

# Introduction to SWACHH 1.3 : Semi-automatic Sanitary Pad making machine

# WHO ARE WE?



SARAL DESIGNS

*Saral Designs* is working on increasing access to high quality sanitary napkins. Founded in 2015 by alumni of IITs, Saral is taking a systematic approach to address challenges in the menstrual hygiene space.

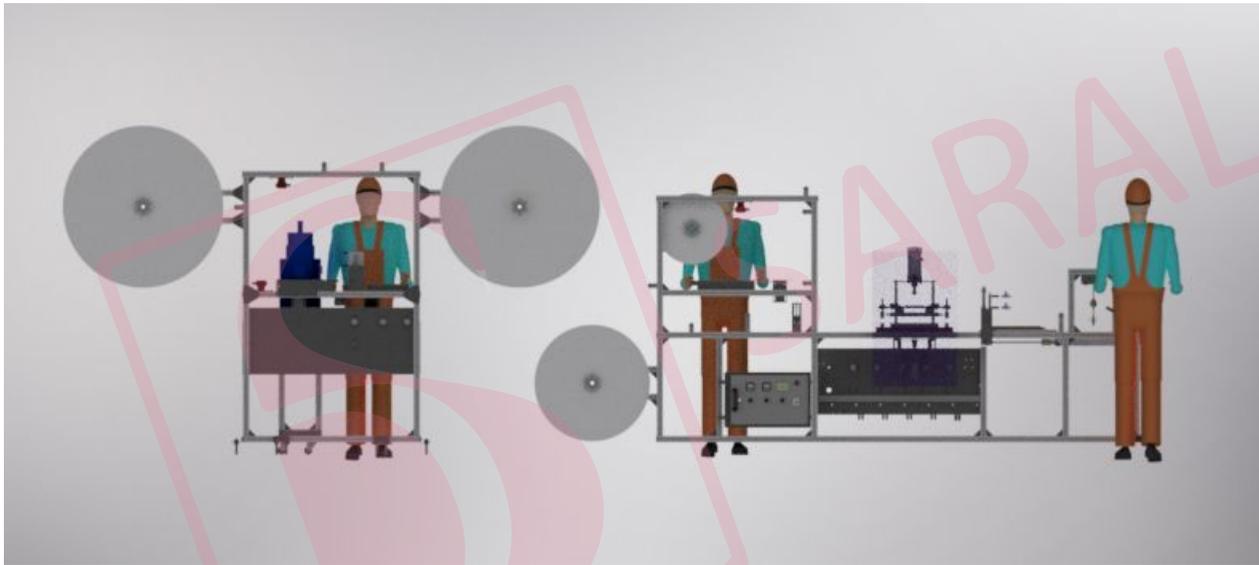
Saral has developed India's first indigenously designed machine, 'Swachh', for producing ultra-thin sanitary napkins at a decentralised scale. While decentralization cuts down the distribution costs, the automated production ensures economies of scale and product quality. Swachh ensures production quality equivalent to a that of ultra-thin napkins manufactured by Multinationals at less than half of their rate, maintaining the quality parameters (of large length, high absorption using SAP gel technology, dry and soft feel).

This will enable several manufacturers to collectively solve the problem of quality, access and affordability of menstrual hygiene products.

With production units spread **across 7 different countries**, Swachh machines are robust and the best choice for long term sustainability.

# SWACHH 1.3

## Semi-Automatic Sanitary Napkin Making Machine



*Swachh 1.3* is a **Patented** semi automatic machine for producing high quality ultrathin sanitary napkins. The machine is compact and easily operable; hence, it can be installed at several locations making it ideal for decentral manufacturing.



## Specifications of SWACHH 1.3

Power Mode	220-240V, Single phase
Dimensions (L x B x H)	15ft x 3ft x 6ft
Pad Production Rate	8-10 pads/min*
Pad Type	Ultra thin XL with wings
Weight	250 kgs
Air Pressure	8-10 kg/cm <sup>2</sup>
Power Consumption	5kW

## Salient Features



Compact machine



Modular aluminium structure



Temperature controller and indicator for better process monitoring



Easy process for re-mounting the raw materials roll

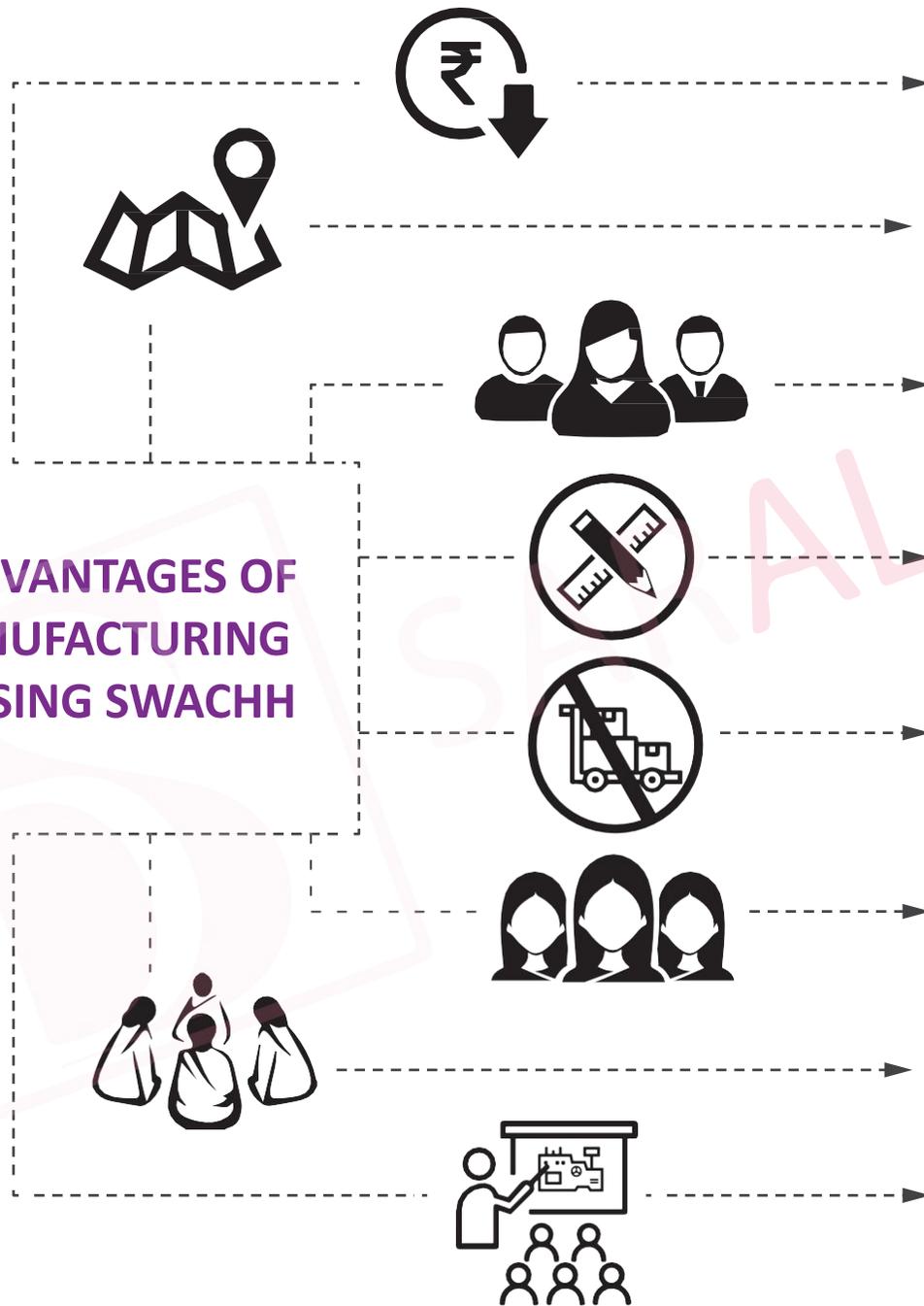


PLC automation

**Note:** All product specifications are subject to change without notice as we are in the process of constant innovation and improvement in the machine

\*The production speed of the machine depends on the operator's efficiency.

## ADVANTAGES OF LOCAL MANUFACTURING USING SWACHH



Low set-up and distribution costs through localised manufacturing

Multiple manufacturing locations across different locations

Generates local employment

Final product can be customised according to the local requirements

Eliminates the dependency on the external suppliers

Involves women actively in the sales and distribution of sanitary napkins

Women empowerment through village level entrepreneurship distribution model through SHGs

In-line with government envision of MSME & Skill development programmes

## Requirements of SWACHH 1.3

---

Power Mode	<ul style="list-style-type: none"><li>i. 220V, three phase or Single phase with 5 KW load capacity</li><li>ii. If <b>electricity supply is irregular</b> in the factory, it is advisable to purchase <b>a generator</b></li><li>iii. IGBT based Static Voltage Stabilizer- 10 kVA</li><li>iv. Recommended to have RCCB/RCBO for employees safety</li></ul>
Air Pressure	8-10 kg/cm <sup>2</sup>
Air Requirements	<ul style="list-style-type: none"><li>i. 3 HP Air compressor, <b>10 CFM</b></li><li>ii. It is advisable to purchase an <b>air dryer for the air compressor</b></li></ul>
Space	<ul style="list-style-type: none"><li>i. Clean closed room of <b>at least 400 square feet</b> needs to be maintained for the production floor and packaging- the room should be such that neither the length nor the width of the room is less than 20 feet and the height should be at least 10 feet.</li><li>ii. Clean and dry storage facility for raw materials and finished goods of 600 square feet</li><li>iii. 100 square feet for office space for keep stock accounts etc (if needed)</li></ul>
Staff Requirements	<ul style="list-style-type: none"><li>i. 3 semi-skilled labours for the packaging of the product per shift</li><li>ii. 3 semi-skilled labour for operating the machine per shift</li><li>iii. 1 Production Manager (optional) for ensuring supply chain and managing production staff</li></ul>
Process Guidelines	Once the machine's possession is given to the buyer, <b>detailed guidelines for production will be provided and they must be followed</b>

# Training

The training will be in two parts:

## Part 1

This training will require the production manager to travel to Mumbai for a 2 days training program at Saral office.

Following modules will be covered during the training:

1. Overview of the industry and Swachh technology
2. Sales and Marketing strategies
3. Pad composition
4. Keeping stock and accounts of raw materials as well as finished goods

---

## Part 2

After installation at the buyer's site, Saral's Engineer will provide a 5 days training on the following topics on-site to all the staff members involved in production including the production manager.

This training will cover the following modules:

1. Operating the machine
2. Loading and unloading of raw materials on machine
3. Best practices to be followed for production
4. Regular maintenance of the machine including replacement of wear and tear parts
5. Managing basic breakdown



# Installation & Warranty

---

## Installation details

Once the machine is received at the buyer's premises, one staff members of Saral will travel to the installation site.

The purpose of this one week-long visit will be as follows:

1. Installation of the machine
2. Inspection of the production facility
3. Make sure that the machine is commissioned properly

The cost of travelling, lodging and boarding of the Saral staff needs to be borne by the buyer. Before the installation, the buyer should procure relevant licenses, carpentry, air requirements, and electricity work at their own expense.

Note: At the time of commissioning, two personnel from the buyer's end should be present to assist Saral's engineer according to regular shift timings (8hours).

## Warranty

1. Each machine comes with a one-year warranty against manufacturing defects, damages during transportation and installation.

2. Critical Spares for regular maintenance for 1 year are provided for free at the time of installation.

3. Any component failure or part replacement beyond the Critical spares, will be payable by the buyer as per actuals. Saral can ship components as required to the buyer as per actual costs.

4. If Saral staff needs to travel to the production site for repair during the warranty period, the cost of travel, lodging and boarding needs to be borne by the buyer.

5. Regular free consultation (via audio or video calling) shall be available to the Production Engineer for any questions.



## Project Financing:

---

For promoting menstrual hygiene and Entrepreneurship, Government of India has multiple loan schemes available by NABARD (upto INR 5Lac) and nationalized bank schemes like Mudra loan (upto INR 10Lac).

Find details here: <https://saraldesigns.in/how-to-finance-your-sanitary-napkin-business/>

Saral Designs Automatic machines are now registered under **TUFS scheme**. In future, if you decide to upgrade your machine to an automatic machine, subsidy scheme upto 15% can be availed. Please check the TUFS website for more details and eligibility criteria.

<http://texmin.nic.in/schemes/technology-upgradation-fund-scheme>





**SARAL DESIGN SOLUTIONS PRIVATE LIMITED**

EL-11, DNA road, Electronic zone, MIDC, Mahape, Navi Mumbai-400710  
+91-9029330401 | [www.saraldesigns.in](http://www.saraldesigns.in) | [contactus@saraldesigns.in](mailto:contactus@saraldesigns.in)

**Disclaimer:** The contents in the brochure are confidential and are protected under Intellectual Property laws of India with Saral Design Solutions Private Limited as the rightful owner of the information, patents on the sanitary napkin machine and trademark for Active Ultra Healthy Hamesha.