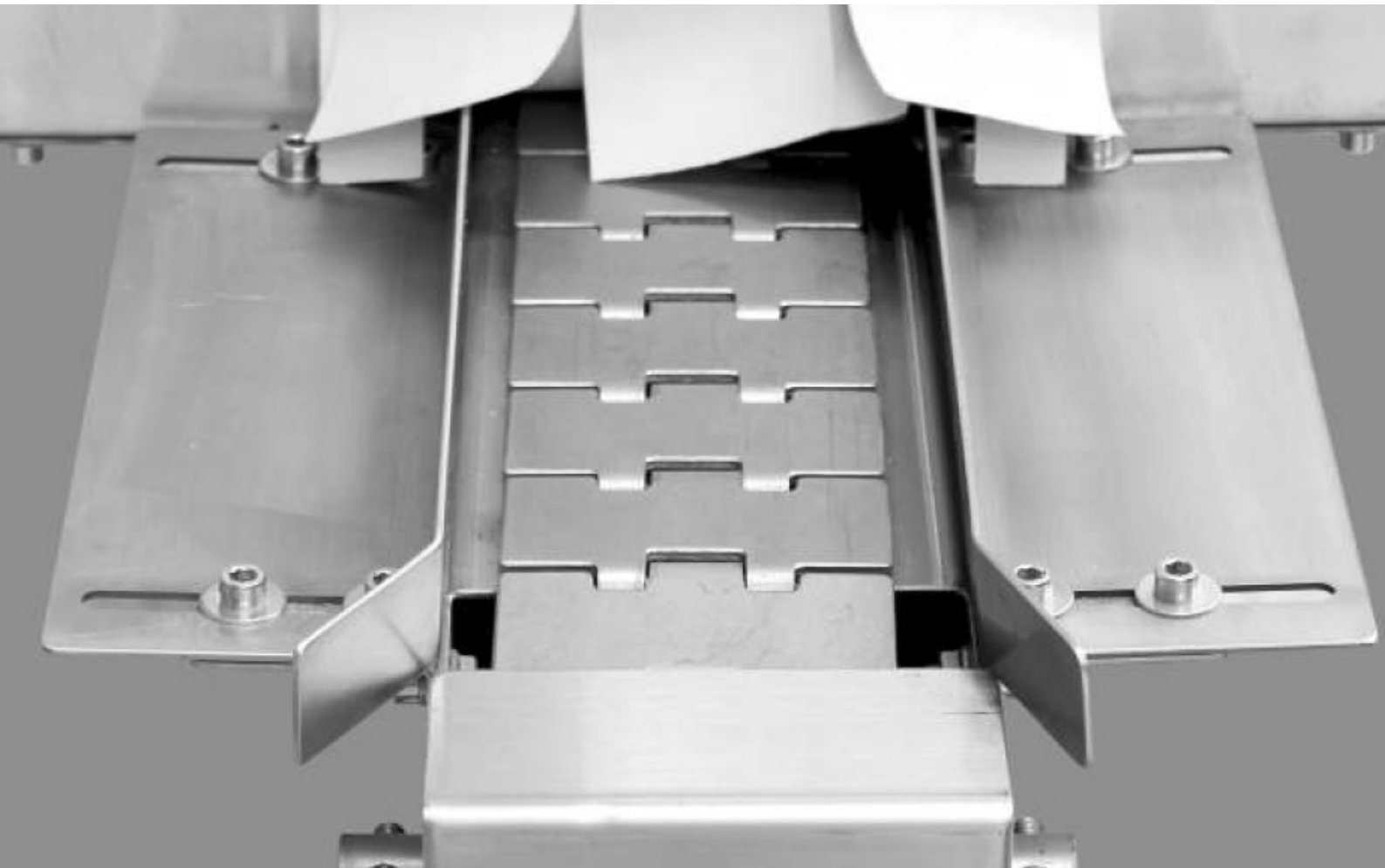




AN ISO 9001:2008 CERTIFIED COMPANY

USER MANUAL

Sleeve Shrink Tunnel

QS1538SSTV



www.sevana.com

YOUR PACKAGING PARTNER

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1. FOREWORD

Thank you for choosing Sevana. You now belong to the Sevana family of over one million satisfied customers across the world. We are confident that you will have many years of complete satisfaction from this Sevana product.

We want you to derive maximum value from Sevana's reliable service and support infrastructure in India. We maintain Sevana's service mission of working continuously to provide customers with highest level of service, thereby ensuring mutually successful long term business association.

You can contact us through

Email	:	support@sevana.com	
Phone	:	+91-484-2680780	Monday to Saturday
Mobile	:	+91-9388180781	8.30 am – 5.00pm IST
Fax	:	+91-484-2680680	

We value your partnership

Yours sincerely

For Sevana Electrical Appliances Pvt. Ltd.

Manager in charge, Customer support

While contacting the support centre kindly provide the following information for a speedier support and service.

- i. Model
- ii. Serial no.
- iii. The nature of problem

2. HOW TO USE THIS MANUAL

- ❖ Please read this manual carefully before installing and commissioning the machine.
- ❖ Please keep a copy of this manual for reference near the machine.

The information in this document is believed to be accurate and reliable. However, Sevana Electrical Appliances Pvt Ltd, cannot accept any financial or other responsibilities that may result from the use of this information. No warranties are granted or extended by this document.

Sevana Electrical Appliances reserves the right to change any or all information contained herein without prior written notice. Revisions may be issued at the time of such changes and/or deletions.

3. SAFETY PRECAUTIONS

➤ Introduction

Machines of Sevana have been designed to provide extremely safe and dependable operation when properly used. Safety precautions must be observed during normal operation and when servicing the machines of Sevana.

➤ Warning

A warning describes safety hazards or unsafe practices which could result in personal injury or loss of life. A warning message is accompanied by a symbol as described in the following paragraphs and is also surrounded by a box to attract your attention.



This is a warning symbol indicating a hot surface.

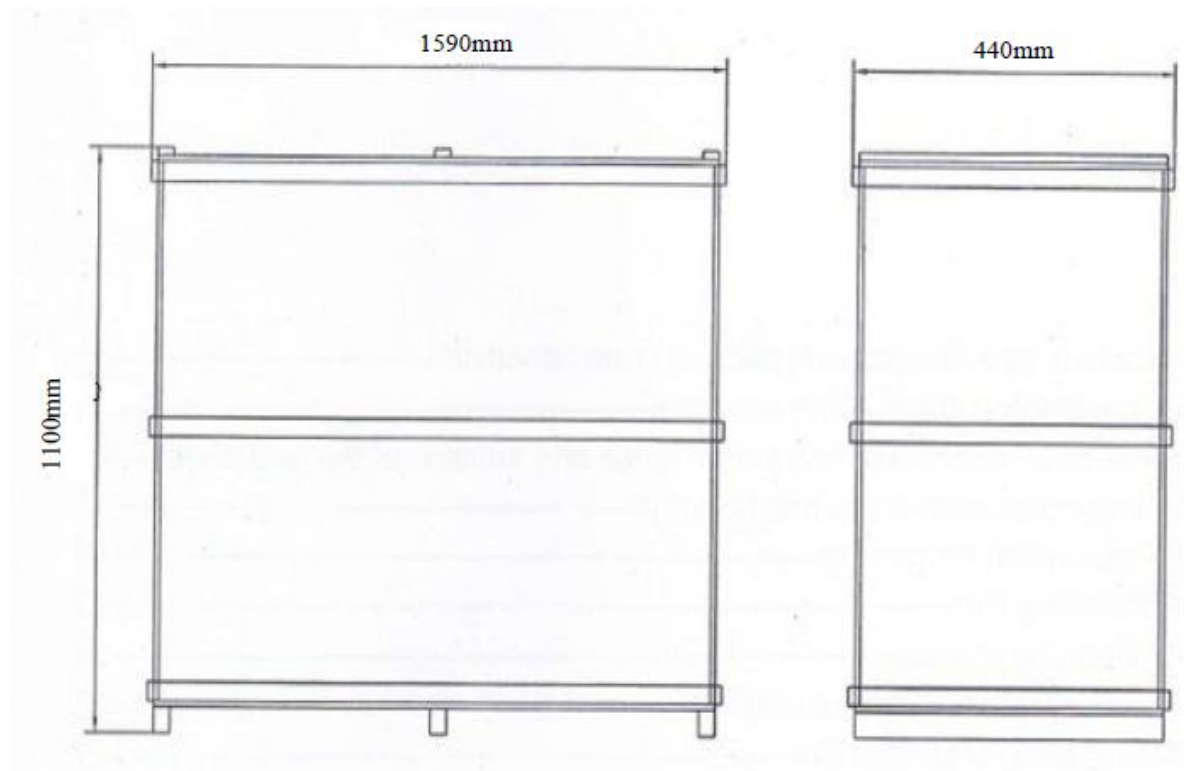


This is a warning symbol indicating moving parts.

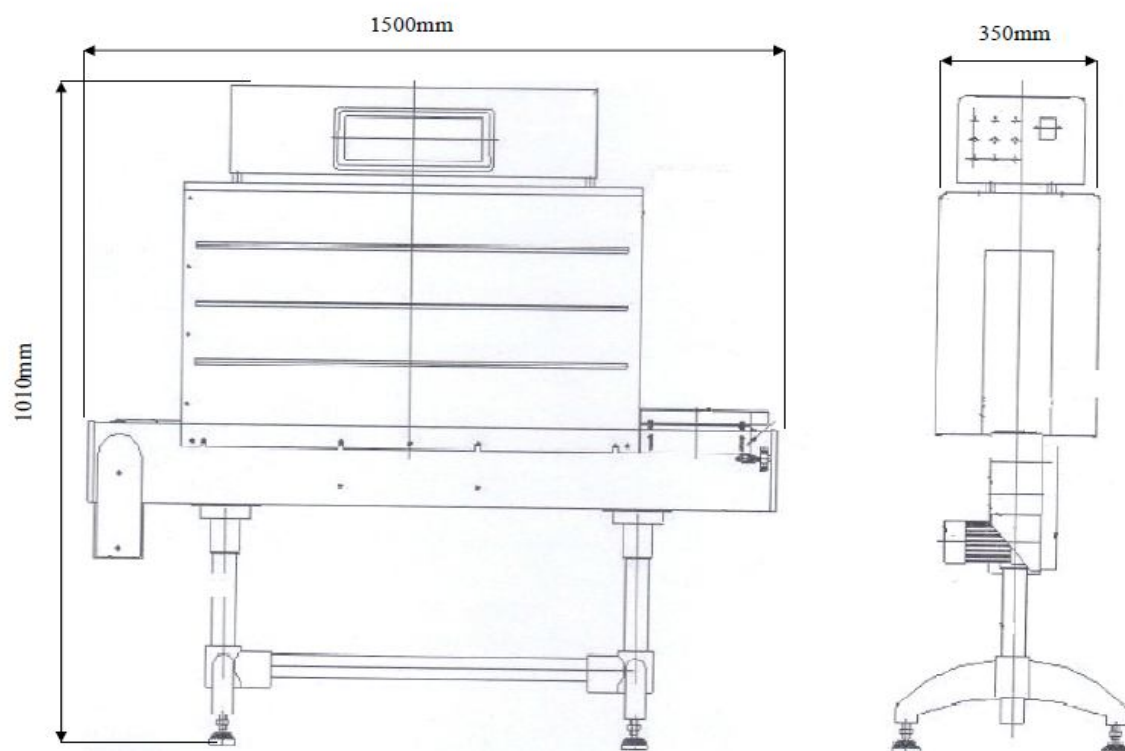
- ❖ The machine has to be grounded properly before using.
- ❖ Never try to shrink wrap explosive or inflammable material.
- ❖ Do not insert hand in the chamber when machine is in operation.
- ❖ Do not allow any liquid to go in to the machine.
- ❖ Do not keep Shrinkable film on the machine.

4. MACHINE DIMENSIONS

a. Dimensions of packing case



b. Dimensions of machine



5. PACKING SLIP

Name	Quantity
User manual	1
Tool set	1
Machine	1

6. TECHNICAL SPECIFICATIONS

Model	QS1538 SSTV
Machine's dimensions (L x W x H)	1500 mm x 350 mm x 1010 mm
Conveyor motor	90W/220V AC
Conveyor	812 S/S plate
Conveyor speed	0 - 10m/min
Tunnel size	1000mm x 150mm x 380mm
Max. packing size (dia x H)	Φ105 x 350mm
Loading weight	15 Kg
Power	9KW / 415V / 3P / 50Hz
Shrink film	POF, PVC

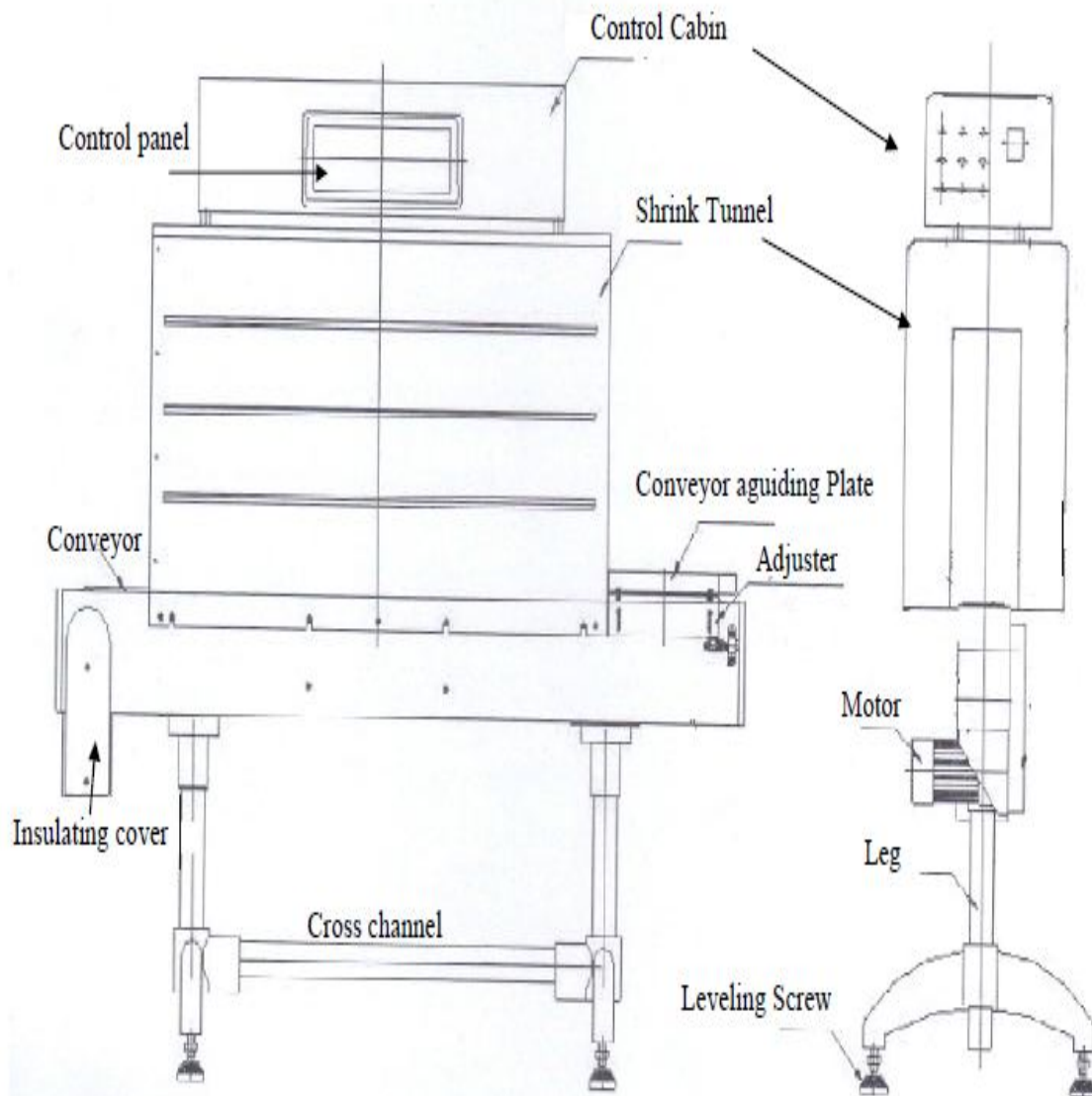
7. UNPACKING

Note: Please verify the items with the packing slip.

- ❖ Inspect for any transit damages. If there are any, notify your dealer/transporter/insurance company or us immediately.
- ❖ The machine is shipped well packed in a wooden box with four bolts holding the machine to the bottom panel.
- ❖ Place the wooden box with the “TOP” Marked to the top.
- ❖ Remove all the side panels and top panel of the box.
- ❖ Lift the machine with the bottom panel using a pallet jack.
- ❖ Remove the packing bolts.
- ❖ Remove all packing materials.
- ❖ Lower the pallet jack and slide the machine to the floor.

Tools required to unpack
• Pry bar/Crowbar • Claw hammer

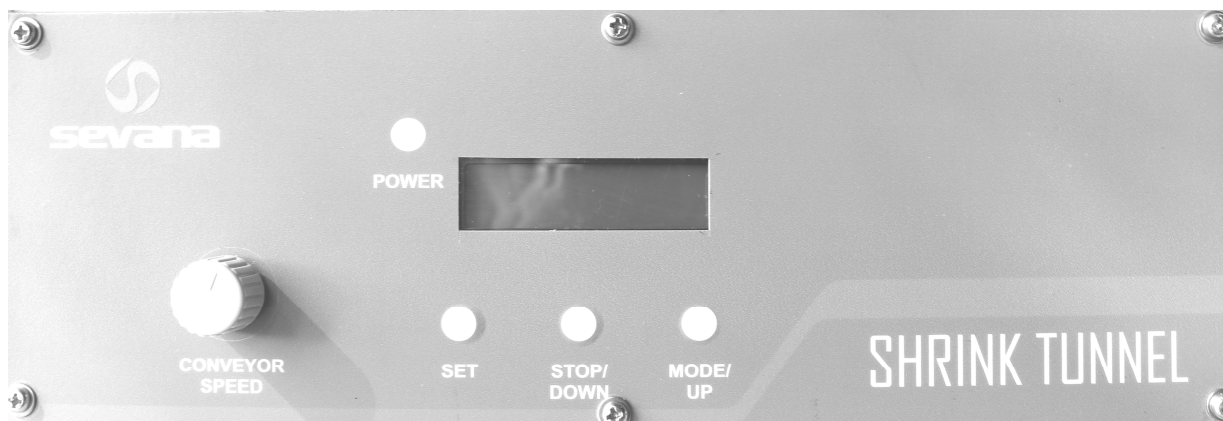
8. LIST OF PARTS



9. POWER CONNECTION

Five terminal points on the power connection block with indication R, Y, B, N and E. Connect the terminal points R, Y and B to phases indicated by Red, Yellow & Blue respectively and N to the neutral(Black) and E to the earth(Green). Switch on the MCB.

10. CONTROL PANEL



1	Conveyor speed control knob
2	Power LED
3	Control buttons
4	LCD 16x2 display

11. HOW TO START THE MACHINE

CONTROL BUTTONS:

- SET button
- STOP/DOWN button
- MODE/UP button

To start the machine, connect the machine to appropriate power supply and switch on.

A LCD check function is done first; version of the software is displayed.

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DSTV

SEVANA Ver 1.0

The machine has four modes/program presets. Each mode preset parameter is Temperature of Chamber. This parameter can be modified by the operator if required. (Each mode can be used for different type of films/products).

The machine will automatically go to the previously used mode after initializing. Now the temperature will be building up. When the temperature is not built up to the preset level, a message “Not ready” is displayed

NOT READY TEMP:107°C

When the temperature is building up to the preset level, the message will change to “MODE: x, TEMP: xxx” also an audio indication is also given.

MODE:1 TEMP:150°C

PROGRAM MODES:

Sevana’s micro-processor based DSTV machine has 4 preset modes or programs. Each program can be set with different parameters.

Variable parameter in each mode/program is:

- Temperature: It represents the temperature to be set in shrink chamber in degree Centigrade (°C).

To preset program modes:

Eg: Target

Temperature : 200

Select the mode by pressing “MODE/UP” button

To set the temperature, press “SET” button. It displays “Set Temperature”

EDIT SETTINGS TEMP:40°C

To increase the temperature, press the “MODE/UP” button continuously till the required value is displayed.

EDIT SETTINGS TEMP:200°C
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Press the “SET” button to save the values.

Another parameter is Conveyor speed (Minimum-maximum = 0-10 Meters per minute). Speed of conveyor can increase or decrease by turning conveyor speed knob clockwise or anticlockwise.

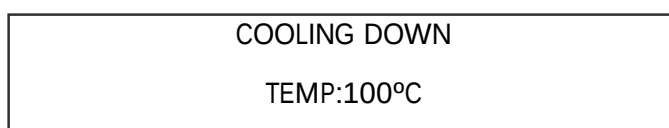
FEATURES:

If the temperature sensor probe fails, a message will be displayed on the Digital Display as

CHECK THE TEMP PROBE TEMP: xxx°C
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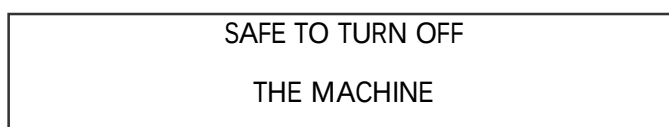
12. HOW TO SHUT DOWN/ SWITCH OFF

Press the “STOP” button for 1 second.



When the temperature is reduced to safe levels, the heaters are switched off automatically.

A message is displayed when ready to switch off.



Now the power supply to the machine can be switched off.

13. SHRINKING OPERATION

- a) Special plastic films which shrink on application of heat are used for shrink wrapping. Shrink films commonly available are Low Density Poly Ethylene (LDPE), Poly Vinyl Chloride (PVC) and Poly Olefin (POF). The temperature required for shrinking each film varies and this information can be obtained from the film manufactures.
- b) Insert the article in a preformed sleeve or tube of shrinkable film of suitable size. Seal the open ends.
- c) Place the wrapped article on the conveyor at the inlet. The article will come out of the outlet properly shrunk. Inspect the article.
- d) If the shrinking is not sufficient increase the temperature setting or reduce the conveyor speed. Make final adjustment of speed and temperature after the temperature has reasonably stabilized.

14. MAINTENANCE

Caution: Isolate electric power supply before doing the maintenance.

Daily Maintenance

- ❖ Blow off the dust and film debris using a blower or compressed air.
- ❖ Remove any plastic leftover on the conveyor.

Weekly maintenance.

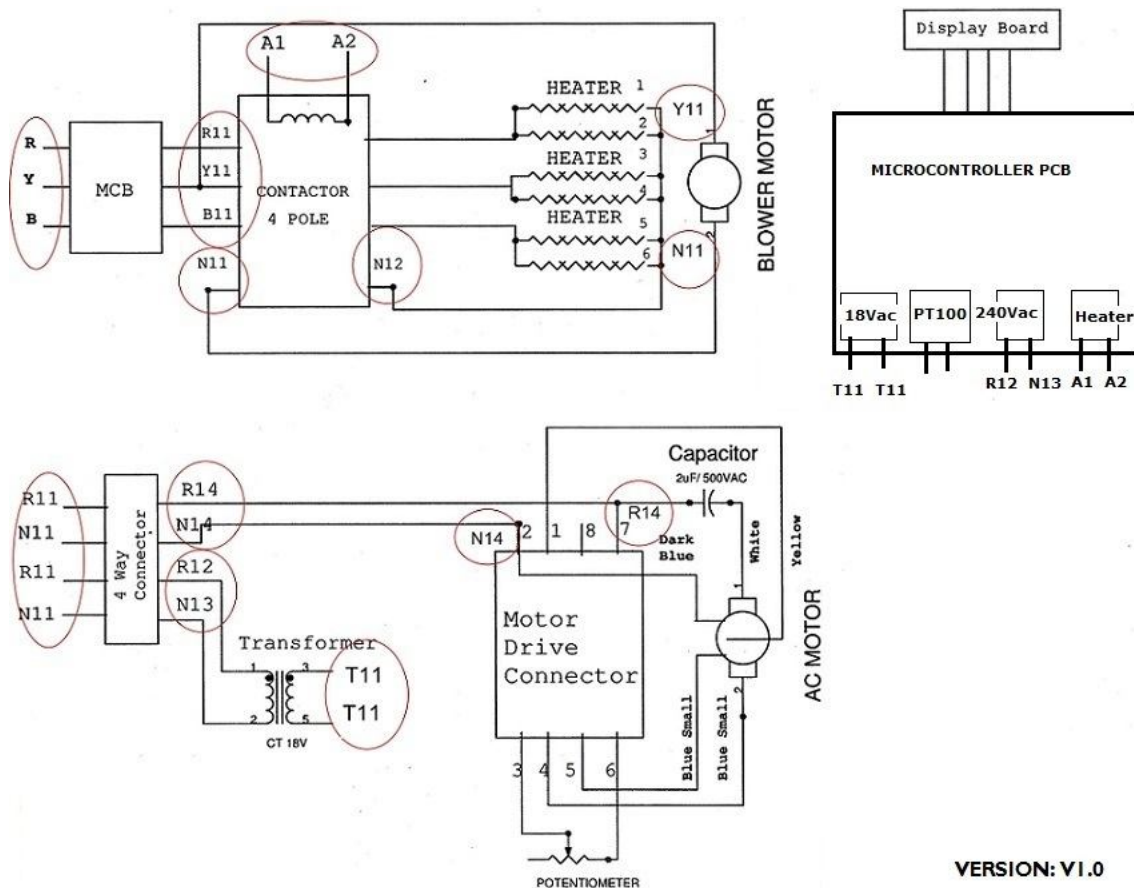
- ❖ Apply graphite grease on the chains
- ❖ Check the conveyor chain tension. Adjust if required
- ❖ Apply lubricant to other moving parts.

15. TROUBLE SHOOTING

No	Complaint	Reason	Remedy
1	Machine does not work , power indicating LED does not glow	1. No power supply 2.MCB tripped	1. Restore power supply 2. Check the wiring for any short circuit. If satisfactory reset the MCB
2	Conveyor is not moving	1.Conveyor speed set to 0 2.Conveyor motor stalling 3.Defective conveyor motor 4. Conveyor chain disengaged from the sprockets. 5. Conveyor chain breakage 6. Defective conveyor drive sprocket 7. Defective AC variable speed drive	1. Increase the conveyor speed 2. Reduce load on the conveyor. Install the machine with a slope towards the direction of the conveyor movements to increase the load carrying capacity of the conveyor. 3. Rectify/replace the conveyor motor 4. Engage the conveyor chain with the sprocket. 5. Replace both chain together to avoid the mismatching of chains 6. Replace the conveyor drive sprockets 7. Replace AC variable speed drive
4	Air blower not working	1. Defective blower motor	1. Replace the blower motor
5.	Blower motor works , but the blower does not rotate freely	1.Blower tightening nut loose.	1.Tighten blower to blower motor.
6.	Insufficient shrinking	1. Low temperature setting. 2. Temperature is not building up	1. Increase the temperature setting. 2. Refer to complaint no. 7
7.	Temperature is not building up.	1. Heater connection loose. 2. Heater failure. 3. Low temperature setting 4. Defective contactor for heaters	1. Make proper connections. 2. Replace the defective heater 3. Increase temperature setting 4.Replace the defective contactor
8	Excessive Shrinking	1. High temperature setting. 2. Low conveyor speed. 3. Defective Temperature sensor 4. Defective contactor for heaters due to contact welding	1.Reduce the temperature setting. 2. Increase the conveyor speed. 3. Replace the defective part. 4.Replace the defective contactor

9.	Shrinking not uniform	1. Blower not working or loose. 2. Heaters are not working.	1.Refer complaint troubleshooting Case 4 and 5. 2. Identify the defective heaters and replace them.
10.	Abnormal sound and vibration	1. Blower loose. 2. Blower motor bearing failure. 3. Machine is not installed on a level surface.	1. Tighten the nut with which the Air Turbulence Fan is attached to the blower motor 2. Replace the defective bearing. 3. Correct the level the machine.
11.	Conveyor is moving constant speed	1.Defective speed controller	1.Replace speed controller
12	Display Black out when Heater are turned on.	1.EMI generated through contactor arcing.	1.Replace contactor connections for loose terminals. 2.Connect a 220ohm resistor and a 104/1kv capacitor in series across A1 and A2 of contactor. 3. Replace Contactor.

16. ELECTRICAL SCHEMATIC DIAGRAM



17. SERVICE LOG

[illegible]