

SWASTIK

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EXCELLENCE
1937-2012

ROTARY SCREEN PRINTING MACHINE

ROTO-PRINT RSP-8



SWASTIK TEXTILE ENGINEERS PVT. LTD.

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SWASTIK

SWASTIK Rotary Screen Printing Machine
Roto-Print RSP-8

The 'Roto-Print RSP-8' is a Universal, Reliable, Robust and Versatile printing machine printing with high accuracy and is easy to operate. Easy Screen insertion, easy and fast registration setting, high quality with variable lead setting and equipped with PLC controlled Servo Drive System with Touch-Screen operation ensures high performance with great printing sophistication and accuracy.



FABRIC FEEDING DEVICE

Versatile In-Feed with a controlled tension batch release arrangement with necessary guide rollers, swivel tensioning device and a pair of Electro-Magnetic cloth guiders / Mechanical Edge Decurlers. A Heated curved plate is provided for crease free feeding of fabric to the machine.



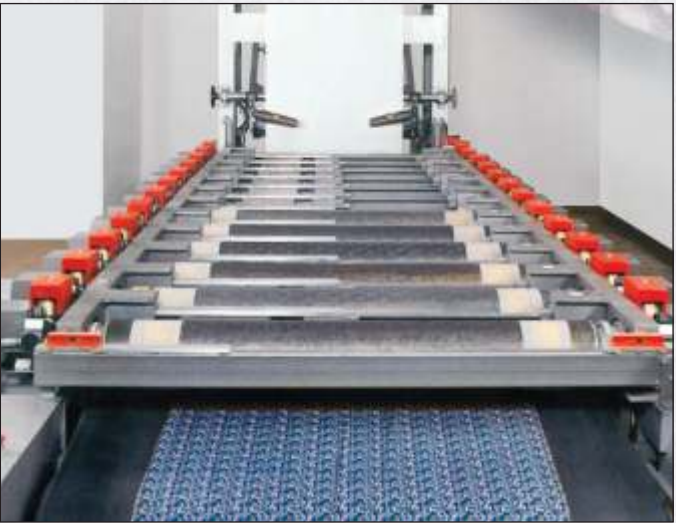
PRINTING SECTION CONTROLS

The design of the printing section provides easy access to the operator for mounting of screen and insertion of squeegee. All Repeat related adjustments like Axial, Diagonal, Longitudinal, Squeegee angle and Squeegee pressure can be done conveniently while the machine is running. Once adjusted, the repeats are maintained even after a colour change. Necessary Indicators are provided. Zero positioning is provided for the first and subsequent reinsertions to achieve faster repeat registration, thereby considerably reducing printing damage.

ROTARY SCREEN PRINTING MACHINE



ROTARY PRINTING MACHINE RSP-8G WITH GEAR BOX AND COMMON DRIVE



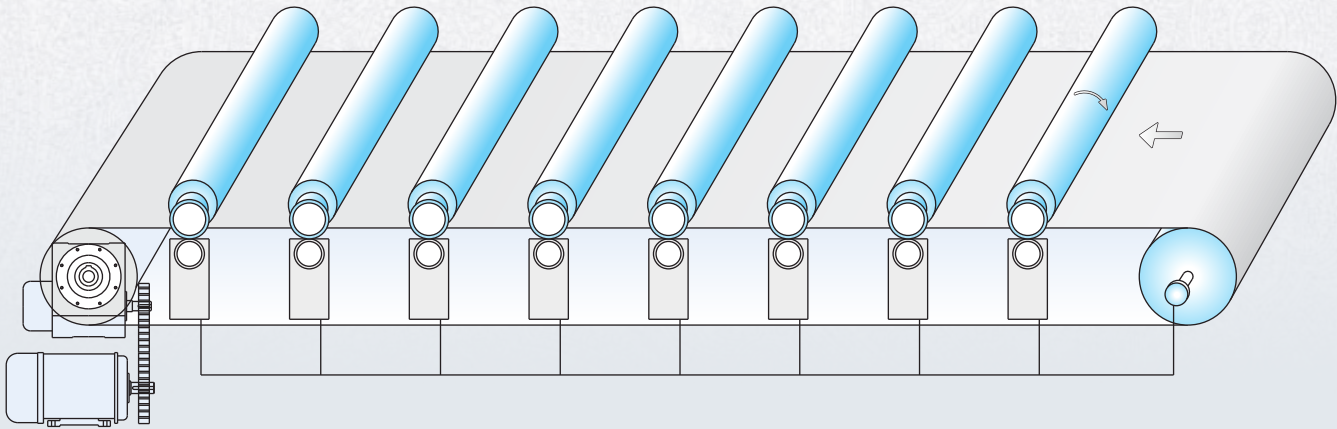
GEAR BOXTYPE ROTARY PRINTING MACHINE

The Rotary Printing Machine can alternatively be supplied with Individual Gear Box drive with shaft, fully synchronized with the Blanket and equipped with Variable Frequency controlled system and a PLC to provide reproducibility.



COLOUR FEEDING UNITS
PRINTING PASTE SUPPLY SYSTEM

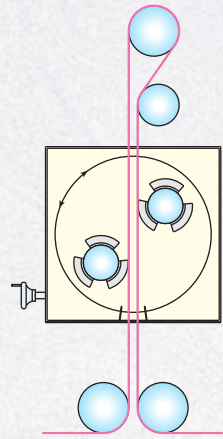
Individual reversible gear pumps are conveniently located for continuous feeding of colour to the screens. An electronic level controller maintains the level of colour in the screen. Leftover colour in the squeegee can be pumped back. The machine can also be equipped with pneumatic pumps on request.



SERVO DRIVE SYSTEM FOR EACH PRINTING HEAD WITH ITS OWN SERVO MOTOR

CLEANING DEVICE

A well designed and highly efficient Brushing and Cleaning Device is provided for cleaning the side of the fabric to be printed and efficiently removing loose fibres and threads from that side of the fabric. These are sucked out to a dust collection unit located on one side of the machine. This helps reduce the printing damage considerably.



GLUEING SYSTEM

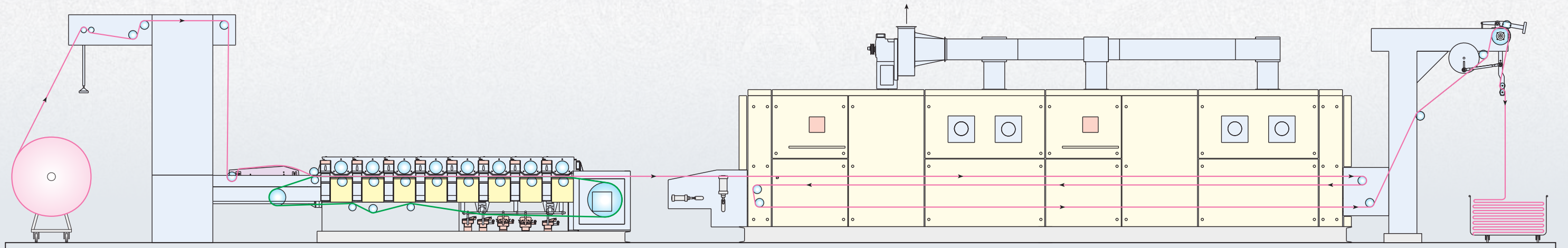
For normal cotton and synthetic blended fabrics, the 'Roto-Print RSP-8' is equipped with a standard simple and most economical Glueing System placed at the entry side, below the blanket. For synthetic fabrics, a suitable THERMOPLAST applicator and stripping device are provided. The THERMOPLAST on blanket is revived by electrical heaters fixed in the curved plate. The fabric is also heated over the curved plate fitted with electrical heater. THERMOPLAST heating temperature will depend on the quality of adhesive used.



SERVO MOTOR ON EACH PRINTING POSITION

PRINTING HEAD CONTROL

The highly efficient and flexible Printing Unit is equipped with a Drive to each printing position. This is either through individual Servo Motors for each printing position or with gearboxes driven from a common motor. The Servo Drive and Controller ensures greater accuracy and ease of operation with high efficiency – as compared to the gear transmission system. The high level of automation and control ensure high printing sophistication and perfect synchronization of the printing blanket with screens at all speeds. Servomotor driven machines for Wider Width fabrics are provided with drive from both sides of the screen to avoid torsion effect on screen.



SCREENS

The 'Roto-Print RSP-8' is suitable to take up both Galvano-Nickel as well as Nickel perforated screens. The machine is generally equipped for taking up screens of standard repeats of 640 mm, 820 mm, 914 mm and 1018 mm. For larger repeats a special printing head is offered.



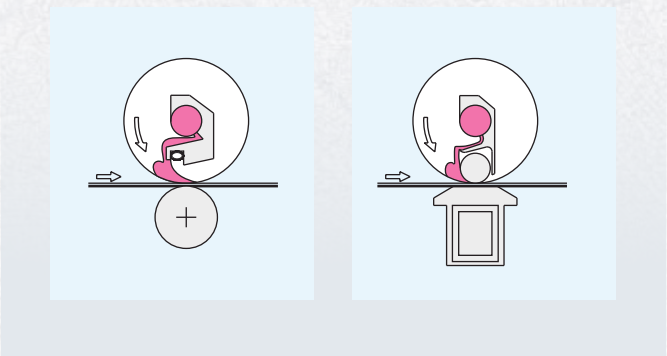
BLANKET WASHING

The Blanket Washer mainly consists of polyurethane sponges, spray pipes and scrapers. Water re-circulation system for the main washer is optional and can be used to reduce water consumption.



SQUEEGEE

The 'Roto-Print RSP-8' is generally equipped with a pneumatic squeegee for printing paste application. It consists of a squeeze holder and a Stainless Steel blade with an inflatable tube. The 'Roto-Print RSP-8' can also be supplied with magnetic squeegee on a few printing positions. Magnetic Pressure can be adjusted steplessly to control penetration of colour paste as desired.



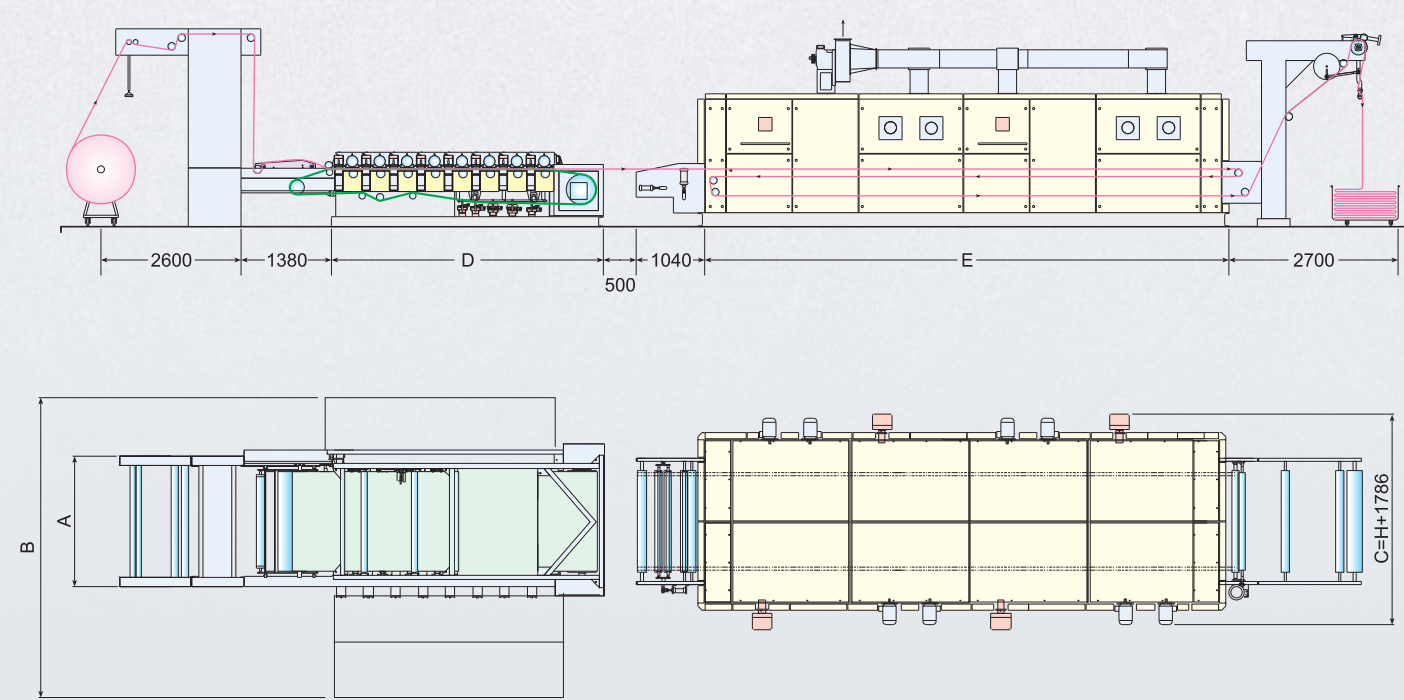
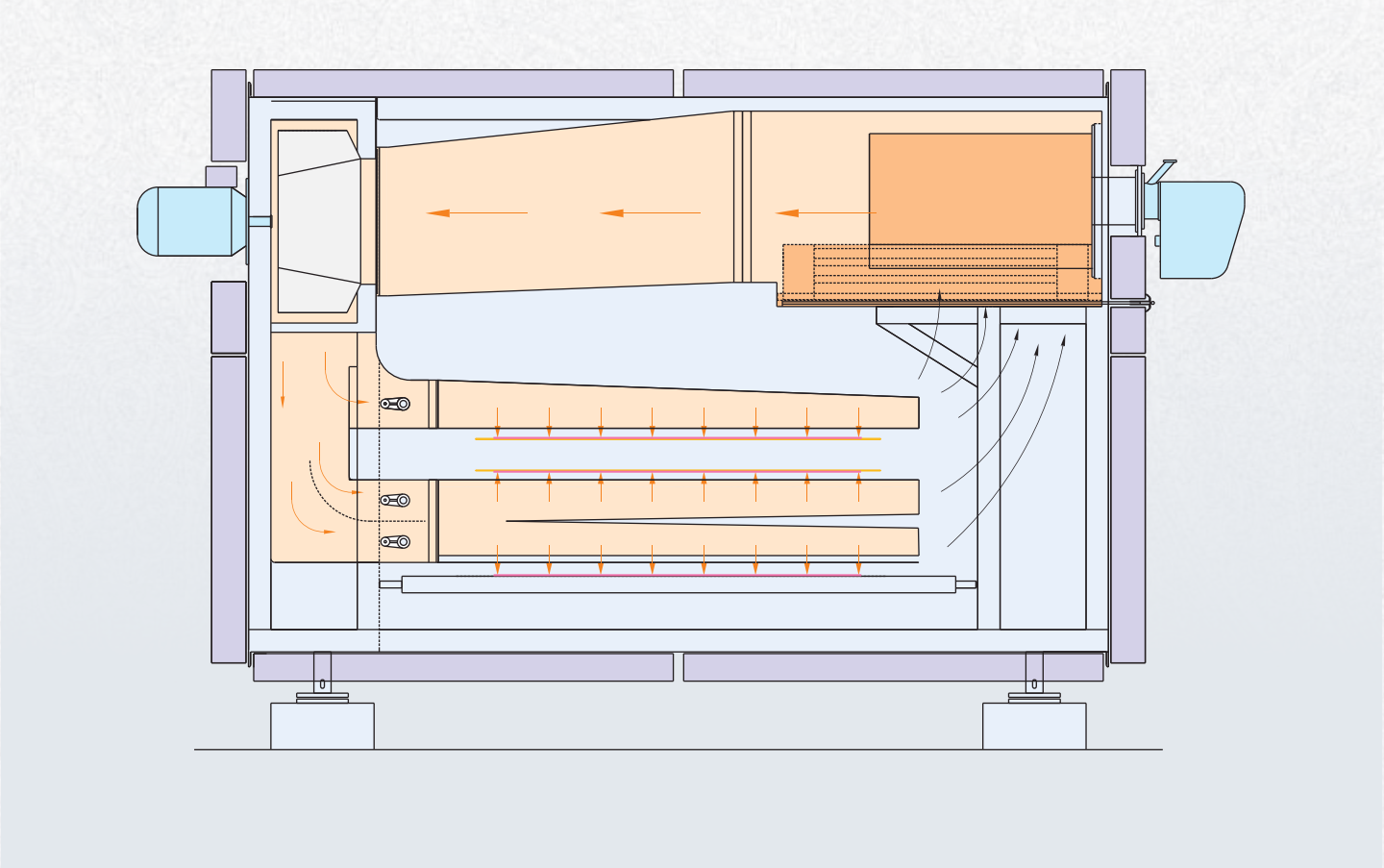
DRYER - A CLOSED CIRCUIT DESIGN

The 'Roto-Print RSP-8' is equipped with highly efficient and sturdy multi chamber Jet Dryer with three active drying passes. The dryer can be heated with Steam / Thermic Oil / Direct fired Gas Heating System.

The dryer is equipped with a Teflon Coated Conveyor Belt with large openings to carry the fabrics in tensionless condition. Conveyor tensioning and centering system are provided. The drying chamber is provided with twin blower directly coupled motors with one blower for top nozzles (first pass) and 2nd blower for bottom nozzles (2nd and 3rd pass).

EXHAUST

A suitable exhaust system is provided which exhausts the contaminated air & fumes from either side of the chamber with the outlet located outside the fabric passage. All motors are Variable Frequency Controlled for efficient use of power.



TECHNICAL DATA					
Repeats	640mm / 819mm / 914mm / 1018mm				
No. of Colours	6	8	10	12	16
Table Length - D	4120	4120	5785	5785	7440
Printing Width	1280	1620	1850	2200	2400
Space Required - A	2000	2340	2570	2920	3120
- B	4250	4590	4820	5170	5370
- C	3286	3620	3850	4200	4400
Speed	5 to 80 mtr./min.				
No. of Drying Section	4		6		8
Length of Dryer - E	8000		11600		15200
Dryer Infeed Width	1040mm				
Dryer Plaiter Width	2700mm				



ROTARY SCREEN ENGRAVING EQUIPMENTS

END-RING GLUEING DEVICE

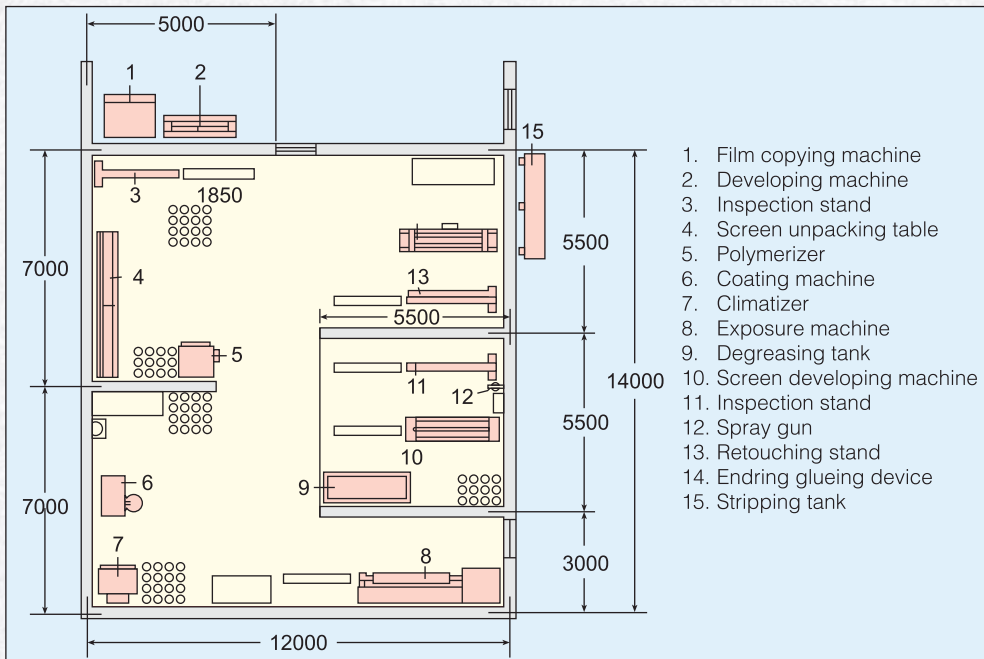
The end-rings are positioned precisely in the horizontal universal glueing device. The contact surface of the end-ring lies exactly perpendicular to the screen axis. They are fixed with the screen in horizontal position.

An universal device ideal for all length of screens and by changing the replaceable holding plates, end-rings of all repeats can be fixed.



ROTARY SCREEN EXPOSING MACHINE

This is an unique, efficient and low cost machine for engraving nickel rotary screen. A rubber inflatable tube, actinic ultraviolet light source and accurate marking device are the main features. The actinic tubes are mounted on a carriage which can be shifted in X and Y axis for easy operation. Use of actinic ultraviolet tubes as light source is highly beneficial



1. Film copying machine
2. Developing machine
3. Inspection stand
4. Screen unpacking table
5. Polymerizer
6. Coating machine
7. Climatizer
8. Exposure machine
9. Degreasing tank
10. Screen developing machine
11. Inspection stand
12. Spray gun
13. Retouching stand
14. Endring glueing device
15. Stripping tank

OTHER ACCESSORIES FOR ROTARY SCREEN ENGRAVING PLANT

- Screen unpacking trough
- Inspection & retouching stand
- Degreasing tank
- Softening tank
- Climatizing equipment
- Hand Coating device
- Auto Coating machine
- Stripping tank (Vertical or Horizontal)
- Miscellaneous Equipments

OTHER ANCILLARIES FOR ROTARY PRINTING MACHINE

1. Rotary Screen Washer
2. Sample Printing Table
3. Film Step & Repeat exposing machine
4. Film copying machine

Manufactured by

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Selling Agents

SHREEJI ENGINEERING & MARKETING SERVICES

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