



## FOR MANUFACTURING “HAND GLOVES”

### *Introduction*

Hand gloves are made from both woven and knitted cloth and are used for different purposes like sports, protection from winter and some specific industrial uses. Synthetic, cotton and woollen yarns are used as raw materials for manufacturing these items. The uses of hand gloves is increasing in electronic, chemicals and pharmaceutical industries for diverse applications. Seamless hand gloves is a new development on this product which is manufactured on special type flat V bed knitting machine. These products are quite popular and users are also finding it comfortable for various purposes. The huge demand of this product especially for industrial uses to handle the sensitive materials has led to the rapid establishment of manufacturing units for hand gloves.

### *Market Potential*

Use of hand gloves in sophisticated industries is becoming essential requirement for handling the important raw materials. In the earlier periods, ordinary type hand gloves were used for the purpose of handling important items. Now-a-days special type of knitted seamless hand gloves are used by the consumers because of its advantageous features. There is a good scope for exporting these items in European and other developed countries.

### *Basis and Presumptions*

This project is prepared on the following assumptions:

- ❑ This project is based on single shift basis and 300 working days in a year.
- ❑ Working efficiency is considered at 75% in the first year and 80% in subsequent years.
- ❑ Rental value indicated in the project is Rs.25 per square metre.
- ❑ 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.
- ❑ Cost of installation and electrification is taken @ 10% of cost of machinery and equipment.



- ❑ Non-refundable deposits, project report cost, trial production, security deposits with Electricity Board are taken under pre-operative expenses.
- ❑ Time period for achieving maximum capacity utilisation is considered from 3<sup>rd</sup> year.
- ❑ Depreciation has been considered 5% on building, 10% on plant and machinery, 20% on office furniture and fixtures and 25% on workshop accessories.
- ❑ Interest on capital loan has been taken @ 18% per annum.
- ❑ Minimum 25% of total investment is required as margin money.

### *Implementation Schedule*

	<i>Period</i>
➤ Selection of site / working shed	1 month
➤ Registration with Commissioner of Industries/DIC	1 month
➤ Arrangement of finance {Term loan & working capital}	3 months
➤ Procurement of machinery and equipment	1 month
➤ Plant erection and electrification	2 weeks
➤ Arrangement of raw material including packaging material	1 month
➤ Recruitment of manpower	1 month
➤ Selection of market channel	1 month
➤ Miscellaneous works like power/water connection etc.	2 months

*Note: Considering that some of the above activities may be overlapping, the project implementation will take a total period of six months approximately for starting the production*

#### **Technical Aspects**

##### *(i) Process of Manufacture*

This product is manufactured on special type flat V bed knitting machine by feeding the yarn to the needles through tensioning device, yarn guide etc. and running the machine for knitting the gloves on preset machine. In the process, needles are automatically selected with the help of cam which takes the yarn from the feeder. Gloves are automatically knitted on the machine as per the programme fed to the machine. After doffing the gloves from the machine, finger tips are interlinked with the special type of overlock machine.



In order to remove dirt and stains present in the knitted gloves, the gloves are treated with mild soap solution in garment washing machine by lightly agitating the gloves for sometime. Temperature and time duration of washing are maintained to get optimum results. After washing, the garments are hydroextracted to remove excess water and finally dried in dryer tumbler. After this, gloves are visually checked by placing them on a table so that any objectionable faults seen in the gloves can be removed. Gloves after checking are passed to pressing section. After this, gloves are steam pressed to remove wrinkle marks and to give final shape and are finally packed as per the customer's demand.

(ii) *Quality Control*

The product should be clean from oil stains, cuts, holes etc. Care should be taken while manufacturing to ensure the above characteristics.

(iii) *Production Capacity (per annum)*

Product	Quantity (Pcs.)	Value (Rs.)
<i>Knitted Hand Gloves</i>	81,000	1,01,25,000

(iv) *Motive Power*

Total power requirement will be 25 HP. This is proposed to be obtained from State Electricity Board.

(v) *Pollution Control*

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

(vi) *Energy Conservation*

Maximum care should be taken while selecting the machinery and other electrical equipment so as to maintain minimum power consumption.



**Financial Aspects**

*(i) Fixed Capital*

**Land and Building**

Building area

Factory Shed	250 sq. metre
Store (Raw material)	25 sq. metre
Office etc.	25 sq. metre
Total covered area	300 sq. metre
Rent per month @ Rs.25 per sq. mt	Rs.7,500/-

*(ii) Machinery and Equipment*

Sl. No	Description	No	Rate (Rs.)	Amount (Rs.)
1.	Fully automatic seamless gloves knitting machine complete with all accessories	10	6,00,000	60,00,000
2.	5 Thread overlock machine	3	25,000	75,000
3.	Air conditioner (2 ton)	2	45,000	90,000
4.	Garment washing machine 25 kg. capacity	2	1,45,000	2,90,000
5.	Hydroextractor 25 kg. capacity	1	70,000	70,000
6.	Tumbler dryer 25 kg. capacity	1	1,40,000	1,40,000
7.	Portable electric press	5	20,000	1,00,000
8.	Washing room trolley	3	10,000	30,000
9	Other miscellaneous assets	LS	20,000	20,000
<b>Total</b>				<b>68,15,000</b>

LS : Lumpsum



## Other Fixed Assets

Sl. No.	Description	Amount (Rs.)
1.	Erection and installation @ 10%	6,76,500
2.	Office furniture	25,000
3.	Pre-operative expenses	20,000
	<b>Total</b>	<b>7,21,500</b>
	<b>Total Fixed Capital</b>	<b>75,36,500</b>

## Working Capital (per month)

### (i) Staff and Labour Wages

Sl. No	Designation	No	Rate (Rs.)	Amount (Rs)
1.	Manager	01	7000	7000
2.	Clerk/Store Keeper	01	3500	3500
3.	Watchman	01	2000	2000
<b>Total</b>				<b>12,500</b>
Production Staff		No	Rate (Rs.)	Amount (Rs)
1.	Shift Supervisor	01	4000	4,000
2.	Skilled worker	15	3500	52,500
3.	Pressing man	05	3000	15,000
4.	Helper	05	2000	10,000
<b>Total</b>				<b>81,500</b>
Sub-Total				94,400
Perquisites 20%				18,800
<b>Grand Total</b>				<b>1,12,800</b>



*(ii) Raw material (per month)*

Sl. No.	Description	Quantity (Kgs)	Rate/Unit (Rs.)	Amount (Rs.)
1	Cotton yarn (open end 10's count)	4050	80	3,24,000
2	Elastic thread	95	245	23,275
3	Detergent for washing	LS		1300
4	Packing materials (Dozens)	6750	5	33,750
<b>Total</b>				<b>3,82,325</b>

LS: Lumpsum

*(iii) Utilities (per month)*

Sl. No.	Description	Amount (Rs)
1.	Electricity bill	12,000
2.	Water charges	2,000
<b>Total</b>		<b>14,000</b>

*(iv) Other Expenses (per month)*

Sl. No	Description	Amount (Rs)
1.	Rent	7,500
2.	Postage/stationery	1,000
3.	Repair and maintenance	28,188
4.	Transport / travelling charges	1,000
5.	Insurance	500
6.	Telephone bill	2,000
7.	Miscellaneous expenses	3,000
<b>Total</b>		<b>43,188</b>

*(v) Total recurring expenses (per month)* 5,52,313

*(vi) Total working capital for 03 months* 16,56,938



### Total Capital Investment

Sl. No	Description	Amount (Rs)
1.	Machinery and equipment	75,36,500
2.	Working capital for 3 months	16,56,938
	<b>Total</b>	<b>91,93,438</b>

### Machinery Utilisation

Capacity utilisation is considered as 75% of the installed capacity.

### Financial Analysis

#### (i) Cost of Production (per year)

Sl. No.	Description	Amount (Rs)
1	Recurring expenses	66,27,750
2	Depreciation on machinery @ 10%	6,76,500
3	Depreciation on office furniture @ 20%	5,000
4	Depreciation on equipment @ 25%	5,000
5	Interest on total investment @ 18%	16,54,819
	<b>Total cost of production (per year)</b>	<b>89,69,069</b>

#### (ii) Turn over per year (Sales)

Product	Quantity (Pcs)	Rate per piece. (Rs.)	Total (Rs.)
<b>Knitted Gloves</b>	<b>81,000</b>	<b>125</b>	<b>1,01,25,000</b>

Net profit (per year) 11,55,931

Net profit ratio (Net Profit/Turn over per year) 11.42%

Rate of return on investment (Net Profit/Total Capital Investment) 12.57%



## Break-even Point

### *Fixed cost*

Sl.No.	Description	Amount (Rs)
1.	Rent	90,000
2.	Depreciation	6,86,500
3.	Interest on capital investment	16,54,819
4.	40% of wages of staff and labour	5,41,440
5.	40% of other expenses	2,36,100
6.	Insurance	6,000
	<b>Total fixed cost</b>	<b>32,14,859</b>

Break-even Point

$$\text{Fixed cost} \times 100 / \text{Fixed Cost} + \text{Profit}$$

73%





**Names and addresses of machinery and equipment suppliers**

Sl. No	Names and addresses of the suppliers
1	M/s. Janak Sons, 66, Hemkunt Colony, Opposite Nehru Place, New Delhi
2	M/s. Dynamic International Agencies, 76-A, Industrial Estate, Ludhiana – 141003

***Branch Office:***

B-42, Ansal Chambers-1,  
3, Bhikaji Cama Place,  
New Delhi – 110066.

***Raw material*** is easily available in the local market