

Gents T-Shirts

PRODUCT CODE	: 260313009
QUALITY AND STANDARDS	: IS 4375:1975
MONTH AND YEAR OF PREPARATION	: May, 2003
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INTRODUCTION

Garments are classified into woven and knitted wears. Woven fabrics are generally used for the manufacture of structured garments whereas knitted fabrics are generally used for the manufacture of informal/casual wears. Knitted garments are getting wider acceptance because of its easy care and cheapness. Among various types of knitwears, T-Shirts are considered as item of mass consumption and choice of modern society. T-Shirts with logo of embroidered design is considered as fashion wear. Sports person prefers to wear T-shirts while playing in the track and field because it provides comfort with sweat absorbency. This project report provides general information for setting up a unit for the manufacture of T-shirts of various sizes. The machinery involved in this report is proposed to be imported as well as sourced indigenously.

MARKET POTENTIAL

Knitted shirts and other dresses are common consumer items and have

replaced other textile apparels because of their flexible design, durability and easy care properties. Due to its cheaper rates combined with durability, the demand for knitted dresses is increasing exponentially. Earlier this item was considered as casual wear but now this phenomenon has changed drastically and it is being considered as formal wear. It is presumed that marketing of T-shirts with better quality will not be a major threat to this industry.

BASIS AND PRESUMPTIONS

This project is prepared on the following assumptions:

Number of working days is considered at 300 working days in a year. The rental value indicated in the project is Rs. 20 per sq. mt. It may be less in small cities and backward area. Costs of machinery and equipment/material indicated refer to a particular make and approximately to those prevailing at the time of preparation of this project and are likely to vary from supplier to supplier and place to place. Installation and electrification expenditure

is taken @ 10% of cost of machinery and equipment. Non-refundable deposits, project report cost, trial production, security deposits with Electricity Board are considered under preoperative expenses. Depreciation has been taken at 10% on plant and machinery, 20% on office furniture and fixtures and 20% on other fixed assets. Interest rate on capital loan is taken as 14% per annum.

IMPLEMENTATION SCHEDULE

Time period (in months) required for executing the project from preparation of project report to starting the trial run production will be of 6 months period approximately. Considering that some of the many activities may be overlapping and can be done at same time, the project implementation will take a total period of five months approximately for starting the actual production.

TECHNICAL ASPECTS

Process of Manufacture

Raw material i.e. polyester/cotton yarn in cones are placed directly on the circular knitting machine for producing tubular fabric. After sufficient length of fabric is knitted, fabric is cut and taken out and sent to dyeing house for imparting required colour and finishing. The cloth after receiving is cut into desired shape and size and stitched to make T-shirts. Stitched portions are overlapped on overlocking machines. These stitched garments are checked for any defects to remove them before sending to washing section.

All garments are charged into washing machine containing mild detergents and washed for 4 hours in order to remove dirt and stains acquired

during the manufacturing process. After washing, the garments are hydroextracted to remove excess water and after this, they are dried in the tumbler dryer. Final inspection is done to check the measurement and packed as per the customer's choice.

Quality Control and Standards

Generally these are made as per customer's specification in respect of size, design and fashion. However, care should be taken in each stage of production to maintain quality.

Production Capacity (per annum)

Product	Quantity (pcs)	Amount (Rs.)
Knitted T-Shirts	1,90,000	1,61,50,000

Motive Power

29 HP of power is required for running this unit.

Pollution Control

Although not required, however, entrepreneurs are to contact State Pollution Control Board for necessary guidance.

Energy Conservation

Maximum care should be taken while selecting the machinery and other electrical equipments so as to minimise the wastage of energy.

FINANCIAL ASPECTS

A. Fixed Capital

(i) Land and Building	
Building area	
Factory shed	400 sq. mt.
Store (Raw material)	25 sq. mt.
Office etc.	25 sq. mt.
Total covered area	450 sq. mt.
Rent (per month)	Rs. 9,000

(ii) Machinery and Equipments

Sl. No.	Description	No.	Rate (In Rs.)	Amount (In Rs.)
1.	Power operated interlock knitting machine 24G 30" dia 24 feeder with needles and accessories with electric motor attachment	4	1,50,000	6,00,000
2.	Power operated interlock knitting machine 20G 17" dia 16 feeder with needles and accessories with electric motor attachment	4	74,000	2,96,000
3.	Power operated interlock knitting machine 14G 15" dia 14 feeder with needles and accessories with electric motor attachment	4	75,000	3,00,000
4.	Cutting Machine (power-operated)	1	65,000	65,000
5.	4 thread overlock machine with electric motor and accessories	8	70,000	5,60,000
6.	Flat lock stitch machine (5 thread) with table and electric motor attachment	4	24,000	96,000
7.	Lock stitch (sewing Machine) with table, motors and accessories	20	5,000	1,00,000
8.	Potable steam press	3	23,000	69,000
9.	Wooden frame, pressing boards, cutting tables, stools etc.	LS	1,00,000	1,00,000
10.	Workshop accessories	LS	20,000	20,000
	Total			22,06,000

(iii) Other Fixed Assets (Rs.)

(a)	Erection and installation	1,66,100
(b)	Office furniture	25,000
(c)	Pre-operative expenses	20,000
	Total	2,11,100
	Total Fixed Capital	24,17,100

B. Working Capital (per month)

(i) Staff and Labour Wages

Sl. No.	Designation	Nos.	Rate (Rs.)	Amount (Rs.)
1.	Manager	1	8000	8000
2.	Clerks/Typist	2	3500	7000
3.	Store-keeper	1	3500	3500
4.	Peon/Watchman	1	2500	2500
	Total			21000
<i>Production Staff</i>				
1.	Cutting Master	1	7000	7000
2.	Skilled workers	40	3,500	1,40,000
3.	Pressing man	3	2,500	7,500
4.	Semi-skilled workers	6	2,500	15,000
5.	Helpers	4	2,250	9,000
	Total			1,78,500
	<i>Perquisites@ 20%</i>			39,900
	G.Total			2,39,400

(ii) Raw Material (per month)

Sl. No.	Description	Qty.	Rate/Unit (Rs.)	Amount (Rs.)
1.	Polyester/cotton yarn dyed or bleached (Kgs)	5,000	150	7,50,000
2.	Cotton Sewing thread	LS	14,000	14,000
3.	Trims and embellishments (including collar)	LS		65,000
4.	Washing detergents	LS		2,500
	Total			8,31,500

(iii) Utilities (per month) (Rs.)

Electricity, Water charges	16000
Total	16,000

(iv) Other Contingent Expenses (per month) (Rs.)

(a)	Rent	9,000
(b)	Postage/Stationery	500
(c)	Repair and maintenance	13,842
(d)	Transport/travelling charges	1,000

(e) Insurance	700
(f) Telephone	2,000
(g) Miscellaneous expenses	3,000
Total	30,042

(v) Total Recurring Expenses (per month) Rs. 11,16,942

(vi) Total Working Capital for 3 months Rs. 33,50,825

C. Total Capital Investment

(i) Machinery and equipment	Rs. 24,17,100
(ii) Working capital for 3 months	Rs. 33,50,825
Total	Rs. 57,67,925

MACHINERY UTILISATION

Capacity utilisation is considered in this project as 75% of installed capacity.

FINANCIAL ANALYSIS

(1) Cost of Production (per year)	(Rs.)
Recurring expenses	1,34,03,300
Depreciation on machinery @ 10%	1,66,100
Depreciation on office furniture and equipment @20%	29,000
Interest on total investment @14%	8,07,509
Total	1,44,05,909

(2) Turnover (per year)

	Pcs.	Rate (Rs.)	Amount (Rs.)
T-Shirts	1,90,000	85	1,61,50,000
Total			1,61,50,000

(3) Net Profit (per year) Rs. 17,44,091

(4) Net Profit Ratio (Net profit/ Turnover per year) 10.70%

(5) Rate of Return on Investment (Net Profit/Total Capital Investment) 30%

(6) Break-even Point

Fixed Cost	(Rs.)
Rent	1,08,000
Depreciation	1,95,100
Interest on capital investment	8,07,509

Fixed Cost	(Rs.)
40% of wages of staff and labour	11,49,120
40% of other expenses	97,642
Insurance	8,400
Total	23,65,771

$$\begin{aligned}
 \text{B.E.P.} &= \frac{\text{FC} \times 100}{\text{FC} + \text{profit}} \\
 &= \frac{2365771 \times 100}{2365771 + 1744091} \\
 &= 57\%
 \end{aligned}$$

Addresses of Machinery and Equipment Suppliers

1. M/s. Paras Special Machine Co. Madhopur Kucha No. 7, Rohan Road, Ludhiana.
2. M/s. Vijay Sewing (P) Ltd. 17-D, Everest House, 46-C, Chowringhee Road, Kolkata.
3. M/s. Industrial Machines Pvt. Ltd. 1/23 B, Asaf Ali Road, New Delhi-110002
4. M/s. Apparel and Leather Techniques Pvt. Ltd. Kaikondanahalli, Sarjapur Road, Near Bellaandur Gate, Bangalore-560035.
5. M/s. Industrial Sewing Systems 30 Ramakrishna Street, North Usman Road, T. Nagar, Chennai.

Addresses of Raw Material Suppliers

1. M/s. Vardhman Threads, Mahavir Spinning Mills Ltd. Chandigarh Road, Ludhiana.
2. M/s. Powerloom Cloth Manufacturing Centre Erode, Bhiwandi, Mumbai, Surat etc.