		681	681		654	654		1335	1335
25	40s PC 67/33	104	4	108	68		68	172	4	176
26	50s PC 67/33	36	255	291	92		92	128	255	383
27	80s PC 67/33		447	447		177	177		624	624
28	80 DEN./34/`0'				112		112	112		112
29	150 DEN.				101		101	101		101
30	28s CW 57:43	102		102	87		87	189		189
31	18s PW 70/30		43	43		47	47		90	90
32	28s PW 55:45		47	47		42	42		89	89
33	50s PW 55:45		94	94		87	87		181	181
34	11s WC 48/52				79		79	79		79
35	22.5s WC 48/52		82	82					82	82
Total Cotton Yarn		3402	665	4067	2628	324	2952	6030	989	7019
Total Blended Yarn		1544	4553	6097	1670	3116	4786	3214	7669	10883
Grand Total(Kgs.)		4946	5218	10164	4298	3440	7738	9244	8658	17902

APPENDIX - II b

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

RING FRAMES														(S.Y.)										NEW
MIX	16/20s	44s K	44s K	44s C	MC 48/52	PW 70/30	MC 48/52	CW 57/43	PW 55/45	PC 48/52	PC 42/58	PC 67/33	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PC 48/52	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33	TOTA
COUNT	24	30	34	40	11	18	22.5	28	28	16	16	16	20	30	32	40	40	45	50	50	60	80	80	
KGS. REQD.(AT SPG.)	138	48	155	780	79	90	83	189	89	718	977	401	301	1135	1335	176	232	36	159	383	52	84	624	82(
MAKE OF RING FRAME	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW	
SPINDLE SPEED	13200	13500	14000	15000	8300	10300	9100	10000	10300	12000	12000	12000	12500	13200	13600	14000	14000	14000	14400	14500	14500	14600	14600	
T.M.	4.40	4.20	4.20	3.90	4.00	4.26	5.00	5.00	5.00	3.70	3.70	3.70	3.70	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	
T.P.I.	21.56	23.00	24.49	24.67	13.27	18.07	23.78	25.46	26.46	14.80	14.80	14.80	16.55	20.81	21.50	24.03	24.03	25.49	26.87	26.87	29.43	33.99	33.99	
100% PRODN./SP./8HRS(GM)	184	141	121	109	410	228	123	97	100	365	365	365	272	152	142	105	105	88	77	78	59	39	39	
EFFICIENCY (%)	90	90	90	92	82	82	85	86	86	89	89	89	91	90	90	90	90	90	91	91	92	92	92	90.5
PRODN./SP./8HRS.(GM)	165.3	126.8	109.0	90.0	335.8	186.9	104.4	83.6	86.1	324.7	324.7	324.7	246.1	137.0	128.1	94.4	94.4	79.1	70.2	70.7	54.4	35.6	35.6	
PRODN./SP./24HRS.(GM)	496	380	327	270	1007	561	313	251	258	974	974	974	738	411	384	283	283	237	211	212	163	107	107	
ACTUAL SPINDLES REQUIRED	278	126	474	2889	78	160	262	754	345	737	1003	412	408	2762	3473	622	819	152	755	1805	319	787	5848	2526
UTILISATION LOSS (%)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
TOTAL SPINDLES REQUIRED	292	133	498	3033	82	169	275	791	362	774	1053	432	428	2900	3647	653	860	159	792	1896	335	827	6140	2653
NO. OF SPINDLES/FRAME	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	480	
PRODN./MC/8HRS.(KG)	79	61	52	43	161	90	50	40	41	156	156	156	118	66	61	45	45	38	34	34	26	17	17	
PRODN./MC/24HRS.(KG)	238	183	157	130	484	269	150	120	124	468	468	468	354	197	184	136	136	114	101	102	78	51	51	
LIFT (INCHES)	7	7	7	7	6	6	6	6	6	7	7	7	7	7	6	6	6	6	6	6	6	6	6	
RING DIA.	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	
DRAFTING SYSTEM	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	L.R. NEW	NEW TOTAL
NO. OF FRAMES REQUIRED	0.6	0.3	1.0	6.3	0.2	0.4	0.6	1.6	0.8	1.6	2.2	0.9	0.9	6.0	7.6	1.4	1.8	0.3	1.7	3.9	0.7	1.7	12.8	55.
AVERAGE COUNT																								33.2

PURCHASED YARN				SALE YARN	
50s PW 55:45 (NM)	= 181 KGS.	10sK	= 2010 KGS.	2/30s PC 67/33	= 1835 KG
80 DEN.	= 88 KGS.	14sK	= 653 KGS.	50s PC 67/33	= 1225 KG
84 DEN.	= 24 KGS.	16sK	= 2655 KGS.	60s PC 67/33	= 525 KG
150 DEN.	= 101 KGS.	20sK	= 580 KGS.		
TOTAL (1)	= 394 KGS.	TOTAL (2)	= 5898 KGS.	TOTAL	= 3585 KG
		TOTAL (1+2)	= 6292 KGS.		

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

SPEED FRAMES																								NEW
														(S.Y.)										TOTAL
MIX	16/20s K	44s K	44s K	44s C	WC 48/52	PW 70/30	WC 48/52	CW 57/43	PW 55/45	PC 48/52	PC 42/58	PC 67/33	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PC 48/52	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33	
HANK	1.1	1.8	1.8	1.8	1.1	1.1	1.1	1.4	1.4	1.1	1.1	1.1	1.1	1.4	1.4	1.4	1.4	1.4	2.0	2.0	2.8	2.8	2.8	
PRODUCTION REQD.(KG)	143	50	161	808	82	93	85	196	92	744	1012	416	312	1176	1383	182	240	37	165	397	54	87	647	8563
TYPE OF FRAME	LR	LR	LR	LR	LR	LR	LR	LR	LR	LR	LR	LR	LR	LF1400	LR	LF1400	LR	LR	LR	LR	LR	LR	LR	
SPINDLE SPEED	820	820	820	820	820	820	820	820	820	820	820	820	820	900	820	900	820	820	820	820	820	820	820	
T.M.	1.540	1.350	1.350	1.150	1.600	0.900	1.600	1.190	0.900	0.900	0.900	0.900	0.900	0.900	0.900	0.860	0.900	0.900	0.860	0.860	0.860	0.860	0.860	
T.P.I.	1.62	1.81	1.81	1.54	1.68	0.94	1.68	1.41	1.06	0.94	0.94	0.94	0.94	1.06	1.06	1.02	1.06	1.06	1.22	1.22	1.44	1.44	1.44	
100% PRODN/SP/8HRS(KG)	3.32	1.81	1.81	2.13	3.20	5.69	3.20	3.00	3.96	5.69	5.69	5.69	5.69	4.35	3.96	4.55	3.96	3.96	2.43	2.43	1.47	1.47	1.47	
EFFICIENCY (%)	80	80	80	80	80	80	80	80	80	80	80	80	80	90	80	90	80	80	80	80	80	80	80	
EXP. PRODN/SP/8HRS(KG)	2.66	1.45	1.45	1.70	2.56	4.55	2.56	2.40	3.17	4.55	4.55	4.55	4.55	3.91	3.17	4.09	3.17	3.17	1.94	1.94	1.17	1.17	1.17	
EXP. PRODN/SP/24HRS(KG)	7.98	4.35	4.35	5.10	7.68	13.65	7.68	7.19	9.50	13.65	13.65	13.65	13.65	11.74	9.50	12.28	9.50	9.50	5.83	5.83	3.52	3.52	3.52	
SPINDLES REQUIRED	18	11	37	158	11	7	11	27	10	55	74	30	23	100	146	15	25	4	28	68	15	25	184	1083
AVERAGE HANK																								1.51

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

DRAW FRAME														(S.Y.)										NEW
MIX	16/20s	44s K	44s K	44s C	WC 48/52	PW 70/30	WC 48/52	CW 57/43	PW 55/45	PC 48/52	PC 42/58	PC 67/33	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PC 48/52	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33	TOTAL
HANK	0.125	0.180	0.180	0.180	0.125	0.125	0.125	0.140	0.140	0.125	0.125	0.125	0.125	0.140	0.140	0.140	0.140	0.140	0.200	0.200	0.300	0.300	0.300	
PRODUCTION REQD.(KG)	144	50	161	812	82	94	85	197	93	748	1018	418	313	1182	1390	183	242	37	166	399	54	87	650	8606
DELIVERY SPEED (MPM)	240	215	215	215	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	
100% PRODN/DEL/8HRS(KG)	544	338	338	338	442	442	442	395	395	442	442	442	442	395	395	395	395	395	276	276	184	184	184	
EFFICIENCY (%)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
EXP. PRODN/DEL/8HRS(KG)	435	271	271	271	354	354	354	316	316	354	354	354	354	316	316	316	316	316	221	221	147	147	147	
EXP. PRODN/DEL/24HRS(KG)	1306	812	812	812	1061	1061	1061	947	947	1061	1061	1061	1061	947	947	947	947	947	663	663	442	442	442	
NO. OF FIN. DEL. REQD.	0.1	0.1	0.2	1.0	0.1	0.1	0.1	0.2	0.1	0.7	1.0	0.4	0.3	1.2	1.5	0.2	0.3	0.0	0.2	0.6	0.1	0.2	1.5	
NO. OF PASSAGES REQD.	2	2	2	2	3	2	3	3	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
TOTAL NO. OF DEL. REQD.	0.2	0.1	0.4	2.0	0.2	0.2	0.2	0.6	0.2	2.8	3.8	1.6	1.2	5.0	5.9	0.8	1.0	0.2	1.0	2.4	0.5	0.8	5.9	37.0

SPIN PLAN AFTER MODERNISATION – B & C MILLS, MADRAS.

COMBERS					(S.Y.)														NEW
	44s	WC	WC	CW	PC	PC	PC	PC	PC	PC	PC	PC	PC	PC	PC	PC	PC	PC	TOTAL
MIX	C	48/52	48/52	57/43	48/52	42/58	67/33	48/52	67/33	67/33	67/33	48/52	48/52	48/52	67/33	48/52	48/52	67/33	
HANK	0.180	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.180	0.180	0.180	0.180	0.180	
PRODN. REQUIRED	816	43	45	113	391	593	139	164	392	461	61	126	20	87	132	28	46	216	3871
NIPS PER MINUTE	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	195	
100% PRODN/M/C/8HRS(KG)	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
EFFICIENCY (%)	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	
EXP. PRODN/M/C/8HRS(KG)	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	
EXP. PRODN/M/C/24HRS(KG)	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	
NO.OF COMBERS REQUIRED	1.73	0.09	0.09	0.24	0.83	1.26	0.29	0.35	0.83	0.98	0.13	0.27	0.04	0.18	0.28	0.06	0.10	0.46	8.21
NOIL %	16	14	14	14	14	14	14	14	14	14	14	14	14	16	16	16	16	16	

SPIN PLAN AFTER MODERNISATION – B & C MILLS, MADRAS.

CARDS FOR ALL COTTON / COTTON IN BLENDS (S.Y.)

MIX	16/20s K	44s K	44s C	44s NEW	WC 48/52	WC 48/52	CW 57/43	PC 48/52	PC 42/58	PC 67/33	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PC 48/52	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33 NEW	TOTAL
HANK	0.125	0.160	0.160	0.160	0.125	0.125	0.140	0.125	0.125	0.125	0.125	0.140	0.140	0.140	0.140	0.140	0.160	0.180	0.180	0.180	0.180	
PRODN.REQUIRED	144	50	162	972	100	104	262	454	690	161	191	456	536	71	147	23	103	157	34	54	257	5128
DOFFER SPEED (RPM)	10	30	30	30	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
100% PRODN/CARD/7.5HRS(KG)	51	150	150	150	51	51	45	51	51	51	51	45	45	45	45	45	35	35	35	35	35	
EFFICIENCY (%)	80	85	85	85	85	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
EXP. PRODN/CARD/7.5HRS(KG)	40	128	128	128	43	40	36	40	40	40	40	36	36	36	36	36	28	28	28	28	28	
EXP. PRODN/CARD/22.5HRS(KG)	121	384	384	384	129	121	108	121	121	121	121	108	108	108	108	108	84	84	84	84	84	
NO.OF CARDS REQUIRED	1.2	0.1	0.4	2.5	0.8	0.9	2.4	3.7	5.7	1.3	1.6	4.2	5.0	0.7	1.4	0.2	1.2	1.9	0.4	0.6	3.0	39.2

CARDS FOR P/V & POLYESTER IN P/C BLENDS (S.Y.)

MIX	WC 48/52	PW 70/30	WC 48/52	CW 57/43	PW 55/45	PC 48/52	PC 42/58	PC 67/33	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PC 48/52	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33 NEW	TOTAL
HANK	0.125	0.125	0.125	0.140	0.140	0.125	0.125	0.125	0.125	0.140	0.140	0.140	0.140	0.140	0.160	0.180	0.180	0.180	0.180	
PRODN.REQUIRED	83	94	86	198	93	363	432	283	152	800	941	124	117	18	80	270	26	42	440	4642
DOFFER SPEED (RPM)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
100%PRODN/CARD/7.5HRS(KG)	51	51	51	45	45	51	51	51	51	45	45	45	45	45	35	35	35	35	35	
EFFICIENCY (%)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
EXP. PRODN/CARD/7.5HRS(KG)	40	40	40	36	36	40	40	40	40	36	36	36	36	36	28	28	28	28	28	
EXP. PRODN/CARD/22.5HRS(KG)	121	121	121	108	108	121	121	121	121	108	108	108	108	108	84	84	84	84	84	
NO.OF CARDS REQUIRED	0.7	0.8	0.7	1.8	0.9	3.0	3.6	2.3	1.3	7.4	8.7	1.1	1.1	0.2	1.0	3.2	0.3	0.5	5.2	43.7

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

BLOWROOM FOR ALL COTTON / COTTON IN BLENDS								(S.Y.)															
MIX	16/20s K	44s K	44s K	44s C	WC 48/52	WC 48/52	CW 57/43	PC 48/52	PC 42/58	PC 67/33	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PC 48/52	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33	NEW TOTAL	
HANK	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002		
PRODN. REQUIRED (KG)	152	53	171	1023	105	109	276	478	726	170	201	480	564	74	155	24	108	166	35	57	270		5398
100% PRODN/SC./7.5HRS(KG)	1283	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937	937		
EFFICIENCY (%)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80		
EXP. PRODN/SC./7.5HRS(KG)	1027	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749	749		
EXP. PRODN/SC./22.5HRS(KG)	3080	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248	2248		
NO.OF SCUTCHERS REQUIRED	0.05	0.02	0.06	0.46	0.05	0.05	0.12	0.21	0.32	0.08	0.09	0.21	0.25	0.03	0.07	0.01	0.05	0.07	0.02	0.03	0.12		2.33

BLOWROOM FOR P/V & POLYESTER IN P/C BLENDS																							
								(S.Y.)															
MIX	WC 48/52	PW 70/30	WC 48/52	CW 57/43	PW 55/45	PC 48/52	PC 42/58	PC 67/33	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PC 48/52	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33	NEW TOTAL	
HANK	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002		
PRODN. REQUIRED (KG)	84	95	87	200	94	366	436	285	154	808	950	125	118	18	81	273	27	43	444		4689		
100% PRODN/SC./7.5HRS(KG)	1101	1101	1101	1101	1101	1101	1101	1101	1101	1101	1101	1101	1101	1101	1101	921	921	921	921	921			
EFFICIENCY (%)	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80			
EXP. PRODN/SC./7.5HRS(KG)	881	881	881	881	881	881	881	881	881	881	881	881	881	881	881	737	737	737	737	737			
EXP. PRODN/SC./22.5HRS(KG)	2643	2643	2643	2643	2643	2643	2643	2643	2643	2643	2643	2643	2643	2643	2643	2210	2210	2210	2210	2210			
NO.OF SCUTCHERS REQUIRED	0.03	0.04	0.03	0.08	0.04	0.14	0.16	0.11	0.06	0.31	0.36	0.05	0.04	0.01	0.04	0.12	0.01	0.02	0.20		1.84		

APPENDIX - II b contd..

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

RING FRAMES	PC	PC	PV	PV	PV	PV	(S.Y.) PC	(S.Y.) PC	LR TOTAL	(S.Y.) PC	(S.Y.) PC	PLATTS TOTAL	COTTON TOTAL	BLEN TOTA
MIX	67/33	48/52	48/52	64/36	48/52	64/36	67/33	67/33		67/33	67/33			
COUNT	30	32	32	32	60	40	50	60		30	50			
KGS. REQD.(AT SPG.)	1143	1662	856	268	60	493	550	525	5557	700	675	1375	1121	14074
MAKE OF RING FRAME	L.R.	L.R.	L.R.	L.R.	L.R.	L.R.	L.R.	L.R.		PLATTS	PLATTS			
SPINDLE SPEED	13000	13000	13000	13000	13500	13000	13500	13500		12500	13000			
T.M.	3.80	3.80	3.40	3.40	3.40	3.00	3.80	3.80		3.80	3.80			
T.P.I.	20.81	21.50	19.23	19.23	26.34	18.97	26.87	29.43		20.81	26.87			
100% PRODN./SP./8HRS(GM)	150	136	152	152	62	123	72	55		144	70			
EFFICIENCY (%)	91	91	92	92	92	92	92	92	91.48	88	91	89.65	91.53	90.70
PRODN./SP./8HRS.(GM)	136.4	123.8	139.2	139.2	56.6	112.8	66.6	50.6		126.8	63.1			
PRODN./SP./24HRS.(GM)	409	371	417	417	170	339	200	152		381	189			
ACTUAL SPINDLES REQUIRED	2793	4474	2050	642	353	1456	2754	3456	17980	1840	3569	5408	3768	44888
UTILISATION LOSS (%)	5	5	5	5	5	5	5	5		5	5			
TOTAL SPINDLES REQUIRED	2933	4698	2153	674	371	1529	2892	3629	18879	1932	3747	5679	3956	47133
NO. OF SPINDLES/FRAME	432	432	432	432	432	432	432	432		420	400			
PRODN./MC/8HRS.(KG)	59	53	60	60	24	49	29	22		53	25			
PRODN./MC/24HRS.(KG)	177	160	180	180	73	146	86	66		160	76			
LIFT (INCHES)	7	7	7	7	7	7	7	7		7	7			
RING DIA.	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM	42 MM		42 MM	42 MM			
DRAFTING SYSTEM	L.R.	L.R.	L.R.	L.R.	L.R.	L.R.	L.R.	L.R.	LR TOTAL	KUNAL	KUNAL	PLATTS TOTAL	COTTON TOTAL	BLEND TOTAL
NO. OF FRAMES REQUIRED	6.8	10.9	5.0	1.6	0.9	3.5	6.7	8.4	43.8	4.6	9.4	14.0	8.2	104.9
AVERAGE COUNT									37.03			39.82	36.77	35.08

L.R.	7"	43.8
PLATTS	7"	14.0
NEW	7"	55.3
		113.1

APPENDIX - II b contd..

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

SPEED FRAMES															
									LR			PLATT	COTTON	BLENDS	GRAND
							(S.Y.)	(S.Y.)	TOTAL	(S.Y.)	(S.Y.)	TOTAL	TOTAL	TOTAL	TOTAL
MIX	PC	PC	PV	PV	PV	PV	PC	PC		PC	* PC				
	67/33	48/52	48/52	64/36	48/52	64/36	67/33	67/33		67/33	67/33				
HANK	1.4	1.4	1.4	1.4	2.4	1.4	2.0	2.8		1.4	2.0				
PRODUCTION REQD.(KG)	1184	1722	887	278	62	511	570	544	5759	725	699	1425	1162	14584	15746
TYPE OF FRAME	LF1400	LR	LR	LR	LR	LR	LR	LR		LR	LR				
SPINDLE SPEED	900	820	820	820	820	820	820	820		820	820				
T.M.	0.900	0.900	0.810	0.810	0.810	0.810	0.860	0.860		0.900	0.860				
T.P.I.	1.06	1.06	0.96	0.96	1.25	0.96	1.22	1.44		1.06	1.22				
100% PRODN/SP/8HRS(KG)	4.35	3.96	4.40	4.40	1.96	4.40	2.43	1.47		3.96	2.43				
EFFICIENCY (%)	90	80	80	80	80	80	80	80		80	80				
EXP. PRODN/SP/8HRS(KG)	3.91	3.17	3.52	3.52	1.57	3.52	1.94	1.17		3.17	1.94				
EXP. PRODN/SP/24HRS(KG)	11.74	9.50	10.56	10.56	4.70	10.56	5.83	3.52		9.50	5.83				
SPINDLES REQUIRED	101	181	84	26	13	48	98	155	707	76	120	196	225	1761	1985
AVERAGE HANK									1.60			1.69	1.71	1.55	1.57

	FRS.	SPDLS	KGS
LF1400	1.8	216	2543
LR	16.4	1769	13203
	18.2	1985	15746

APPENDIX – II b contd..

SPIN PLAN AFTER MODERNISATION – B & C MILLS, MADRAS.

DRAW FRAME							(S.Y.)	(S.Y.)	LR	(S.Y.)	(S.Y.)	PLATT	COTTON	BLENDS	GRAND
	PC	PC	PV	PV	PV	PV	PC	PC	TOTAL	PC	PC	TOTAL	TOTAL	TOTAL	TOTAL
MIX	67/33	48/52	48/52	64/36	48/52	64/36	67/33	67/33		67/33	67/33				
HANK	0.140	0.140	0.140	0.140	0.240	0.140	0.200	0.300		0.140	0.200				
PRODUCTION REQD.(KG)	1190	1731	892	279	62	513	573	547	5787	729	703	1432	1167	14658	15825
DELIVERY SPEED (MPM)	195	195	195	195	195	195	195	195		195	195				
100% PRODN/DEL/8HRS(KG)	395	395	395	395	230	395	276	184		395	276				
EFFICIENCY (%)	80	80	80	80	80	80	80	80		80	80				
EXP. PRODN/DEL/8HRS(KG)	316	316	316	316	184	316	221	147		316	221				
EXP. PRODN/DEL/24HRS(KG)	947	947	947	947	553	947	663	442		947	663				
NO. OF FIN. DEL. REQD.	1.3	1.8	0.9	0.3	0.1	0.5	0.9	1.2		-0.8	1.1				
NO. OF PASSAGES REQD.	4	4	2	2	2	2	4	4		4	4				
TOTAL NO. OF DEL. REQD.	5.0	7.3	1.9	0.6	0.2	1.1	3.5	4.9	24.5	3.1	4.2	7.3	2.7	66.1	68.9

APPENDIX - II b contd..

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

COMBERS											
	PC	PC	(S.Y.) PC	(S.Y.) PC	LR TOTAL	(S.Y.) PC	(S.Y.) PC	PLATTS TOTAL	COTTON TOTAL	COT.IN BLENDS TOTAL	GRAND TOTAL
MIX	67/33	48/52	67/33	67/33		67/33	67/33				
HANK	0.130	0.130	0.180	0.180		0.130	0.180				
PRODN. REQUIRED	395	905	190	181	1671	242	233	475	816	5201	6017
NIPS PER MINUTE	195	195	195	195		195	195				
100% PRODN/M/C/8HRS(KG)	210	210	210	210		210	210				
EFFICIENCY (%)	75	75	75	75		75	75				
EXP. PRODN/M/C/8HRS(KG)	157	157	157	157		157	157				
EXP. PRODN/M/C/24HRS(KG)	472	472	472	472		472	472				
NO.OF COMBERS REQUIRED	0.84	1.92	0.40	0.38	3.54	0.51	0.49	1.0	1.7	11.0	12.8
NOIL %	14	14	16	16		14	16				

SPIN PLAN AFTER MODERNISATION - B & C MILLS, MADRAS.

CARDS FOR ALL COTTON / COTTON IN BLENDS	PC	PC					PLATTSCOTTONCOT.IN	GRAND
MIX	67/33	48/52					TOTAL	TOTAL
HANK	0.140	0.140						
PRODN.REQUIRED	459	1052					559	1329	6311	7640
DOFFER SPEED (RPM)	10	10						
100% PRODN/CARD/7.5HRS(KG)	45	45						
EFFICIENCY (%)	80	80						
EXP. PRODN/CARD/7.5HRS(KG)	36	36						
EXP. PRODN/CARD/22.5HRS(KG)	108	108						
NO.OF CARDS REQUIRED	4.2	9.7					5.9	4.3	60.1	64.3

CARDS FOR P/V & POLYESTER IN P/C BLENDS	PC	PC	PV	PV	PV	PV	(S.Y.)	(S.Y.)	LR	(S.Y.)	(S.Y.)	PLATTSCOTTONCOT.IN	GRAND
MIX	67/33	48/52	48/52	64/36	48/52	64/36	PC 67/33	PC 67/33	TOTAL	PC 67/33	PC 67/33	TOTAL	TOTAL
HANK	0.140	0.140	0.140	0.140	0.200	0.140	0.180	0.180		0.140	0.180		
PRODN.REQUIRED	806	839	896	281	63	516	388	370	4158	493	476	969	0	9769	9769
DOFFER SPEED (RPM)	10	10	10	10	10	10	10	10		10	10		
100%PRODN/CARD/7.5HRS(KG)	45	45	45	45	32	45	35	35		45	35		
EFFICIENCY (%)	80	80	80	80	80	80	80	80		80	80		
EXP. PRODN/CARD/7.5HRS(KG)	36	36	36	36	25	36	28	28		36	28		
EXP. PRODN/CARD/22.5HRS(KG)	108	108	108	108	76	108	84	84		108	84		
NO.OF CARDS REQUIRED	7.4	7.8	8.3	2.6	0.8	4.8	4.6	4.4	40.7	4.6	5.6	10.2	0.0	94.5	94.5

TOTAL CARDS	
OLD	155.8
NEW	3.1
TOTAL	158.9

APPENDIX – II b contd..

SPIN PLAN AFTER MODERNISATION – B & C MILLS, MADRAS.

BLOWROOM FOR ALL COTTON / COTTON IN BLENDS	PC	PC	(S.Y.) PC	(S.Y.) PC	LR TOTAL	(S.Y.) PC	(S.Y.) PC	PLATT TOTAL	COTTON TOTAL	COT.IN BLENDS TOTAL	GRAND TOTAL
MIX	67/33	48/52	67/33	67/33		67/33	67/33				
HANK	0.002	0.002	0.002	0.002		0.002	0.002				
PRODN. REQUIRED (KG)	483	1107	238	227	2056	296	292	588	1399	6643	8042
100% PRODN/SC./7.5HRS(KG)	937	937	937	937		937	937				
EFFICIENCY (%)	80	80	80	80		80	80				
EXP. PRODN/SC./7.5HRS(KG)	749	749	749	749		749	749				
EXP. PRODN/SC./22.5HRS(KG)	2248	2248	2248	2248		2248	2248				
NO.OF SCUTCHERS REQUIRED	0.21	0.49	0.11	0.10	0.91	0.13	0.13	0.3	0.6	3.0	3.6

BLOWROOM FOR P/V & POLYESTER IN P/C BLENDS	PC	PC	PV	PV	PV	PV	(S.Y.) PC	(S.Y.) PC	LR TOTAL	(S.Y.) PC	(S.Y.) PC	PLATT TOTAL	COTTON TOTAL	COT.IN BLENDS TOTAL	GRAND TOTAL
MIX	67/33	48/52	48/52	64/36	48/52	64/36	67/33	67/33		67/33	67/33				
HANK	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002		0.001	0.002				
PRODN. REQUIRED (KG)	814	848	905	283	63	521	392	374	4200	498	481	979	0	9867	9867
100% PRODN/SC./7.5HRS(KG)	1101	1101	1101	1101	1101	1101	921	921		1101	921				
EFFICIENCY (%)	80	80	80	80	80	80	80	80		80	80				
EXP. PRODN/SC./7.5HRS(KG)	881	881	881	881	881	881	737	737		881	737				
EXP. PRODN/SC./22.5HRS(KG)	2643	2643	2643	2643	2643	2643	2210	2210		2643	2210				
NO.OF SCUTCHERS REQUIRED	0.31	0.32	0.34	0.11	0.02	0.20	0.18	0.17	1.65	0.19	0.22	0.4	0.0	3.9	3.9

TOTAL SCUTCHERS	
OLD	7.45
NEW	0.00
	7.45

WINDING PLAN FOR SINGLE COUNTS AFTER MODERNISATION – B & C MILLS, MADRAS.

MIX	16/20s	44s	44s	44s C	WC 48/52	PC 67/33	PC 42/58	PC 48/52	PW 70/30	PC 48/52	WC 48/52	CW 57/43	PW 55/45	PC 67/33	PC 67/33	PC 67/33	PC 48/52	PV 46/52	PV 64/36	PV 64/36	PC 48/52	PC 67/33	PC 48/52	PC 48/52	PC 67/33	PC 67/33	PC 67/33	PV 48/52	PC 48/52	PC 67/33	PC 67/33	PC 48/52	OVERAL
COUNT	24	30	34	40	11	16	16	16	18	20	22.5	28	28	30	30	30	32	32	32	40	40	40	45	50	50	50	60	60	60	80	80	80	-
KGS. REQUIRED (AT SPG.)	138	48	155	780	79	401	977	718	90	301	82	189	89	1143	1335	1835	1662	856	268	493	232	176	36	159	383	1225	525	60	52	600	24	84	15195
KGS. REQUIRED (AT WINDING)	137	48	154	776	79	399	972	714	90	299	82	188	89	1137	1328	1826	1654	852	267	491	231	175	36	158	381	1219	522	60	52	597	24	84	15119
DRUM SPEED (Y.P.M.)	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	1094	625	625	625	625	625	625	625	625	875	625	625	
100% PRODN./DRUM/7.5 HRS(K	6.3	5.1	4.5	3.8	13.8	9.5	9.5	9.5	8.4	7.6	6.8	5.4	5.4	5.1	5.1	5.1	4.7	4.7	4.7	3.8	6.6	3.8	3.4	3.0	3.0	3.0	2.5	2.5	2.5	2.7	1.9	1.9	
EFFICIENCY %	79	80	80	65	65	65	65	65	65	79	79	79	79	80	80	80	80	80	80	65	56	65	65	80	80	75	86	86	86	75	86	86	
PRODN./DRUM/7.5 HRS.(KGS)	5.0	4.1	3.6	2.5	9.0	6.2	6.2	6.2	5.5	6.0	5.3	4.3	4.3	4.1	4.1	4.1	3.8	3.8	3.8	2.5	3.7	2.5	2.2	2.4	2.4	2.3	2.2	2.2	2.2	2.0	1.6	1.6	
PRODN./DRUM/22.5 HRS.(KGS)	15.0	12.2	10.7	7.4	26.9	18.5	18.5	18.5	16.5	18.0	16.0	12.9	12.9	12.2	12.2	12.2	11.4	11.4	11.4	7.4	11.2	7.4	6.6	7.3	7.3	6.8	6.5	6.5	6.5	6.0	4.9	4.9	
NO OF DRUMS REQUIRED	9	4	14	105	3	22	53	39	5	17	5	15	7	94	109	150	145	75	22	66	21	24	5	22	52	178	80	9	8	100	5	17	1481
DRUMS PER WINDER	15	20	20	30	12	15	15	15	15	15	15	15	15	20	20	20	20	20	20	30	60	30	30	30	30	30	30	30	30	60	30	30	
LIFT IN INCHES	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
TYPE OF MACHINE	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	AUTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	AUTO	ROTO	ROTO	
NO .OF WINDERS REQUIRED	0.60	0.20	0.70	3.50	0.25	1.67	3.53	2.60	0.33	1.13	0.33	1.00	0.47	4.70	5.45	7.50	7.25	3.75	1.15	2.20	0.35	0.80	0.17	0.73	1.73	5.93	2.67	0.30	0.27	1.67	0.17	0.57	63.47

WINDING PLAN FOR DOUBLE COUNTS AFTER MODERNISATION - B & C MILLS, MADRAS.

MIX	16/20s	16/20s	16/20s	44s	P/W 70:30	W/C 48:52	P/W 55:45	P/C 67:33	P/C 67:33	P/C 67:33	P/C 48:52	P/C 48:52	P/C 48:52	P/V 64:36	P/V 64:36	P/V 48:52	P/V 67:33	P/C 48:52	P/C 48:52	P/C 48:52	P/C 67:33	TOTAL
COUNT	2/16s	2/20s	2/24s	2/40s	2/18s	2/22.52/28s		2/30s	2/30s	2/32s	2/32s	2/40s	2/32s	2/32s	2/40s	2/60s	2/50s	2/50s	2/60s	2/80s	2/80s	
KGS. REQUIRED (AT SPG.)	242	57	138	552	90	82	89	1143	1835	1335	1662	232	856	268	493	60	259	159	52	84	624	10312
KGS. REQUIRED (AT WINDING)	239	56	136	545	89	81	88	1129	1812	1318	1641	229	845	265	487	59	256	157	51	83	616	10183
DRUM SPEED (Y.P.M.)	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	625	
100% PRODN./DRUM/7.5 HRS(KGS	19.0	15.2	12.7	7.6	16.9	13.5	10.9	10.1	10.1	9.5	9.5	7.6	9.5	9.5	7.6	5.1	6.1	6.1	5.1	3.8	3.8	
EFFICIENCY %	64	77	77	82	64	77	77	83	83	83	83	82	83	83	82	74	62	62	74	80	80	
PRODN./DRUM/7.5 HRS.(KGS)	12.2	11.7	9.7	6.2	10.8	10.4	8.4	8.4	8.4	7.9	7.9	6.2	7.9	7.9	6.2	3.7	3.8	3.8	3.7	3.0	3.0	
PRODN./DRUM/22.5 HRS.(KGS)	36.5	35.1	29.2	18.7	32.4	31.2	25.1	25.2	25.2	23.6	23.6	18.7	23.6	23.6	18.7	11.2	11.3	11.3	11.2	9.1	9.1	
NO OF DRUMS REQUIRED	7	2	5	29	3	3	4	45	72	56	69	12	36	11	26	5	23	14	5	9	68	504
DRUMS PER WINDER	20	20	20	30	20	20	20	24	24	24	24	30	24	24	30	40	40	40	40	40	40	
LIFT IN INCHES	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	9.5/10	7"/6"	7"/6"	9.5/10	7"/6"	7"/6"	
TYPE OF MACHINE	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	ROTO	
NO .OF WINDERS REQUIRED	0.35	0.10	0.25	0.97	0.15	0.15	0.20	1.88	3.00	2.33	2.88	0.40	1.50	0.46	0.87	0.13	0.58	0.35	0.13	0.23	1.70	18.58

APPENDIX – II d

PIRN WINDING PLAN FOR SINGLE COUNTS AFTER MODERNISATION

MIX	12s	12s	16s	20s	44s	44s	44s C	PC 67/33	PC 48/52	PC 42/58	PC 48/52	CW 57/43	WC 48/52	PC 48/52	PC 67/33	PC 67/33	FIL. WEFT 80 DEN	FIL. WEFT 84 DEN	FIL. WEFT 150 DEN	SINGLE YARN TOTAL
COUNT	10	14	16	20	30	34	40	16	16	16	20	28	11	45	40	50	66	63	35	
WEFT KGS. REQUIRED (AT SPG.)	2010	386	35	30	17	64	86	184	379	449	83	87	79	36	68	92	88	24	101	4298
KGS. REQUIRED (PIRN WINDING)	2000	384	35	30	17	64	86	183	377	447	83	87	79	36	68	92	88	24	100	4277
SPINDLE SPEED (Y.P.M)	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	
100% PRODN./SPDL/7.5HRS(KGS)	10.3	7.4	6.5	5.2	3.4	3.0	2.6	6.5	6.5	6.5	5.2	3.7	9.4	2.3	2.6	2.1	1.6	1.6	2.9	
EFFICIENCY %	58	77	78	75	80	80	74	78	78	78	75	80	80	74	74	83	82	82	80	
PRODN./SPDL/7.5 HRS.(KGS)	6.0	5.7	5.0	3.9	2.8	2.4	1.9	5.0	5.0	5.0	3.9	3.0	7.5	1.7	1.9	1.7	1.3	1.3	2.3	
PRODN./SPDL/22.5 HRS.(KGS)	18.0	17.0	15.1	11.6	8.3	7.3	5.7	15.1	15.1	15.1	11.6	8.9	22.5	5.1	5.7	5.1	3.8	4.0	7.0	
NO OF SPINDLES REQUIRED	111	23	2	3	2	9	15	12	25	30	7	10	3	7	12	18	23	6	14	331
TYPE OF FEED	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
SPINDLES PER WINDER	48	48	48	60	72	72	96	48	48	48	60	60	60	96	96	96	96	96	72	
NO. OF WINDERS REQUIRED	2.32	0.47	0.05	0.04	0.03	0.12	0.16	0.25	0.52	0.62	0.12	0.16	0.06	0.07	0.12	0.19	0.24	0.06	0.20	5.79

APPENDIX - II d

PIRN WINDING PLAN FOR DOUBLE COUNTS AFTER MODERNISATION

MIX	16s	20s	44 s	P/W 55:45	P/W 55:45	P/C 67:33	P/C 67:33	P/C 48:52	P/V 48:52	P/V 64:36	P/W 55:45	P/V 64:36	P/C 67:33	DOUBLE YARN TOTAL	OVERALL
COUNT	2/16s	2/24s	2/40s	2/18s	2/28s	2/30s	2/32s	2/32s	2/32s	2/32s	2/50s	2/40s	2/80s		
WEFT KGS. REQUIRED (AT SPG.)	97	138	89	47	42	460	654	939	375	120	87	215	177	3440	7738
KGS. REQUIRED (PIRN WINDING)	95	136	87	46	41	452	643	923	369	118	86	211	174	3381	7657
SPINDLE SPEED (Y.P.M)	425	425	425	425	425	425	425	425	425	425	425	425	425		
100% PRODN./SPDL/7.5HRS(KGS)	12.9	8.6	5.2	11.5	7.4	6.9	6.5	6.5	6.5	6.5	4.1	5.2	2.6		
EFFICIENCY %	58	69	75	77	77	77	78	78	78	78	78	75	74		
PRODN./SPDL/7.5 HRS.(KGS)	7.5	5.9	3.9	8.8	5.7	5.3	5.0	5.0	5.0	5.0	3.2	3.9	1.9		
PRODN./SPDL/22.5 HRS.(KGS)	22.5	17.8	11.6	26.5	17.0	15.9	15.1	15.1	15.1	15.1	9.7	11.6	5.7		
NO OF SPINDLES	4	8	8	2	2	28	43	61	24	8	9	18	30	245	576
TYPE OF FEED	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO		
SPINDLES PER WINDER	48	48	60	48	48	48	48	48	48	48	48	60	96		
NO. OF WINDERS REQUIRED	0.09	0.16	0.13	0.04	0.05	0.59	0.89	1.27	0.51	0.16	0.18	0.30	0.32	4.68	10.48

DOUBLING PLAN AFTER MODERNISATION – B & C MILLS, MADRAS.

DOUBLING FRAMES					(S.Y.)																
MIX	16s	20s	20s	44 s	P/C 67:33	P/C 67:33	P/C 67:33	P/C 48:52	P/C 48:52	P/W 70:30	P/W 48:52	P/W 55:45	P/V 48:52	P/V 64:36	P/V 64:36	P/V 48:52	P/C 48:52	P/C 67:33	P/C 48:52	P/C 67:33	P/C 48:52	TOTAL
COUNT	2/16s	2/20s	2/24s	2/40s	2/30s	2/30s	2/32s	2/32s	2/40s	2/18s	2/22.5	2/28s	2/32s	2/32s	2/40s	2/60s	2/60s	2/50s	2/50s	2/80s	2/80s	
KGS. REQD.(AT SPG)	242	57	139	551	1143	1835	1335	1662	232	90	82	89	856	268	493	60	52	259	159	624	84	10312
KGS. REQD.(AT DBG.)	241	57	138	548	1137	1826	1328	1654	231	90	82	89	852	267	491	60	52	258	158	621	84	10261
TYPE OF FRAME	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	PLATTS /NMM	BM FRAME	BM FRAME	BM FRAME	BM FRAME	
SPINDLE SPEED - R.P.M	7500	8000	8000	8500	8500	7500	8500	8500	8500	8500	8500	8500	8500	8500	8500	8500	8500	7000	7000	7000	7000	
T.P.I.	12.9	14.4	15.8	19.5	14.2	16.0	15.1	15.1	16.8	12.6	14.1	18.5	13.5	13.5	15.1	18.4	20.6	18.8	18.8	23.8	23.8	
100% PRODN./SP./8HRS(GMS)	524	400	304	157	288	225	254	254	182	538	385	236	284	284	203	111	99	107	107	53	53	
100% PRODN./SP./24HRS(GMS)	1572	1200	913	471	863	675	762	762	546	1613	1154	708	852	852	610	332	297	322	322	159	159	
EFFICIENCY %	85	85	85	85	93	93	93	93	93	93	93	93	93	93	93	93	93	88	88	88	88	
EXP.PRODN./SP./24HRS(GMS)	1336	1020	776	401	802	628	709	709	508	1500	1073	658	793	793	567	309	276	283	283	140	140	
LIFT (INCHES)	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	9 1/2 / 10	7" / 6"	7" / 6"	7" / 6"	7" / 6"	
RING DIA. (INCHES)	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	
SPINDLES / FRAME	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	344	328	328	328	328	
SPINDLES REQUIRED	180	56	178	1349	1418	2909	1873	2332	455	60	76	134	1074	336	665	193	167	911	559	4441	598	20205
FRAMES REQUIRED	0.5	0.2	0.5	4.0	4.1	8.5	5.4	6.8	1.3	0.2	0.2	0.4	3.1	1.0	2.5	0.6	0.5	2.8	1.7	13.5	1.8	59.6

SALE YARN - 2/30s PC 67/33 = 1635 KGS.
PURCHASED YARN - REFER YARN REQ.- PAGE 1

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	FRS	KGS
PLATTS/NMM	39.8	9140
BM FRAME	19.8	1120
	59.6	10261

AVERAGE COUNT 17.98

WARPING & SIZING PLAN AFTER MODERNISATION - 8& C MILLS

SAMPLE NO	MTRS REQ. AT WEAVING	MTRS REQ. AT SIZING	REQ. NO. OF SIZING M/C	MTRS REQ. AT WARPING	REQ. NO. OF WARPING M/C
1148	522	563	0.020	6765	0.020
1194	2294	2500	0.110	20003	0.070
1291	304	334	0.010	4012	0.010
1362	836	451	0.019	5417	0.019
1828	242	266	0.010	3194	0.010
1829/30	928	1011	0.040	8092	0.030
22012	174	182	0.010	1461	0.010
22915	166	87	0.003	703	0.002
27455	210	228	0.010	2746	0.010
28012	573	300	0.012	3609	0.013
28058	1115	585	0.024	7024	0.025
28409	3284	1740	0.073	20886	0.075
28578	3011	1580	0.066	18969	0.068
28652	1561	835	0.035	10021	0.036
28915	1095	580	0.024	6964	0.025
28916	446	236	0.009	2836	0.010
29451	675	729	0.030	5832	0.020
29451	784	846	0.040	6773	0.020
37039	4755	5135	0.220	61624	0.220
37056	1162	1313	0.060	15756	0.060
37085	4079	4527	0.190	54332	0.200
37128	1508	1613	0.070	19362	0.070
37141	878	974	0.040	11694	0.040
37295	1479	1597	0.070	19167	0.070
37315	4121	4450	0.190	53408	0.190
37359	2357	2521	0.110	30263	0.110
37366	788	851	0.040	10212	0.040
37367	817	882	0.040	10588	0.040
37695	3676	3933	0.170	47199	0.170
38040	1763	1974	0.080	23694	0.090
38295	1763	1904	0.080	22848	0.080
4385	1133	1302	0.050	10423	0.040
4775	4991	2670	0.112	32042	0.115
758	2294	2500	0.110	20003	0.070
7670	666	799	0.030	6393	0.020
8346	265	280	0.010	3370	0.010
8714	1125	1282	0.050	15390	0.060
8902	1747	1939	0.080	15513	0.060
8968	869	955	0.040	11470	0.040
8974	815	920	0.040	11051	0.040
9002	20479	11161	0.469	133932	0.483
922	669	729	0.030	5833	0.020
9953	860	954	0.040	7636	0.030
9955	495	549	0.020	4395	0.020
TC3089	350	378	0.020	4536	0.020
TC3090	306	333	0.010	2668	0.010
TC3091	272	310	0.010	3720	0.010
TC3092	258	294	0.010	3529	0.010
TC3093	845	912	0.040	10951	0.040
Total	85805	73016	3.07	818335	2.95

NOTE:- SIZING M/C SPEED = 30 MPM & EFF. = 55%
WARPING M/C SPEED = 350 MPM & EFF. = 55%

APPENDIX - III

LOOM PLAN AFTER MODERNISATION - B W MILLS, BANGALORE

SAMPLE NO.	QUALITY	REED	SELVEDGE COUNT	WARP COUNT	WEFT COUNT	SPLIT ID	EFF. %	UTIL. %	U+E %	MTRS./ L/SHIFT	L/SHIFTS DAY	MTRS./ DAY
RUTI 110 cm (188 PPM)												
3397	TUSSORE	4/30		2/20 s	12 s	1	75	95	71	40.23	24	966
8612	LIGHT DRILL	4/40	2/20 s	20 s	12 s	1	65	95	62	32.17	24	772
B52	3/1 DRILL	4/46	2/20 s	16 s	12 s	1	65	95	62	33.13	285	9441
D 316	CASEMENT	56	2/20 s	20 s	10 s	1	75	95	71	37.12	243	9019
TOTAL							70	95	66		576	20198
RUTI 220 cm (150 PPM)												
D316	CASEMENT	56	2/20 s	20 s	10 s	2	75	95	71	59.23	204	12083
8979	DRILL 54"	4/52	2/20 s	20 s	20 s	1	65	95	62	20.17	84	1694
TOTAL							72	95	68		288	13777
RUTI TOTAL							70	90	63		864	33975

APPENDIX - III a

YARN REQUIREMENT (KGS) AT SPINNING - B W MILLS, BANGALORE.

MIXING	COUNT	SINGLE YARN		DOUBLE YARN		SUB TOTAL	BOUGHT YARNFOR TOWELS	GRAND TOTAL
		WARP	WEFT	WARP	WEFT			
OPENEND								
10 s MIX	10 s 10		2033			2033	-	2033
10 s MIX	12 s 12		721			721		721
20 S MIX	16 s 16	1106				1106		1106
20 S MIX	20 s 20	2012	177	262		2451		2451
20 S MIX	24 s 24							
TOWELS								
10 s MIX	10 s 10	1809	618			2427		2427
10 s MIX	12 s 12	145	141			286		286
20 S MIX	16 s 16	384	86			470		470
20 S MIX	20 s 20			630		630		630
20 S MIX	24 s 24			208		208		208
GRAND TOTAL	AVG. COUNT 14.37	5456	3776	1100		10332		10332

APPENDIX - III b

SPIN PLAN AFTER MODERNISATION - B W MILLS, BANGALORE.

TECHNICAL SPECIFICATION - SPINNING - B W M MILLS						
OPENEND SPINNING						
MIX	10s	10s	20s	20 s	20 s	
COUNT	10	12	20	16	24	
KGS. REQUIRED (AT SPG.)	4460	1007	3081	1576	208	10332
ROTOR SPEED	65000	65000	70000	70000	70000	
T.M.	5.30	5.30	5.30	5.30	5.30	
T.P.M.	660	723	933	835	1022	
100% PRODN/ROTOR/8HRS(KG)	2.79	2.12	1.06	1.49	0.81	
EFFICIENCY (%)	92	92	94	94	94	
UTILISATION	97	97	97	97	97	
PRODN/ROTOR/8HRS(KG)	2.49	1.95	0.97	1.40	0.74	
PRODN/ROTOR/24HRS(KG)	7.47	5.85	2.90	4.20	2.22	
40s CONVERSION FACTOR	0.227	0.278	0.462	0.365	0.604	
PRODN./ROTOR/8 HRS(40s-KG)	565	542	447	511	446	
ACTUAL ROTOR REQUIRED	597	172	1063	375	94	2301
NO. OF ROTORS / FRAME	192	192	192	192	192	
PRODN. / MC / 8 HRS. (KG)	478	374	186	269	142	
PRODN. / MC / 24 HRS. (KG)	1434	1123	557	807	425	
NO. OF FRAMES REQUIRED	3.1	0.9	5.5	2.0	0.5	12

APPENDIX - III b

SPIN PLAN AFTER MODERNISATION - B W MILLS, BANGALORE.

TECHNICAL SPECIFICATION - SPINNING - B W MILLS

DRAW FRAME			
MIX	10 s	20 s	
HANK	0.10	0.12	
PRODUCTION REQD.(KG)	5522	4914	10436
DELIVERY SPEED (MPM)	175	175	
100% PRODN/DEL/8 HRS(KG)	496	413	
EFFICIENCY (%)	80	80	
EXP. PRODN/DEL/8 HRS(KG)	397	331	
EXP. PRODN/DEL/8 HRS(KG)	1190	992	
NO. OF FIN. DEL. REQD.	4.6	5.0	
NO. OF PASSAGES REQD.	2	2	
TOTAL NO. OF DEL. REQD.	9.3	9.9	19.2

CARDS			
MIX	10 s/20 s	20 s	
TYPE OF CARDS	IRHP	TOYODA	
HANK-	0.10	0.12	
PRODN.REQUIRED	6121	4368	10489
DOFFER SPEED (RPM)	12	20	
DOFFER DIA IN INCHES	27	27	
TENSION DRAFT	1.4	1.4	
100% PRODN/CARD/8HRS(KG)	103	143	
EFFICIENCY (%)	85	85	
EXP. PRODN/CARD/8HRS(KG)	87	121	
EXP. PRODN/CARD/24HRS(KG)	262	364	
NO.OF CARDS REQUIRED	23.4	12.0	35.4

APPENDIX - III b

SPIN PLAN AFTER MODERNISATION - B W MILLS, BANGALORE.

TECHNICAL SPECIFICATION - SPINNING - B W MILLS			
BLOWROOM FOR ALL COTTON / COTTON IN BLENDS			
MIX	10 s	20 s	
TYPE OF BLOWROOM			
PRODN. REQUIRED (KG)	5883	5235	11118
SHELL ROLLER DIA IN MM	240	240	
RPM	8.5	8.5	
STANDARD LAP LENGTH IN MTRS.	40	40	
STANDARD KGS./ LAP	18.00	18.00	
EFFICIENCY %	85	85	
KGS. / SCUTCHERS/24 HRS.	3311	3311	
NO OF SCUTCHERS REQUIRED	1.78	1.58	3.36

APPENDIX - III C

PIRN WINDING PLAN FOR SINGLE COUNTS AFTER MODERNISATION
B W MILLS BANGALORE.

MIX	12s	12s	20s	SINGLE YARN TOTAL
COUNT	10	12	20	
WEFT KGS. REQUIRED (AT SPG.)	2033	721	177	2931
KGS. REQUIRED (PIRN WINDING)	2023	717	176	2916
SPINDLE SPEED (Y.P.M)	425	425	425	
100% PRODN./SPDL/7.5HRS(KGS)	10.3	8.6	5.2	
EFFICIENCY %	58	69	75	
PRODN./SPDL/7.5 HRS.(KGS)	6.0	5.9	3.9	
PRODN./SPDL/22.5 HRS.(KGS)	18.0	17.8	11.6	
NO OF SPINDLES REQUIRED	113	40	15	168
TYPE OF FEED	AUTO	AUTO	AUTO	
SPINDLES PER WINDER	48	48	60	
NO. OF WINDERS REQUIRED	2.34	0.84	0.25	3.44

APPENDIX - IIId.

WARPING & SIZING PLAN AFTER MODERNISATION - BW. M.

SAMPLE NO	MTRS REQ. AT WEAVING	MTRS REQ. AT SIZING	REQ. NO. OF SIZING M/C	MTRS REQ. AT WARPING	REQ. NO. OF WARPING M/C
2760	9441	10290	0.430	82325	0.300
3397	966	560	0.023	4482	0.016
8612	772	413	0.017	4956	0.017
8740	9019	9920	0.420	79367	0.290
8740	12083	13291	0.560	106330	0.380
8979	1694	1829	0.080	21954	0.080
Total	33975	36305	1.52	299415	1.08

NOTE:- SIZING M/C SPEED = 30 MPM & EFF. = 55%
WARPING M/C SPEED = 350 MPM & EFF. = 55%

DETAILS OF MACHINERIES REQUIREMENT FOR CENTRALISED PROCESS HOUSE.

S.No.	Description of Machine	Total No.of M/cs Required	Machineries to be shifted from B&C	Machineries to be shifted from B.W.M.	New Machines to be purchase
1	Fast plaiting machine	2	2		
2	Singeing Machine	2	1		1
3	Continuous scouring and bleaching M/C	1			1
4	William Washing Machine N.W.	3	2	1	
5	Widewidth Washing Machine	3	2		1
6	Thermo Reaction Chamber	1	1		
7	Rope kier	1	1		
8	Rope Washing machine	1	1		
9	Soda Machine W.W.	1	1		
10	Souring wide width	1	-1		
11	Super Jumbo J.T.10	2			2
12	Carbonising Range with preheater & ager	1	1		
13	Hotflue Drier with padding mangle(Artos	1	1		
14	Hotflue Drier with padding mangle W.W.	1			1
15	Mineral Khaki Developing range N.W.	1	1		
16	Mineral Khaki Developing range W.W.	1	1		
17	Pre-drier N.W.	2	2		
18	Pad steam N.W.	1	1		
19	Pad steam W.W.	1			1
20	Computerise Hydraulic Jigger	1			1
21	Hydraulic Kuster Padding mangle	1			1
22	Dye Alkali mixer with batching device & 6 Nos Batching trollyes with rotating device	1			1
23	Padding mangle N.W.	2	2		
24	Padding mangle W.W./Jumbo pad	2	2		
25	Batching machine	1	1		
26	Jumbo Jigger	9	7	2	
27	Jiggers W.W.	8	8		

APPENDIX IV

DETAILS OF MACHINERIES REQUIREMENT FOR CENTRALISED PROCESS HOUSE.

S.No.	Description of Machine	Total No.of M/cs Required	Machineries to be shifted from B&C	Machineries to be shifted from B.W.M.	New Machines to be purchase
28	Rapid Jet dyeing machine	6	2	1	3
29	HT/HP Beam Dyeing machine	1	1		
30	Detwister	3	2		1
31	Merceriser W.W.	2	1		1
32	Quadruple effect caustic evoparator	1			1
33	Stenters Thermic fluid heated	7	3	1	3
34	Polymeriser	3	1	1	1
35	Sanforiser W.W.	2	1	1	
36	Sanforiser N.W.	1	1		
37	Semi-continuous decatising machine	1			1
38	Water proof pad	1	1		
39	Drying cylinder N.W.	2		2	
40	Drying cylinder W.W.	5	3	1	1
41	Seven Bowl calender	1	1		
42	Blueing pad	1	1		
43	Flatbed Screen Printing	1	1		
44	Rotary Printing	1	1		
45	H.T.Pressure kier (Printing)	2	2		
46	Milling Machine	2		1	1
47	S.S.Winches	5	2	3	
48	Scutcher	2	1	1	
49	Raising Machine	1	1		
50	Shearing and Cropping M/c	1	1		
51	Automatic Exposing Machine for Ptg.	1			1
52	Automatic Lacquering machine for Ptg	1			1
53	Hydro Extracter	2			2
54	Terry Towel Drying M/C (Tumbler drying)	1			1

APPENDIX IV

DETAILS OF MACHINERIES REQUIREMENT FOR CENTRALISED PROCESS HOUSE.

S.No.	Description of Machine	Total No.of M/cs Required	Machineries to be shifted from B&C	Machineries to be shifted from B.W.M.	New Machines to be purchased
55	Roberto Roller 2000 mm	2			2
56	Roberto Roller 1800 mm	1			1
57	Plaiting Machine W.W. for Dyed Fabrics	2	1	1	
58	Plaiting Machine N.W. For Dyed Fabrics	1	1		
59	Kier Decatising Machine	1		1	
60	Napthol Coupling Machine	1	1		
61	Chrome Plant	2	2		
62	Sewing Machine	40	15	5	20
63	F.R.P Bandies Large	430	190	40	200
64	F.R.P Bandies Small	150	150		
65	Batching Trolleys with handle Big	90			90
66	Batching Trolleys with handle Small	30	30		
67	Digital electronic Balances	8			8
68	Xeno Tester	1			1
69	Permutit plant with filters	4	3	1	
70	Battery operated trucks	3			3
71	Tri Homogenisers	2			2
72	Ball Mills	3			3
73	Meter Counters	40			40

APPENDIX V

CENTRALISED PROCESS HOUSE - BHUVANAGIRI

DETAILS OF PRODUCT MIX

PARTICULARS	Production/day (000'Metres)
Cotton	79
Polyester Blends	58
Wollen Blends	4
Job-Processing	12
Grand Total	153

APPENDIX VI

ASSUMPTIONS FOR WORKING OUT COST OF PRODUCTION - B & C MILLS.MADRAS.

SALES AND OTHER DIRECT COST BUDGET

No. of Working days per year : 354

Machine Utilisation % Assumed :

Spinning 95

Weaving 95

SORT NO	QUALITY	Grey mtrs/day	El/Sh %	Finish mtrs/day	LSS %	<--Rate per Metre (Rs.)--> Improved SVP	SM	DYES	PM	CC %	<----Value per day in Rs.----> S.V.P.	Siz	Dyes	Pack	O.Com	Processing Charges Value/day	Rate Per Mtr.
EXPORT :																	
TC 3093	As MARATHON	845	-1.96	828	3.40	47.80	0.11	6.81	1.01	3.20	39578	91	5639	836	1266	9603	11.60
	EXPORT TOTAL	845		828							39578	91	5639	836	1266	9603	
EXPORT GARMENT MAKERS :																	
TC 3089	20sx20s G.Sheeting Twill	350		350	2.00	17.49	0.26		0.14	1.00	6122	91	0	49	61	0	
TC 3090	30sx30s G.Sheeting Twill	306		306	2.00	23.67	0.25		0.11	1.00	7243	77	0	34	72	0	
TC 3091	40sx40s G.Sheeting Plain	272		272	2.00	16.46	0.28		0.14	1.00	4477	76	0	38	45	0	
TC 3092	40sx40s G.Sheeting Satin	258		258	2.00	18.52	0.26		0.14	1.00	4773	67	0	36	48	0	
	EXPORT GARMENT TOTAL	1186		1186							22620	311	0	157	226	0	
DEFENCE /GOVT :																	
S 8975	B 17 DRILL	4056	3.23	4187	3.60	21.01	0.16	2.11	0.09	2.20	87969	670	8835	377	1735	33025	7.89
S 7670	11 OZ CANVAS	666	8.84	725	8.10	38.96	0.14	4.66	0.11	2.20	28246	102	3379	80	621	9548	13.17
S 8975	B17 DRILL CAMOUFLAGE PTD	3092	3.23	3192	3.60	34.09	0.16	4.32	0.09	2.60	108815	511	13585	287	2829	30164	9.45
S 5036	BD 401	1888	3.23	1949	3.70	16.11	0.11	1.55	0.09	2.20	31398	214	3021	175	671	11338	5.82
S 8504	VARIETY 4 DRILL	1747	3.23	1803	3.30	28.40	0.24	8.79	0.09	2.20	51205	433	15943	162	1127	16966	9.41
S 37085	AIRMARSHALL	2458	-3.97	2360	3.10	57.43	0.11	9.04	0.95	2.60	135535	260	21334	2242	3524	27376	11.60
S 1362	ANGOLA	836	-7.90	770	3.77	46.42	0.30	4.44	0.30	2.80	35743	231	3419	231	1001	3542	4.60
	GOVT.TOTAL	14743		14986							478911	2421	71221	3554	11728	132169	
HOME :COTTON CLOTH :																	
S 8975	B 17 DRILL	13331	3.23	13762	3.60	21.01	0.16	1.30	0.09	1.00	289140	2202	17891	1239	2891	108445	7.88
S 5036	BD 401	3103	3.23	3203	3.70	15.93	0.11	0.86	0.09	1.00	51024	352	2755	288	510	18962	5.92
S 4385	LUSTALIN	1133	-2.50	1105	3.80	20.10	0.23	0.74	0.20	1.00	22211	254	818	221	222	5669	5.13
S 8714	MARLENE	1125	0.67	1133	3.40	16.04	0.23	0.78	0.20	1.00	18173	261	884	227	182	6186	5.46
S 8974	HANAVA "W"	815	-0.50	811	10.90	48.05	0.35	5.53	0.42	1.00	38969	284	4485	341	390	11508	14.19
S 8968	SUPER CONSUL	869	-0.50	865	3.20	46.89	0.40	3.40	0.42	1.00	40560	346	2941	363	406	14913	17.24
S 8346	SATIN FURNISHING	265	1.63	269	3.10	29.73	0.25	3.19	0.28	2.00	7997	67	858	75	160	2553	9.49
	HOME COT.CLOTH TOTAL	20641		21148							468074	3766	30632	2754	4761	168236	

APPENDIX VI (Contd.)

ASSUMPTIONS FOR WORKING CUT COST OF PRODUCTION - E & C MILLS,MADRAS. No. of Working days. : 354

SALES AND OTHER DIRECT COST BUDGET

SORT NO	QUALITY	Grey mtrs/day	El/Sh %	Finish mtrs/day	LSS %	Rate per Metre (Rs.) Improved SVP	SM	DYES	PM	DC %	Value per day in Rs. S.V.P.	Siz	Dyes	Pack	D.Com	Processing Charges Value/day	Rate Per Mtr.
HOME BLENDS CLOTH :																	
S 37039	MARLBOROUGH	4755	-0.66	4724	6.00	57.94	0.09	5.08	0.95	2.00	273709	425	23998	4488	5474	54798	11.60
S 37085	AIRMARSHALL	1621	-3.97	1557	5.10	57.42	0.11	6.90	0.95	2.00	89403	171	10743	1479	1788	18061	11.60
S 37315	MARATHON	4121	-1.96	4040	4.40	51.25	0.09	6.20	0.95	2.00	207050	364	25048	3838	4141	46864	11.60
S 37320	COMMANDO	817	-1.32	806	5.00	51.66	0.08	6.58	0.95	2.00	41638	64	5302	766	833	9350	11.60
S 37318	DENVER	788	-1.32	778	5.40	50.75	0.08	6.02	0.95	2.00	39484	62	4684	739	790	9025	11.60
S 37128	SEOUL	1508	-1.96	1478	5.20	52.10	0.19	4.74	0.95	2.00	77004	281	7006	1404	1540	17145	11.60
S 37040	EARL	1763	-3.85	1695	10.50	68.49	0.21	5.15	0.95	2.00	116091	356	8729	1610	2322	18882	11.14
S 37295	VIC. SUPREME	3242	-5.04	3078	5.00	57.25	0.10	6.13	0.95	2.00	176216	308	18868	2924	3524	34229	11.14
S 37695	BINNY STAR	3676	-1.96	3604	4.70	47.19	0.19	7.70	0.95	2.00	170073	685	27751	3424	3401	41806	11.60
S 37359	NEW LOOK	2357	-1.96	2311	4.80	49.53	0.19	6.99	0.95	2.00	114464	439	16154	2195	2289	26802	11.60
S 37141	TRIBUTE	878	-3.18	850	7.40	61.66	0.11	6.00	1.03	2.00	52581	94	5100	876	1052	9469	11.14
S 37056	INSPECTOR GENERAL	1162	0.67	1170	6.50	55.79	0.08	4.15	0.95	2.00	65274	94	4856	1112	1305	13372	11.60
S 1148	CARNABY	522	-7.54	483	2.10	171.92	0.10	6.70	1.54	2.50	83037	48	3236	744	2076	5603	11.60
S 1828	P/W SUITING 70:30	242	-9.55	219	4.80	105.82	0.11	7.76	1.86	2.50	23175	24	1699	407	579	2540	11.60
S 1812	VARSITY	304	-8.03	280	4.80	83.84	0.10	6.70	1.54	2.50	23475	28	1876	431	587	3248	11.60
S 28409	CLASSMATE	3284		3284	5.60	30.19	0.04	4.15	0.72	2.00	99144	131	13629	2364	1983	15106	4.60
S 28652	PLAYMATE	1561	-1.32	1541	6.60	30.49	0.27	1.23	0.72	2.00	46985	416	1895	1110	940	7089	4.60
S 29451	CHECK N CHECK	1459	-1.32	1440	4.70	29.58		2.79	0.72	2.00	42595		4018	1037	852	6624	4.60
S 28578	PRIYANKA	3011	-0.99	2981	11.70	28.02	0.21	1.24	0.72	2.00	83518	924	3696	2144	1671	13713	4.60
S 28915	NEW PRIYANKA	1261	-0.99	1249	7.80	27.73	0.48	1.57	0.72	2.00	34635	600	1961	899	693	5748	4.60
S 28916	NEW DEBONAIR	446	-0.99	442	5.00	32.43	0.51	1.35	0.54	2.00	14334	225	597	209	287	2028	4.60
S 28058	SILVER LEGEND	1115	-0.99	1104	9.30	25.54	0.32	1.57	0.72	2.00	28196	353	1733	795	564	5078	4.60
S 29012	BARON/METEOR	747	0.67	752	11.30	24.17	0.37	0.78	0.72	2.00	19680	278	587	541	394	3459	4.60
S 1194	SCHOOLMATE	2294	-4.26	2196	6.60	30.21	0.19	4.32	0.40	2.00	86341	417	9487	878	1227	10101	4.60
S1829/30	PREFECT CHECK	928	-6.22	870	4.10	26.91	0.15	2.48	0.49	2.00	23412	131	2153	422	468	4002	4.60
S 758	NEW APSARA	2294	-5.26	2173	11.70	21.94	0.21	1.23	0.40	2.00	47676	456	2670	869	954	9995	4.60
S 922	APSARA SUPREME	669	-4.21	641	6.60	23.89	0.26	1.49	0.43	2.00	15313	167	953	309	306	2949	4.60
S 9953	COTSWOOL PLAIN	860	-6.81	801	7.10	40.26	0.23	1.41	1.20	2.50	32248	184	1129	561	806	3688	4.60
	COTSWOOL CHECK	495	-6.81	461	3.70	58.73	0.23	5.74	1.21	2.50	28387	106	2646	558	585	2121	4.60
S 27455	EM 6000	210	-1.32	207	8.40	41.98	0.49	1.37	0.95	2.00	8690	101	284	197	174	2401	11.60
	HOME BLENDS TOTAL	48390		47218							2138838	7932	212499	39761	43705	405563	
	HOME GRAND TOTAL	69031		68363							2606912	11698	243131	42515	48466	573799	
	GRAND TOTAL/day	85805		85363							3148020	14521	319991	47062	61636	715573	
Total for 354 days in Lacs.		303.75		302.19							11143.99	51.40	1132.77	166.60	218.37	2533.13	
MARKET YARN SALES :																	
	50s P/C 67 :33	1225		1225		106.00			1.10		129850			1348			
	60s P/C 67 :33	525		525		108.00			1.10		56700			578			
	2/30s P/C 67 :33	1835		1835		103.00			1.10		189005			2019			
	Yarn Total/day	3585		3585							375555			3945			
	For 354 days	12.69		12.69							1329.46			13.97			

APPENDIX VI (Contd..)

RAWMATERIAL BUDGET

COUNT	MIX	S.WASTE YIELD %	Rate/Kg Rs.	Yarn Requirement Per day Kg	Kg	R.M./day Kg	Value/day Rs.	<-- Y.Duty --> Rate Rs/Kg	Value 0.988
24 K	16/20	85.58	28.90	138	138	161	4653	1.610	220
30 K	44s	87.12	34.91	48	48	55	1920	1.610	76
34 K	44s	87.12	34.91	155	155	178	6214	3.105	475
40 C	44s	74.36	34.91	780	780	1049	36621	3.105	2393
16	PC 48/52	97.81	78.31	718	345	353	27643	8.050	5711
		74.36	34.91		373	502	17525		
20	PC 48/52	97.81	78.31	301	144	147	11512	8.050	2394
		74.36	34.91		157	211	7366		
32	PC 48/52	97.81	78.31	1662	798	816	63901	8.050	13219
		74.36	34.91		864	1162	40565		
40	PC 48/52	97.81	78.31	232	111	113	8849	8.050	1845
		74.36	34.91		121	163	5690		
16/20	PC 42/58	97.81	78.31	977	410	419	32812	8.050	7770
		74.36	34.91		567	763	26636		
16	PC 67/33	97.81	78.31	401	269	275	21535	8.050	3189
		74.36	34.91		132	178	6214		
30	PC 67/33	97.81	78.31	1143	766	783	61317	8.050	9091
		74.36	34.91		377	507	17699		
32	PC 67/33	97.81	78.31	1335	894	914	71575	8.050	10618
		74.36	34.91		441	593	20702		
40	PC 67/33	97.81	78.31	176	118	121	9476	8.050	1400
		74.36	34.91		58	78	2723		
50	PC 67/33	97.81	78.31	383	257	263	20596	8.050	3046
		74.36	38.78		126	169	6554		
80	PC 67/33	97.81	78.31	624	418	427	33438	8.050	4963
		74.36	38.78		206	277	10742		
45	PC 48/52	97.81	78.31	36	17	17	1331	8.050	286
		74.36	38.78		19	26	1008		
50	PC 48/52	97.81	78.31	159	76	78	6108	8.050	1265
		74.36	38.78		83	112	4343		
60	PC 48/52	97.81	78.31	52	25	26	2036	8.050	414
		74.36	38.78		27	36	1396		
80	PC 48/52	97.81	78.31	84	40	41	3211	8.050	668
		74.36	38.78		44	59	2288		
32	PV 48/52	97.81	78.31	856	411	420	32890	16.100	13616
		97.81	58.03		445	455	26404		
60	PV 48/52	97.81	78.31	60	29	30	2349	16.100	954
		97.81	58.03		31	32	1857		
32	PV 64/36	97.81	78.31	268	172	176	13783	16.100	4263
		97.81	58.03		96	98	5687		
40	PV 64/36	97.81	78.31	493	316	323	25294	16.100	7842
		97.81	58.03		177	181	10503		

APPENDIX VI (Contd..)

RAWMATERIAL BUDGET

COUNT	MIX	S.WASTE YIELD %	Rate/Kg Yarn Rs.	Requirement Per day Kg	Kg	R.M./day Kg	Value/day Rs.	<-- Y.Duty --> Rate Rs/Kg	Value 0.968
28	CW 57/43	74.36	34.91	189	108	145	5062	3.110	581
		97.81	286.12		81	83	23748		
18	PW 70/30	97.81	78.31	90	63	64	5012	16.100	1432
		97.81	286.12		27	28	8011		
26	PW 55/45	97.81	78.31	89	49	50	3916	16.100	1416
		97.81	286.12		40	41	11731		
11	WC 48/52	97.81	286.12	79	38	39	11159	1.610	126
		74.36	34.91		41	55	1920		
22.5	WC 48/52	97.81	286.12	82	39	40	11445	1.610	130
		74.36	34.91		43	58	2025		
	COTTON			1121	1121	1443	49408		3164
	BLEND			10489	10489	11947	749587		96239
	TOTAL/DAY			11610	11610	13390	798995		99403
For 30 days in Lacs				3.48	3.48	4.02	239.70		29.82
For 354 days in Lacs				41.10	41.10	47.40	2828.44		351.89
BOUGHT YARN									
10 K	Cotton	100.0	42.30	2010	2010	2010	85023		
14 K	Cotton	100.0	47.50	653	653	653	31018		
16 K	Cotton	100.0	50.05	2655	2655	2655	132883		
20 K	Cotton	100.0	51.60	580	580	580	29928		
2/50s NM	PW 55/45	100.0	253.91	181	181	181	45958		
80 Den	T.P.Yarn	100.0	190.00	88	88	88	16720		
84 Den	T.P.Yarn	100.0	190.00	24	24	24	4560		
150 Den	T.P.Yarn	100.0	160.00	101	101	101	16160		
TOTAL/DAY				6292	6292	6292	362250		
For 30 days in lacs					1.89	1.89	108.68		
For 354 days in lacs					22.27	22.27	1282.37		
SPUN & BOUGHT YARN PER DAY				17902	17902	19682	1161245		
For 30 days in lacs					5.37	5.90	348.37		
For 354 days in lacs					63.37	69.67	4110.81		
Sale Yarn									
2/30	PC 67/33	97.81	78.31	1835	1229	1257	98436		
		74.36	34.91		606	815	28452		
50	PC 67/33	97.81	78.31	1225	821	839	65702		
		74.36	38.78		404	543	21058		
60	PC 67/33	97.81	78.31	525	352	360	28192		
		74.36	38.78		173	233	9036		
				3585	3585	4047	250876		

APPENDIX VI (Contd.)
WAGE BUDGET

Description	
Available on muster-Regular	5314
Daily Employment	2350
Proposed muster	2721
COMPOSITION OF LABOUR	
Regular	2350
Occ.Trainees	
Casuals	
Trainees (Rs.41.60)	
Others Trainees	
	2350
WAGE RATE	
Regular	117.84
Occ.Trainees	97.04
Casuals	62.40
Trainees	41.60
Others Trainees	18.72
Wage cost per day in Rs.	276924
Wage cost for 354 days in Rs.lacs	980.31
Number of staff	92
Staff rate	139.24
Staff salary/Day in Rs.	12810
Staff salary/354 days Rs.lacs	45.35
Number of management staff	125
Mgt Staff salary/Day Rs. @Rs.141.59/day	17699
Mgt Staff salary/354 days Rs.lacs	62.65
Total Wages & Sal./Day Rs.	307433
Total for 354 days Rs. lacs	1088.31
Muster Strength as on 1-11-93	
Regular	5314
Badies	10
Casuals	117
Occupationl Trainees	582
Stipendary Trainees	207
Other Trainees	188
Total	6418
Clerical Staff	424

APPENDIX VI (Contd.)

WAGE BUDGET - VARADAN AWARD ONLY.

Description	
Available on muster-Regular	
Daily requirement	
Proposed muster	
Available/Proposed muster	
Staggered Holidays	
Leave & Absenteeism 20%	
Regulars Available Daily	
COMPOSITION OF LABOUR	
Regular	2350
Occ.Trainees	
Casuals	
Trainees (Rs.41.60)	
Others Trainees	
	2350
WAGE RATE	
Regular	12.07
Occ.Trainees	6.52
Casuals	
Trainees	
Others Trainees	
Wage cost per day in Rs.	28365
Wage cost per annum in Rs.lacs	100.41
Number of staff	92
Staff rate	39.24
Staff salary/Day in Rs.	3610
Staff salary/annum Rs.lacs	12.78
Total Wages & Sal./Day Rs.	31975
Total per annum Rs. lacs	113.19

APPENDIX VI (Contd.)
B & C Mills, Madras.
Power Fuel Water Budget

DETAILS	
COST OF FUEL	
Yarn sized in kgs. per day	10062
Steam consumption/Kg of sized yarn	4.17
Steam req.in kgs. sized/Dyed yarn	41959
Steam required for space heating	678
Steam per kg of Coal for cloth	5.0
Steam per kg of Coal for yarn/heat	5.0
Cost of coal (incl.handling)/ton	1350
Coal required in kgs.	8527
Cost of coal/gas in Rs.per day	11512
Cost in lac Rs. per Annum	40.75
COST OF WATER	
Water required for Steam	49
Water required for General	600
Total Water Requirement/day in KL	649
Metro	649
Cost per day (incl.Treatment)	
Metro @ Rs.(12+10.20)/K.L.	8288
TOTAL /day	8288
TOTAL COST PER ANNUM IN LAC Rs.	29.34
COST POWER COST :	
Rate per unit Madras	2.11
Units per day Madras	98743
Cost per day in Rs.	208348
Cost per Annum in Rs. Lacs	737.55
SUMMARY OF POWER,WATER & FUEL COST	
Power Cost	737.55
Water Cost	29.34
Fuel cost	40.75
	807.64

APPENDIX VI (Contd)

B & C MILLS, MADRAS.

Working Sheet for Stores & Spares and Repairs & Maint. Budget

Cost Centres	Unit of Activity	Rate/Unit Total Rs	Activity	Value/day Rs.
Open End Spinning	Rs.Lacs			
B.M. Carding	Sp.shfts	0.1328		
B.M. Spinning	Sp.shfts	0.1451		
C.M. Carding	Sp.shfts	0.1228	153474	18847
C.M. Spinning	Sp.shfts	0.0691	153474	10605
Doubling	Sp.shfts	0.0334	60615	2025
Roto	Drum shft	0.3486	5676	1979
Uniconer	Drum shft	7.4656		
Autoconer	Drum shft	1.2619	360	454
B.C.Spooler	Drum shft	1.5955		
Schweiter	Sp.shfts	3.1362	2028	6360
Warping	Loom.Sh	0.0665	2376	158
Sizing	Loom.Sh	0.2636	2376	626
T&D	Loom.Sh	3.1417	2376	7465
Northrop	Loom.Sh	9.6357	24	231
Northrop TTL	Loom.Sh			
Ruti	Loom.Sh	13.3319	2172	28957
Ruti TTL	Loom.Sh	14.1395		
Cimmco	Loom.Sh	7.2705	180	1309
Greywarehouse	G.Metres	0.0145	85805	1244
Dyehouse	F. Metres	0.1172		
Finished Warehouse	F. Metres	0.0025		
Others	Day	46846	1	46846
Works Contract	Day	9987	1	9987
Labour Contract	Day	2759	1	2759
Total/Day				139852
For 30 days in lac Rs.				41.96
For 354 days in lac Rs.				495.08

APPENDIX VI (Contd.)

B & C MILLS, MADRAS.

OVERHEADS BUDGET

In Lac Rs.

Details	Per day In Lac Rs.	Details		<--- Per day --->	
MILL OVERHEADS		SELLING EXPENSES			
Postages/Telegrams/Telep	0.03	Management Staff salary			0.07
Insurance Rates & Taxes	0.27	Clerks & Supp salary			0.05
Travelling Expenses	0.01	Regional office expenses			0.06
Personnel,Admn.,Welfare	0.18	Travelling expenses			0.01
Printing & Stationery	0.05	Others			0.04
Carrying Charges on Cott					
Freight Charges	0.08				
Bank charges on cotton	0.06	Sub-Total in Lac Rs.			0.23
Others	0.10				
		QTY.INCENTIVE SCHEME :-	%	SVP/Day	
Total per day in Lac Rs.	0.78	Export	Nil	0.62	
Total per Month in lac Rs	23.01	Government	Nil	4.79	
		City Sales (8 Cr./Annum)	@1.5%	2.26	0.03
H.O. EXPENSES -		SFR (6 Cr./Annum)	Nil	1.69	
Manag.Staff Salary	0.02	Other Home Market	@1.5%	22.12	0.33
clerk & supp salary	0.02				
Corporate Office	0.24	Sub-Total in Lac Rs.		31.48	0.36
Legal Expenses	0.02				
Retirement Benefits	0.03	CASH DISCOUNT SCHEME :-			
Others	0.02	Export	Nil	0.62	
		Government	Nil	4.79	
Total per day in Lac Rs.	0.35	City Sales	@1.5%	2.26	0.03
Total per Month in lac Rs	10.33	Seconds.Fents,Rags	@3.0%	1.69	0.05
		Other Home Market	@2.5%	22.12	0.55
CORPORATE OFFICE EXPENSES					
Postages/Telegrams/telep		Sub-Total in Lac Rs.		31.48	0.63
Travelling expenses					
Car maintenance expenses		Advertisement @ 2% On Total Sales			0.63
Subscription		Total Selling Expenses per day			1.85
Electric/water charges		Total Selling Expenses per Month			54.58
Insurance,rates & taxes		Total Selling Expenses per Annum			654.9
Printing & Stationery					
Audit fees		Provision for Discount on Spl.Supplies &			
Repairs		Stock disposal @ 1% on Total Sales-SFR			
Rep.Office Expenses		Per day			0.30
Misc.General expenses		Per Annum			106.20

APPENDIX VI (Contd.)

B & C MILLS. MADRAS.

Working Sheet for Other income

Credit for sale of waste

Mix	Detail	Rate/kg	
Common,44k & 64k	Quantity		394
	Value	0.44	173
44s C	Quantity		6283
	Value	3.26	20483
64s C	Quantity		1465
	Value	3.39	4966
Polyester	Quantity		8564
	Value	0.12	1028
Viscose	Quantity		766
	Value	0.12	92
Quantity in kgs			17472
Quantity in Value			26742
HARD WASTE WORKINGS			
	Quantity		11610
	Value/day	0.28	3251
Total Quantity/day			29082
Value/day			29993
Value per year Rs. in lacs			106.18

SUMMARY OF OTHER INCOME	/Annum
Proposed rental income	
Sale of waste	106.18
Sale of scrap	90.00
Rental Income	9.00
Income by way of Export Premium	
Total other income/ Annum in Lac Rs	205.18
Total other income per day in Rs.	57960

APPENDIX - VII

ASSUMPTIONS FOR WORKING OUT COST OF PRODUCTION - B.W.MILLS BANGALORE

NO.OF WORKING DAYS PER YEAR : 354

MACHINE UTILISATION % ASSUMED
SPINNING : 95
WEAVING : 95

CLOTH SALE VALUE AND OTHER DIRECT COST BUDGET

LOOM/SORT	DESCRIPTION	GREY MTS	ELG/SHR %	FIN MTS	EX-MILL	V.L. %	V.L. RS.	NET SP	SIZG. MATL.	PRODG. CHRGES (INCL.PKG.)	D.COM	VALUE PER DAY S.V.P	SIZ.MAT	PROC.CHR	D.COM
R-110 (192 LOOMS)															
3397	TUSSORE	966	-4	927	23.50	8.00	1.88	21.62	0.07	7.20	0.22	20042	65	6674	200
8612	LT.DRILL	772	3	795	18.66	5.00	0.93	17.73	0.13	6.13	0.18	14096	103	4873	141
B 52	DRILL	9441	3	9724	21.04	8.00	1.68	19.36	0.13	7.17	0.19	188257	1264	69721	1883
D 316	CASEMENT	9019	5	9470	19.86	8.00	1.59	18.27	0.07	7.20	0.18	173027	663	68184	1730
R-220 (96 LOOMS)															
D 316	CASEMENT	12083	5	12687	19.86	8.00	1.59	18.27	0.07	7.20	0.18	231791	888	91346	2318
8979	DRILL 54"	1694	-1	1677	34.02	5.00	1.70	32.32	0.30	11.92	0.32	54201	503	19990	542
		33975		35280		8.35		17.19				681414	3486	260789	6814

TOWELS PRODUCTION, SALE VALUE AND OTHER DIRECT COST PER DAY

SORT	SIZE	SINGLES EXPORT	SINGLES LOCAL	SINGLES TOTAL	QTY KG. EXPO	QTY KG. LOCAL	QTY KG. TOTAL	BLEACHED 20% EXPORT KG	BLEACHED 20% LOCAL KG	BLEACHED 20% TOTAL	DYED 20% EXPORT KG	DYED 20% LOCAL KG	DYED 20% TOTAL	CONVERSION CHARGES BLEACHED EXPORT RS/KG	CONVERSION CHARGES BLEACHED LOCAL RS/KG	CONVERSION CHARGES DYED EXP/LOCL RS/KG	CONVERSION VALUE UPTO FINI BLD.	CONVERSION VALUE UPTO FINI DYED	CONVERSION VALUE UPTO FINI TOTAL	OCT.92/SEP.93 AVG. EX-MILL PER SINGL	OCT.92/SEP.93 AVG. S V P	V.L.%	PKG. /SIGL RS.	PKG.MATL VAL. RS
8216A	20 X 40		971	971		227	227		182	182		45	45		6	25	3814	1816	5630	23.83	22448	3.00	0.77	748
8573A	30 X 60		1169	1169		622	622		498	498		124	124		6	25	10450	4976	15426	46.94	55495	3.00	0.77	900
7601	27 X 54 J		490	490		201	201		161	161		40	40		6	25	3377	1608	4985	40.98	19478	3.00	0.61	299
7927	16 X 27		1944	1944		398	398		319	319		80	80		6	25	6694	3188	9882	14.75	27814	3.00	0.77	1497
8932	20 X 40 SB		1650	1650		408	408		326	326		82	82		6	25	6854	3264	10118	24.75	39612	3.00	0.77	1271
7641	30 X 54		500	500		239	239		191	191		48	48		6	25	4015	1912	5927	43.88	21282	3.00	0.77	385
8897	12 X 12		5152	5152		223	223		178	178		45	45		6	25	3746	1784	5530	2.64	13193	3.00	0.22	1133
7846	23 X 44		593	593		189	189		151	151		38	38		6	25	3175	1512	4687	26.84	15439	3.00	0.55	326
8933	27 X 54		714	714		347	347		278	278		69	69		6	25	5830	2776	8606	43.69	30259	3.00	0.77	550
9008	19 X 40	814		814	192		192	154		154	38		38	10		25	3840	1536	5376	29.08	22961	3.00	0.62	505
9009	27 X 49	1091		1091	435		435	348		348	87		87	10		25	8700	3480	12180	49.00	51835	3.00	0.87	949
8992	20 X 36	1104		1104	237		237	190		190	47		47	10		25	4740	1896	6636	26.45	28325	3.00	0.62	684
8993	27 X 54	701		701	319		319	255		255	64		64	10		25	6380	2552	8932	55.91	38000	3.00	0.87	610
		3710	13183	16893	1183	2854	4037	946	2284	3230	237	571	807				71615	32300	103914		386160			9856

S V P EXPORT - > 141141
LOCAL - > 245019

APPENDIX-VII (CONTD.)

B.W.MILLS BANGALORE
RAW MATERIAL AND YARN DUTY BUDGET

MIX	BLEND	COUNT	YARN REQ KG	COTTON YARN KG	YIELD	R.M.KG	RATE	VALUE RS.
OPEN END								
10s	COT 100%	10s	4368	4368	0.85	5139	23.57	121101
10s	COT 100%	12s	986	986	0.85	1160	23.58	27350
20s	COT 100%	16s	1543	1543	0.87	1774	28.08	49821
20s	COT 100%	20s	3017	3017	0.87	3468	28.09	97413
20s	COT 100%	24s	203	203	0.87	233	28.22	6575
			10117	10117		11774		302260
BOUGHT YARN								
10s	COT 100%	10s	92	92	1	92	37.00	3404
10s	COT 100%	12s	21	21	1	21	38.00	798
20s	COT 100%	16s	33	33	1	33	45.00	1485
20s	COT 100%	20s	64	64	1	64	50.00	3200
20s	COT 100%	24s	5	5	1	5	53.00	265
			215	215		215		9152
TOTAL			10332	10332		11989		311412

TOTAL R.M. REQUIREMENT PER DAY RS.

	QTY. KG.	VALUE RS.	ADJ.WASTE	NET R.M.VALUE	AVG.RATE/
COTTON	10117	302260	4561	297699	29.43
BOUGHT YARN	215	9152		9152	0.00
TOTAL	10332	311412		306851	

YARN DUTY:

COUNT	YARN PRODN. KG./DAY	YARN DUTY RATE/KG	YARN DUTY VALUE RS.
10s	4460	0.58	2587
12s	1007	1.61	1621
16s	1576	1.61	2537
20s	3081	1.61	4960
24s	208	1.61	335
	Y.D. VALUE PER DAY RS..		12041
	Y.D. VALUE PER YEAR RS.LACS		43

APPENDIX-VII (CONTD.)

WAGES AND SALARIES BUDGET

WORKERS:

DAILY REQUIREMENT	599
WAGE RATE PER DAY RS.	110
WAGES PER DAY RS.	65890

CLERICAL STAFF:

REQUIREMENT	29
RATE PER DAY RS.	140
SALARY PER DAY RS.	4060

MANAGEMENT STAFF

REQUIREMENT	96
RATE PER DAY RS.	145
SALARY PER DAY RS.	13920

SALARIES & WAGES RS.PER DAY	83870
SALARIES & WAGES RS.LACS/YEAR	297

STORES,SPARES,SIZING.PACKING ETC.,

STORES/SPARES

CONSUMPTION OF STORES/SPARES RS.PER DAY	18950
VALUE RS.LACS/YEAR	67

SIZING MATERIAL:

SIZING MATERIAL FOR CLOTH AS PER QUALITY WISE REQUIREMENT:

VALUE RS./DAY	3486
VALUE RS.LACS/YEAR	12

PACKING MATERIALS:

YARN PACKING KG./DAY	4021
RATE PER KG.	1.27
VLAUE PER DAY RS.	5107
GREY CLOTH MTS/DAY	33975
RATE PER MTR. RS.	0.05
VLAUE PER DAY	1699

FINISHED CLOTH PACKING : INCLUDED IN PROCESSING CHARGES

FINISHED TOWELS PACKING: AS PER QUALITY WISE PACKING PER SINGLE:

VALUE RS. PER DAY	9856
VALUE RS.LACS PER YEAR	35
TOTAL PACKING MATERIL VALUE PER DAY	16661
VALUE PER YEAR RS.LACS	59

STORES,SIZING & PACKING MATERIAL VALUE PER YEAR RS.LACS 138

APPENDIX-VII (CONTD.)

POWER, WATER AND FUEL COST

POWER CONSUMPTION PER DAY UNITS	22205
POWER RATE RS./UNIT	2.12
POWER VALUE PER DAY RS.	47075
POWER VALUE RS.LACS PER YEAR	167
WATER:	
CITY WATER REQUIREMENT PER DAY	210 K.L.
RATE PER RS./K.L	24
VALUE PER DAY	5040
BOREWEL WATER REQUIREMENT PER DAY	140 K.L.
RATE PER RS./K.L	4.65
VALUE PER DAY	651
COAL REQUIREMENT TONS PER DAY	10
RATE PER TON RS.	1385
VALUE PER DAY	13850
POWER,WATER AND FUEL VALUE PER DAY RS.	66616
VALUE PER YEAR RS.LACS	236
OVERHEADS	
FREIGHT:	
YARN FOR TOWEL CONVERSIION KG/DAY	4021
RATE PER KG.	0.30
VLAUE PER DAY RS.	1206
GREY CLOTH FOR PROCESSING MTS/DAY	33975
RATE PER MTR.	0.10
VLAUE PER DAY RS.	3398
TOTAL FREIGHT PER DAY RS.	4604
TOTAL FREIGHT PER YEAR RS.LACS	16
GUARANTORS COMMISSION: 1% ON LOCAL SALES	
VALUE RS.LACS PER YEAR	33
QUANTITY INCENTIVE 1% ON LOCAL SALES	
VALUE RS.LACS PER YEAR	33
CASH DISCOUNT: 1.5% ON LOCAL SALES	
VALUE RS.LACS PER YEAR	49
EXPORT HOUSE EXPENSES: 4% ON EXPORT SALES	
VALUE RS.LACS PER YEAR	20
EXPORT PROMOTION EXPENSES: 1% ON EXPORT SALES	
VALUE RS.LACS PER YEAR	5
ADVERTISEMENT: 2% ON LOCAL SALES	
VALUE RS.LACS PER YEAR	66
MILL O.H./ADMN.O.H	
VALUE RS.LACS PER YEAR	211
TOTAL OVERHEADS RS.LACS PER YEAR	417

APPENDIX-VIII

ASSUMPTIONS FOR WORKING OUT COST OF PRODUCTION B.W.MILLS SILK UNIT

SAMPLE NO.	No.of Looms /DAY	Grey Prod /L.Shift /DAY	Prodn. / day	Fin.Mtr /day	EXMILL PER Mtr.	L.S.S. %	S.V.P. Rate/Mt	Total SVP/DAY	Dyes&Chem / Mt.Rs.	Pack Mat / Mt.Rs.	Value per day Rs. Dyes&Chem	Pack Mat
GEORGET G/L SAREES:												
1759 C	1	13.23	13.23	13.0	610.00	2.00	597.80	7751	2.43	0.96	32	12
412 B	6	13.94	83.64	82.0	342.73	2.00	335.88	27531	2.43	0.96	203	79
S 10	3	13.94	41.82	41.0	285.45	2.00	279.74	11465	2.43	0.96	102	39
412	6	13.94	83.64	82.0	342.73	2.00	335.88	27531	2.43	0.96	203	79
SUB TOTAL:	16		222.33	217.88				74277			540	209
SOFT SILK SAREE G/L												
62675	5	15.99	79.95	78.4	328.00	2.00	321.44	25165	3.93	0.96	314	75
61779	1	15.99	15.99	15.7	293.00	2.00	287.14	4500	3.93	0.96	63	15
62558	1	15.99	15.99	15.7	252.00	2.00	246.96	3870	3.93	0.96	63	15
62676	1	15.99	15.99	15.7	297.00	2.00	291.06	4561	3.93	0.96	63	15
62673	3	15.99	31.98	31.3	333.00	2.00	326.34	10228	3.93	0.96	126	30
61861 J	1	15.99	15.99	15.7	391.00	2.00	383.18	6005	3.93	0.96	63	15
62676	1	15.99	15.99	15.7	376.00	2.00	368.48	5774	3.93	0.96	63	15
62677	1	15.99	15.99	15.7	402.00	2.00	393.96	6173	3.93	0.96	63	15
61804	1	15.99	15.99	15.7	272.00	2.00	266.56	4177	3.93	0.96	63	15
61411 A	3	15.99	47.97	47.0	275.00	2.00	269.50	12669	3.93	0.96	189	45
61858	1	15.99	15.99	15.7	513.00	2.00	502.74	7878	3.93	0.96	63	15
622022	1	15.99	15.99	15.7	367.00	2.00	359.66	5636	3.93	0.96	63	15
697020 A	1	15.99	15.99	15.7	733.00	2.00	718.34	11257	3.93	0.96	63	15
697020	1	15.99	15.99	15.7	496.00	2.00	486.08	7617	3.93	0.96	63	15
61422 A	2	15.99	31.98	31.3	280.00	2.00	274.40	8600	3.93	0.96	126	30
61864	1	15.99	15.99	15.7	285.00	2.00	279.30	4377	3.93	0.96	63	15
61929	3	15.99	47.97	47.0	288.18	2.00	282.42	13277	3.93	0.96	189	45
61930	4	15.99	63.96	62.7	398.18	2.00	390.22	24459	3.93	0.96	251	60
622004 D	5	15.99	79.95	78.4	240.00	2.00	235.20	18428	3.93	0.96	314	75
622004 E	5	15.99	79.95	78.4	240.00	2.00	235.20	18428	3.93	0.96	314	75
62019	1	15.99	15.99	15.7	307.27	2.00	301.12	4719	3.93	0.96	63	15
62405 B	1	15.99	15.99	15.7	288.18	2.00	282.42	4426	3.93	0.96	63	15
61737 B	1	15.99	15.99	15.7	260.91	2.00	255.69	4007	3.93	0.96	63	15
612030	3	15.99	47.97	47.0	330.00	2.00	323.40	15203	3.93	0.96	189	45
612031	1	15.99	15.99	15.7	330.00	2.00	323.40	5068	3.93	0.96	63	15
61755 A	1	15.99	15.99	15.7	341.00	2.00	334.18	5237	3.93	0.96	63	15
	49		783.51	767.84				241756			3079	737
DHOTIES												
7010	1	17.02	17.02	16.8	272.22	2.00	266.78	4484	1.5	0.91	26	15
71904	1	17.02	17.02	16.8	276.39	2.00	270.86	4552	1.5	0.91	26	15
SUB TOTAL:	2		34.04	33.6145				9036			51	31
MIMI DHOTIES												
8010	1	17.91	17.91	17.6	239.13	2.00	234.35	4113	1.5	0.91	27	16
	1		17.91	17.5518				4113			27	16
2451	1	36.00	36.00	35.3	275.00	2.00	269.50	9508	2.43	0.73	87	26
2441	4	29.78	119.12	116.7	235.00	2.00	230.30	26885	2.87	0.73	342	85
2461	1	25.80	25.80	25.3	110.00	2.00	107.80	2726	2.87	0.73	74	18
2491 A	1	25.80	25.80	25.3	115.00	2.00	112.70	2850	2.87	0.73	74	18
T.C. 60	1	14.99	14.99	14.7	240.00	2.00	235.20	3455	2.87	0.73	43	11
2439 CHIFFON		15.17	0.00	0.0	110.00	2.00	107.80	0	2.87	0.73	0	0
SUB TOTAL:	8		221.71	217.276				45423			620	159
GRAND TOTAL:	76		1279.5	1254.17				374606			4318	1151
									227460		4318	1151
			Value For (30 days) Rs.					112.36	68.24			

APPENDIX-VIII(CONTD.)

RAW MATERIAL REQUIREMENT AND VALUE PER DAY

YARN TYPE	GTY.KG/DAY	RATE/KG	VALUE/DAY
20/22D CHINESE RAW SILK	83	1179.95	98329
2/210s CHINESE SPUN SILK	8	1753	14608
2/140s CHINESE SPUN SILK	3	1400.13	4667
80D POLYSTER TEXLENE	2	166.36	277
2400 YDS GOLD LACE	6	11670	71965
HALF FINE GOLD LACE	1	5126	4272
			194119
RAW MATERIAL VALUE PER YEAR RS.LACS			687

WAGES AND SALARIES:

WORKERS	
DAILY EMPLOYMENT	401
WAGE RATE PER DAY RS.	110
WAGES PER DAY RS.	44110
STAFF:	23
RATE PER DAY RS	140
SALARY PER DAY RS.	3220
WAGES AND SALARIES PER YEAR RS.LACS	168

POWER, WATER AND FUEL:

POWER UNITS/DAY

SILK MILL	1628
SILK DYE HOUSE	225
SILK WARE HOUSE	20
UNITS PER DAY	1873
RATE PER UNIT RS.	2.12
VALUE PER DAY RS.	3971

WATER:

REQUIREMENT PER DAY	65 K.L
RATE PER K.L	4.65
RS.PER DAY	302

COAL:

REQUIREMENT TONS/DAY	0.65
RATE PER TON RS	1385
VALUE PER DAY RS.	900
POWER, WATER AND FUEL PER DAY RS.	5173
POWER, WATER AND FUEL PER YEAR RS.LACS	18
STORES/SPARES RS.PER DAY	1520
VALUE RS.LACS PER YEAR	5
PACKING MATERIAL:	Re.1 per metre.

APPENDIX IX

Assumptions for working out cost of production
Centralised process house, Bhuvanagiri.

No. of working days per year : 302

WAGE BUDGET

Description	
Requirement of workers per day	847
COMPOSITION OF LABOUR	
Experienced Labour	282
New Labour	565
Total	847
WAGE RATE PER DAY (Rs.)	
Experienced Labour	135
New labour	35
Wage cost for 302 days (Rs. in lakhs)	175
Number of clerical staff	18
Clerical Staff rate / day (Rs.)	140
Clerical staff salary/302 days (Rs. in lakhs)	8
Number of management staff	110
Management staff rate / day (Rs.)	142
Mgt Staff salary/302 days (Rs.in lakhs)	47
Total Wages & Salaries for 302 days (Rs. in lakhs)	230

APPENDIX IX (Conttd.)

CENTRALISED PROCESS HOUSE, BHUVANAGIRI

POWER,WATER AND FUEL BUDGET

Sno	DETAILS	
	COST OF FUEL	
01	Cloth processed in Kgs. per day	27803
02	Yarn dyed in Kgs. per day	225
03	Steam consumption / Kg of cloth	12.0
04	Steam consumption/Kg of dyed yarn	15
05	Steam required in Kgs. for cloth	333636
06	Steam req.in kgs. sized/Dyed yarn	3375
07	Steam/Unit of Lignite/Gas for cloth	3.1/15.94
08	Cost of Lignite (incl.handling)/ton	550
09	Cost /cub.mtr of gas	2.40
10	Lignite required in kg.	20082
11	Gas required in cu.mtr.	17237
12	Cost of Lignite/gas in Rs.per day	52414
13	Cost per Annum (Rs. in Lakhs)	158.29
	COST OF WATER	
01	Cloth to be processed	27803
02	Water reqd/kg of cloth (in Litres)	90
03	Water required for Processing	2502
04	Water required for Steam	388
05	Water required for General	550
06		
07	Total Water Requirement/day in KL	3440
08	Borewell	3440
09	Cost per day (incl.Treatment)	
10	Bore @ Rs.(.94/15.31)/KL	8809
11		
12	Cost per Annum (Rs. in Lakhs)	26.60
	COST POWER COST :	
01	Units per day	33152
02	Rate per unit	2.01
03	Cost per day in Rs.	66636
04	Cost per Annum (Rs. in Lakhs)	201.24
01	Furnace Oil Reqd.per day	7.00
02	Cost per K.L.	5900
03	Furnace oil cost per day in Rs.	41300
04	Cost per Annum (Rs. in Lakhs)	124.73
	SUMMARY OF POWER,WATER & FUEL COST	
01	Furnace oil cost	124.73
02	Power Cost	201.24
03	Water Cost	26.60
04	Fuel cost	158.29
	TOTAL (Rs.in Lakhs)	510.86

APPENDIX IX (Contd.)

CENTRALISED PROCESS HOUSE, BHUVANAGIRI

Stores & Spares and Repairs & Maintenance Budget

B & C Dyehouse	F. Metres	0.0586	99189	5812	
B & C Warehouse	F. Metres	0.0013	100061	125	
BWM Dyehouse	F. Metres	0.0586	41338	2422	
BWM Warehouse	F. Metres	0.0013	41338	52	
Others	Day	23444	1	23444	
Total per day				31855	
Total for 302 days.					
(Rs. in Lakhs)				96	

Note :- Cost of packing materials Rs. 0.25 per metre.