

# **DENIM GARMENTS (JEANS, JACKETS, SHORTS)**

## **1. INTRODUCTION:**

Clothing is the basic necessity for humans. On one hand people want clothes of latest fashion and design and on the other hand they don't wish to take too much trouble maintaining such clothes. Introduction of Denim in late 19<sup>th</sup> century solved this problem. Not only is denim a rough and tough fabric, it does not need much maintenance. The current fashion in fact attaches higher value to denim garments having worn out, faded and old look!

## **2. PRODUCT & ITS APPLICATION:**

Denim fabric is generally made out of open end cotton yarn of coarse count. The weave in classic denim of 14.5 oz. is two up one down giving a traditional look to the fabric. With passage of time, light weight varieties of denim have been developed to meet customer requirements of comfort, functionality, weather conditions, fashion and cost etc. Present day denim fabric sometimes has blended fiber and Lycra or Spandex fiber as well. Jeans, Tops or Jackets and Shorts are the key products made out of denim fabric although there are several other articles made out of denim fabric. Denim garments are worn by men, women and children alike.

## **3. DESIRED QUALIFICATIONS FOR PROMOTER:**

Graduate in any discipline.

## **4. INDUSTRY OUTLOOK & TRENDS:**

Denim is not only a fashion fabric, it is also a trendy fabric that reflects youthfulness and modernity. Increasing acceptance of denim garments by

people of all ages leads to phenomenal rise in demand. The trend is expected to continue at least for few more decades.

## **5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:**

As denim fabric is heavier and stronger compared to normal suiting or shirting, the users feel comfortable going about their routine work without bothering about clothes getting dirty or creased or torn. Usage of denim started with professions involving tough manual work like cowboys, industrial workers and artisans. The comfort and rough nature of the fabric soon attracted attention of all and sundry. Today, denim is worn by almost every individual in the world in some form or the other. Even kids garments are made out of light weight denim! Students and office goers try to keep at least 4-5 denim garments in their wardrobe. The demand for denim garment has been growing in sync with the population. Denim garments with attractive embroidery and embellishments have become sophisticated fashion statements instead of original rough and tough feel. As denim has become common man's garment, the quality and price varies extensively between a very low quality garment costing just ₹ 250 to niche product in luxury segment costing as much as ₹ 5000. The demand for denim is worldwide. Since the manufacturing process is labour intensive, countries in Asia & Africa are more competitive when it comes to supplying to Europe & American markets.

## **6. RAW MATERIAL REQUIREMENTS:**

Main raw material required is denim fabric. Classic denim weighs 14.5 oz. per square meter. There are light weight varieties of 13.5 oz., 12.5 oz., 11 oz., 9 oz. and 6 oz. etc. also. Weight and construction of fabric (warp and weft ratio, type weave and fiber used) depends on customer requirements. There are several denim manufacturers in India and the fabric is easily available through network of dealers and mill agents. Some mills deal directly with large garment manufacturers. Denim garments have several

accessories or embellishments like special coarse thread, labels (size label, wash care label, brand label etc.), zippers and buttons (made of plastic, metal & fabric). Labels can be of woven fabric, non-woven fabric, leather or polyurethane. Sometimes the customers require special printing or embroidery work on denim fabrics. Wholesalers of all these materials are found in every large city although New Delhi, Mumbai, Ludhiana, Coimbatore and few other cities have several dealers and importers of these consumables.

## **7. MANUFACTURING PROCESS:**

Fabric received from the mill is inspected on the inspection machine and defects marked with adhesive flags on the edge of the fabric. The fabric is then spread on long table (usually 4 to 8 meters long) to form layers. Separately, patterns of card board or metal sheet are prepared for each piece of a garment. These patterns are laid on layers of fabric in such a way that wastage is minimized and fabric's desired warp and weft construction as well as design or pattern is achieved in critical parts of the garment. Care is also taken to eliminate parts of fabric having major defects. Several layers of fabric are cut simultaneously through a vertical motorized blade and pieces of garments obtained. Stitching of garments is done in assembly line mode wherein each worker stitches only some parts of the garment and unfinished garment moves forward from table to table in the assembly line. Therefore cut pieces from cutting table are distributed to the respective workers and then the garment assembly starts from 1<sup>st</sup> worker and reaches the last stage where it gets fully stitched. The stitching on denim garment is mostly done through double needle machines to give unique look of parallel coarse thread on the garment although some operations are also done through single needle machines. After stitching, the garments are washed in tumbler wash machines. Sometimes special chemicals or pebbles are added in the wash cycle to achieve desired shade, fade or worn effect on the garment. Denim garments of different colors were in vogue some years ago but the trend

has stopped now and only classic blue and black is used in varying shades. After washing and drying, the garments are cleaned by removing loose threads and dirt with blower, steam pressed and packed. Garments are manufactured in sets of different sizes, colors and design/patterns as per customer requirements and stacked accordingly in the storage shelves.

## 8. MANPOWER REQUIREMENT:

The enterprise needs 72 employees at full capacity, as detailed below:

Sr. No.	Designation of Employees	Monthly Salary ₹	Number of employees required					
			Year-1	Year-2	Year-3	Year-4	Year-5	
	<b>Variable Labour / Workers:</b>							
1	Machine Operators	12,000	24	28	32	36	40	
2	Helpers	8,000	12	14	16	18	20	
	<i>sub-total</i>		36	42	48	54	60	
	<b>Fixed Staff Costs:</b>							
1	Factory Manager	35,000	1	1	1	1	1	
2	Packing Staff	8,000	4	4	4	4	4	
3	Purchase Executive	20,000	1	1	1	1	1	
4	Marketing Executive	20,000	1	1	1	1	1	
5	Accounts Executive	20,000	1	1	1	1	1	
6	Commercial Assistant	12,000	1	1	1	1	1	
7	Security Guard & Peons	10,000	2	2	2	2	2	
8	Driver	12,000	1	1	1	1	1	
	<i>sub-total</i>		12	12	12	12	12	
	<b>Total</b>		48	54	60	66	72	

## 9. IMPLEMENTATION SCHEDULE:

Selection and procurement of machines takes 2 to 3 months. Recruitment of manpower also takes about 2 months. Reasonable planning can help complete the project in about 4 months.

Sr. No.	Activity	Time Required (in months)
1	Acquisition of premises	2
2	Construction (if applicable)	-
3	Procurement & installation of Plant & Machinery	3
4	Arrangement of Finance	2
5	Recruitment of required manpower	2
	Total time required ( <i>some activities shall run concurrently</i> )	4

## 10. COST OF PROJECT:

The project is expected to cost ₹ 90.16 Lacs as detailed below:

Sr. No.	Particulars	₹ in Lacs
1	Land	-
2	Building	-
3	Plant & Machinery	47.75
4	Furniture, Electrical Installations	6.30
5	Other Assets including Preliminary / Pre-operative expenses	10.00
6	Margin for Working Capital	26.11
	<b>Total</b>	<b>90.16</b>

## 11. MEANS OF FINANCE:

Bank term loans are assumed @ 60% of fixed assets. The proposed funding pattern is as under:

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	51.73
2	Bank Finance	38.43
	<b>Total</b>	<b>90.16</b>

## 12. WORKING CAPITAL CALCULATION:

The project requires working capital of ₹ 55.55 Lacs as detailed below:

Sr. No.	Particulars	Gross Amt.	Margin %	Margin Amt.	Bank Finance
1	Inventories	15.04	40%	6.01	9.02
2	Receivables	44.55	40%	17.82	26.73
3	Overheads	6.49	100%	6.49	-
4	Creditors	-10.52	40%	-4.21	-6.31
	<b>Total</b>	55.55		26.11	29.44

## 13. LIST OF MACHINERY REQUIRED AND THEIR MANUFACTURERS

Sr. No.	Particulars	UOM	Qty.	Rate (₹)	Value (₹ in Lacs)
	<b>Plan &amp; Machinery / equipments</b>				
<b>a)</b>	<b>Main Machinery</b>				
i.	Single needle machines + Accessories (Heavy Duty)	Nos	15.00	75,000	11.25
ii.	Double Needle machine + Accessories (Heavy duty)	Nos	15.00	1,00,000	15.00
iii.	Zig Zag stitching machine	Nos	2.00	75,000	1.50
iv.	Fabric Cutting table + Machine	LS	1.00	1,00,000	1.00
v.	Over lock machines	No	2.00	75,000	1.50
<b>Sr. No.</b>	<b>Particulars</b>	<b>UOM</b>	<b>Qty.</b>	<b>Rate (₹)</b>	<b>Value (₹ in Lacs)</b>
vii.	Button hole & stitching machines	Set	1.00	2,50,000	2.50

				0	
viii.	Washing machine - commercial	Nos	4.00	1,50,00 0	6.00
<b>b)</b>	<b>Ancillary machinery</b>				
i.	Lab Equipments	LS	1.00	3,00,00 0	3.00
ii.	Steam Iron, Blower etc.	LS	2.00	1,00,00 0	2.00
iii.	Trolleys & material handling	LS	1.00	4,00,00 0	4.00
	<i>sub-total Plant &amp; Machinery</i>				<b>47.75</b>
	<b>Furniture / Electrical installations</b>				
a)	Computer and printer	Set	2.00	50,000	1.00
b)	Office Tables, Chairs	LS	1.00	1,00,00 0	1.00
c)	Inspection, packing & storing tables	Nos	6.00	25,000	1.50
d)	Storage Racks	Nos.	35.0 0	8,000	2.80
	<i>sub total</i>				<b>6.30</b>
	<b>Other Assets</b>				
a)	Rent Deposits		2.00	1,25,00 0	2.50
b)	Delivery Van		1.00	7,50,00 0	7.50
	<i>sub-total Other Assets</i>				<b>10.00</b>
	<b>Total</b>				<b>64.05</b>

Single Needle and Double Needle stitching machines are available from following suppliers. They have offices across several cities in India. There may also be other local machinery manufacturers offering alternate machines of various makes and models.

- IIGM Private Limited  
Springdale No. 51,  
Residency Road, 3rd cross,  
Bangalore 560025  
[www.iigm.in](http://www.iigm.in)
- Juki India Private Ltd

1090/I, Ground Floor,  
18th Cross, Sector III,  
HSR Layout,  
Bangalore 560102  
[www.jukiindia.com](http://www.jukiindia.com)

- Brother International (India) Pvt Ltd  
Unit No.408, 215, Atrium B-Wing,  
4th floor, Opp. Sangam Cinema,  
Andheri Kurla Road, Andheri (East),  
Mumbai 400093  
[www.brother.in](http://www.brother.in)

#### 14. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹. In Lacs	356.40	415.80	475.20	534.60	594.00
3	Raw Materials & Other direct inputs	₹. In Lacs	303.69	354.30	404.92	455.53	506.15
4	Gross Margin	₹. In Lacs	52.71	61.50	70.28	79.07	87.85
5	Overheads except interest	₹. In Lacs	38.93	38.93	38.93	38.93	38.93
6	Interest	₹. In Lacs	8.05	8.05	8.05	8.05	8.05
7	Depreciation	₹. In Lacs	4.62	4.62	4.62	4.62	4.62
8	<b>Net Profit before tax</b>	₹. In Lacs	<b>1.11</b>	<b>9.90</b>	<b>18.68</b>	<b>27.47</b>	<b>36.25</b>

The above calculations are based on assumed unit sales price varying from ₹ 500 to ₹ 600 for various products. The key raw material is assumed at a cost range of ₹ 200 to ₹ 250 per meter. Electricity tariff is assumed at ₹ 8 per Kwh.

#### 15. BREAKEVEN ANALYSIS:



The project shall reach cash break-even at 53.48% of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value
1	Sales at full capacity	₹. In Lacs	594.00
2	Variable costs	₹. In Lacs	506.15
3	Fixed costs incl. interest	₹. In Lacs	46.99
4	$BEP = FC/(SR-VC) \times 100 =$	% of capacity	53.48%

#### **16. STATUTORY/ GOVERNMENT APPROVALS:**

The project does not require any specific government approval. Registration with MSME is optional. An Entrepreneur may be required to obtain Shops & Establishment Registration and Professional Tax registration by local Municipal authorities. Registration under Factories Act, Provident Fund Act and ESI provisions would be required depending upon the number of employees, the location, the level of mechanization and the age of the enterprise. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

#### **17. BACKWARD OR FORWARD INTEGRATION:**

As the machines used in the project are versatile, the Entrepreneur can also consider manufacture of home furnishing articles like bed sheets, pillow covers, wall hangings etc. depending on opportunities in the market he / she is familiar with.

#### **18. TRAINING CENTERS/COURSES**

Udyamimitra portal ( link : [www.udyamimitra.in](http://www.udyamimitra.in) ) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

**Disclaimer:**

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.

Source:- Udyami Mitra/Sidbi