

## **Sanitary Napkin Manufacturing Project**

**Now Superior Sanitary Napkins can be made at Home: a Unique project Proposal for the Development of Rural and urban poor Women.**

### **Brief about the project:**

**Napkins are manufactured in high cost machines only. The cost of the machine is about 75 lacs to 2.5 crores. These machines are generally run by multinational companies only. Now the quality napkins can be manufactured at home by using the newly invented sanitary napkin manufacturing machine at the cost of Rs.64,000 only.**

### **The benefit:**

**A) Rural women can develop economically by providing direct and indirect employment.**

**B) By providing low cost sanitary napkins for community of millions of rural and poor females the hygiene levels can be improved.**

### **The project:**

#### **Scientific description**

Napkins are manufactured in high cost machines only . The cost of the machine is about 75 lacs to 2.5 crores. These machines are generally run by multinational companies only. By seeing the napkin's whiteness, people who are interested to make these napkins feel that the material used for napkin manufacture is cotton. They used viscose cloth to wrap the cotton. The cotton has a tendency to absorb the liquid, but is releases under slightest pressure or squeeze, Due to this simple reason acceptability and saleability became tougher which led to collapse of these industries. But on automated plant big companies are not using cotton instead they are using wood fibre. Wood fibres and non woven fabrics are generally procured in roll forms that can be processed on high cost machines only. The nature of the wood fibre is that it will absorb and retain the liquid even under pressure .This would give a dry feel to the user. Thus users are satisfied. Now by this just Rs.50,000 worth new invention mini sanitary napkin unit that runs on simple technology can be process the wood pulp and the non woven fabric , and even a rural women can manufacture superior saleable napkins at a fraction of cost compared to big company manufacturing units.

#### **Technical description**

Mini sanitary napkin unit consists of three machines

**De-fiberation machine:** Wood pulp which is commercially available in sheet form can be de-fiberated on this low cost machine. The carbon alloy steel blade in this machine that runs at 10,000 rpm that de-fiberates the wood pulp to a required filament length of 1-1.5mm, instead of grinding. The capacity of the de-fiberation machine is 150gms/min that yields to a volume of 1 cubic feet of de-fibered soft pulp. The machine runs on 1hp single phase motor. The size of the machine is 36" x 24"x 30"

**Core forming machine:** The purpose of the machine is to compress the de-fibered pulp in to a required shape of the soft core of the napkin. Its a manual machine that does not utilise even a single unit of power .The machine size is 24" x 24" x 30".The mould or core block is made of food grade Aluminium.

**Napkin finishing machine:** Formed wood pulp cores on the core forming machine are then wrapped by a non woven fabric (polypropylene) and is sealed by sensitive impulse sealing method. The power requirement is 40 volts. The machine speed is 4-10 napkins/min.Nichrome alloy filament is used in the construction of the sealing pads. The machine size is 36" x 30"x 30".

### **Tangible benefit**

Hygiene improvement among rural women, economic development on rural women by providing direct and indirect employment to millions of rural women.

The average income of women became Rs. 2000-3500/month. Generally in rural areas cloth is being used during the menstrual periods. Studies reveals that this practice is associated with very high risk of cervical cancer, There are chances that 98 out of 100 people will develop this type of cancer, and if uncontrolled, spread to other parts of the body. Lack of fiancé is the reason why the rural women opt for this mode of tackling those 4-5 days, even adolescent girls got affected by this unhygienic practice. The reason is that even that they know about the sanitary napkin the cost of the napkins manufactured by multinationals was not affordable. In this situation with this mini sanitary napkin unit, napkins can be manufactured at low costs (50%less) without compromising the quality of the napkin. Thus napkins manufactured on this low cost unit are easily saleable in rural areas. These will a boon for women self help groups and women entrepreneurs in rural and urban areas also. Since this is a women area rural women can set up this low cost unit at their areas by telling in way

***“Don't use ordinary salts use iodised salt”.***

The women entrepreneurs will be able to educate the rural women not to use cloth but instead use sanitary napkin.

## **Impact**

The low cost machine napkin unit create employment for rural women. The napkins produced by these units are low in cost so affordable by rural, semi urban and even urban poor. The napkin produced and sold by rural women are the unit run by women entrepreneurs, irrespective of area. They would be able to interact with local women. They can also teach the napkin usages and advantages. By this way they would be able to switch over from unhygienic cotton-cloth method to hygienic sanitary napkin. This feat cannot be achieved by corporations as it involves close interaction with the customer as against the advertisements shown on the television.

Thus for rural India,

- 1. Rural women can develop economically by providing direct and indirect employment.**
- 2. For community of millions of rural and poor females the hygiene levels can be improved.**

New invention napkin does not affect any environment. Usually napkins produced by corporate never bother about the disposal. But the new invention low cost napkin producers can teach the rural women on disposal methods as only wood pulp is being employed which has a distinctive property of being bio degradable.

Every new invention sanitary napkin making units produce 4000 packets of napkin (consists of 8 napkins each) for a single shift of eight hours everyday.

### **Manufacturing process in detail**

Manufacturing process: Firstly de- fiberation of wood pulp is done on the de- fiberation machine.

Secondly the de fibred wood pulp is measured on a weighing scale.

Thirdly the wood pulp is filled on a core block and pressed by core forming machine

After this, pressed cores are wrapped by non – woven fabric and sealed by using napkin finishing machine (sealing machine).

Then position sticker is pasted on the napkin and then packed.

Intensive training to manufacture napkins is given on field.

# Mini Sanitary Napkin Manufacturing Unit

## Project Report

### 1. Required Space

16 Feet x 16 Feet - One room

### 2. Required Electricity

1 HP Motor (Single Phase) -1

Single Phase Current 220 volt

### 3. Machineries

S.No	Machineries	Nos	Value (Rs)
1.	De-Fiberation Machine for Grind Wood Pulp	1	19500
2.	Core Forming Machine-To form Napkin core With De-Fibered Wood Pulp	1	5500
3.	Soft Touch Sealing Machine(with Working Table) To finish Formed Wood Pulp Cores Into Napkins	1	28000
4.	Napkin Core dies	5	3125
5.	Installation of Machineries and Training Fees	-	3000
	<b>Total</b>		<b>59125</b>

#### **4. Other Accessories**

<b>S.No</b>	<b>Items</b>	<b>Nos</b>	<b>Value (Rs)</b>
1.	Weighing Scale (To Weigh Wood Pulp)	1	1000
2.	Work Table	2	2000
3.	Plastic Buckets and Trays	5	500
	<b>Total</b>		<b>3500</b>

#### **5. Required Workers**

<b>S.No</b>	<b>Workers</b>	<b>Nos</b>	<b>Salary(Rs.)</b>
1.	Semi Skilled Labors (Daily Wages Rs.70 Per Day)	4 Workers	7000

#### **6. Monthly Administrative Expense**

<b>S.No</b>	<b>Expenses</b>	<b>Value (Rs)</b>
1.	Rent	750
2.	Electricity Bill	500
3.	General Administrative Expenses	1000
	<b>Total</b>	<b>2250</b>

#### **7. Required Raw Material per Day**

<b>S.No</b>	<b>Raw Material</b>	<b>Unit</b>	<b>Value (Rs)</b>
1.	Wood Pulp	14.5 Kgs	740
2.	Top Layer	260 Mts	340
3.	Back Layer	350 Grams;	65
4.	Release Paper	15 Sheets	30
5.	Gum	1 Kg	110
6.	Packing Covers	180 Nos	135
	<b>Total</b>		<b>1420</b>

### 8. Total Napkins Production Details Per Day (Minimum)

Per Day Production - **1440 Napkins**

8 Napkins per Packet - **180 Packets**

### 9. Price Fixing Per Napkin Packet(Rs.)

a. Raw Material per Napkin Packet	-	7.90
b. Wastage	-	0.10
c. Cost Per Napkin Packet	-	<u>8.00</u>
d. Add Our Profit	-	4.50
e. Whole sale Price	-	<u>12.50</u>
f. Add Whole seller's Profit Margin; 20%	-	2.50
g. Maximum Retail Price per Packet ( MRP)	-	15.00

### 10. Sales Per Month(Rs.)

Value Of per Day required Raw Material	-	<u>1420 x 24</u>
One Month (24 Working Days)	=	34,080
Per Day Napkin Production;	-	1440÷8
	=	180 Packets
One Month (24 Working Days)	=	24 x 180
	=	4320 Packets
Per Packet Whole Sale Price	=	12.50
Value of One Month Production	=	4320 x 12.50
One Month Sales	=	54000
One Month Raw Material Expense	=	<u>34080</u>
<b>Total Profit</b>	=	<b>19920</b>
Labor Charge	=	7000
Administrative Expenses	=	<u>2250</u>
		19920 – 9250

**Net Profit per Month = 10670**

**Profit Margin On one Month Total Raw Material Value= 31%**

### **11. Total Investment(Rs)**

1. Advance for working Place	-	5000
2. Machineries, Installation and training fees	-	59125
3. Other Accessories	-	3500
4. Running Capital for Two Months	-	86660
5. SSI Registration and Other Admin Expense	-	7000
<b>Total</b>	<b>-</b>	<b><u>161285</u></b>

### **12. Net Profit per Year(Rs)**

Profit per Month	=	10670
Per Year profit	10670x12	= 128040
Interest for total investment @ 14 %	=	22580 (A)
Depreciation of Machineries 10%	=	5000 (B)
<b>Other expenses and sales Comission 12%</b>	=	<b>15364 (C)</b>
	A+B+C	= <b><u>42944</u></b>

Net Profit Per year;	=	128040 - 42944
	=	85096

**Profit margin on Total Investment = 53%**

### **For Napkin Manufacturing Machineries and Raw Materials Contact**

**Jayaashree Industries  
SF No. 577 KNG Pudur Road  
Somayampalaym (Po)  
Coimbatore - 641 108.  
Mobile; - 92831 55128, 98422 15984**

### **Web Site:**

**www.newinventions.in**