



AN ISO 9001:2015 CERTIFIED COMPANY

USER MANUAL

Delta Shrink Tunnel

QS4525DSTV



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YOUR PACKAGING PARTNER

CONTENT

Sl no	Description	Page no
1.	Foreword	3
2.	How to use this manual	4
3.	Safety precautions	4
4.	Packing case and machine dimensions	5
5.	Packing slip	6
6.	Unpacking	6
7.	Technical specifications	7
8.	List of parts	8
9.	Installation	13
10.	Power connection	13
11.	Control panel	13
12.	Starting the machine	13
13.	Shut down/switching off the machine	14
14.	Shrinking operation	14
15.	Maintenance	15
16.	Electrical schematic	16
17.	Troubleshooting	17
18.	Service log	20

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 the highest level of service, thereby ensuring mutually successful long term business association.

You can contact us through

Toll Free	:	18004250780	
Email	:	customercare@sevana.com	
Phone	:	+91-484-2680780	Monday to Saturday
Mobile	:	+91-9388180781	8.30 am – 5.00pm IST

We value your partnership

Yours sincerely

For Sevana Electrical Appliances Pvt. Ltd.

Manager in charge, Customer support

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

- ❑ Model
- ❑ Serial No
- ❑ 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 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

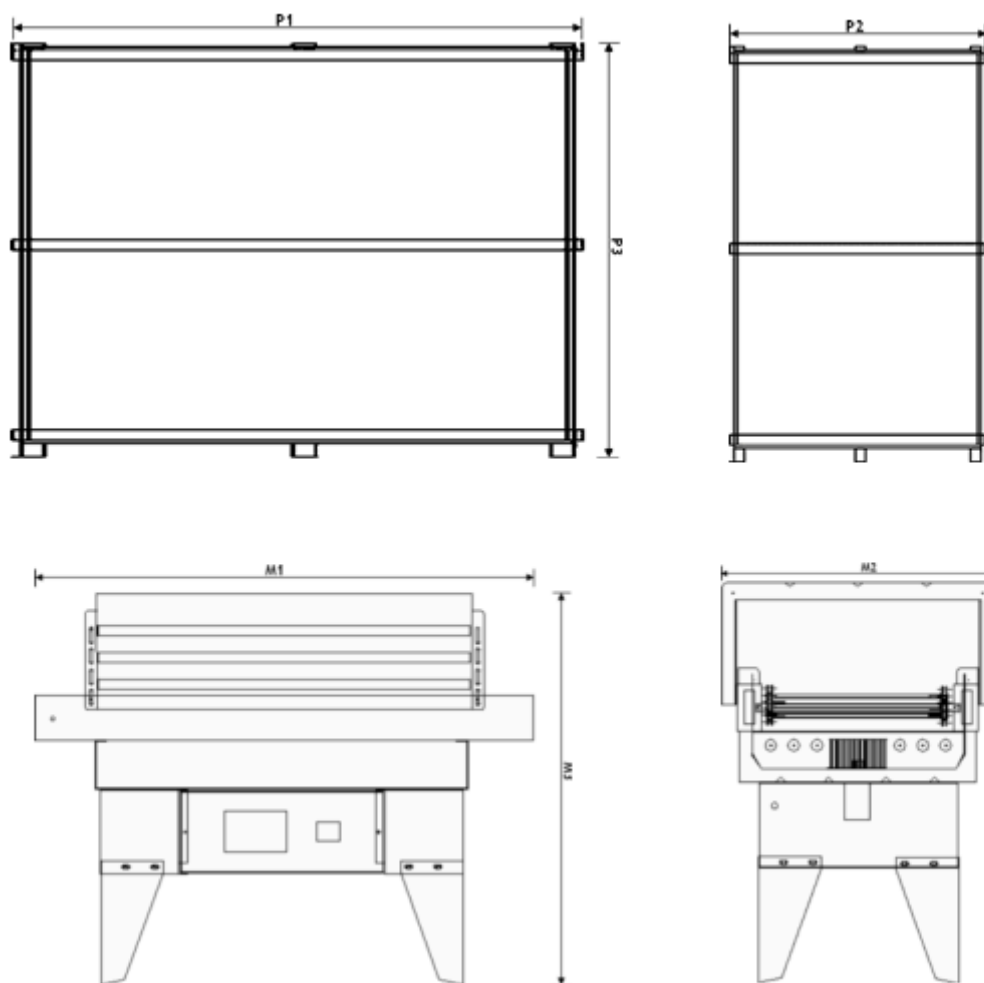
A warning describes safety hazards or unsafe practices which could result in personal injury or loss of life. A warning message is accompanied by a symbol as described in the following paragraphs and is also surrounded by a box to attract your attention.

- i.  This is a warning symbol indicating a hot surface.

- ii.  This is a warning symbol indicating moving parts.

1. The machine has to be grounded properly before using.
2. Never try to shrink wrap explosive or inflammable material.
3. Do not insert your hand in the chamber when the machine is in operation.
4. Do not allow any liquid to go into the machine.
5. Do not keep shrinkable film on the machine.

4. PACKING CASE AND MACHINE DIMENSIONS



Machine	P1	P2	P3	M1	M2	M3
QS4525DSTV	1250	760	600	1210	700	1080

5. PACKING SLIP

ITEM	QUANTITY
Machine	1
User manual	1
Warranty card	1
Double open-end wrench/spanner (16-17)	1
Screwdriver multi type	1
Allen key(5mm)	1

6. 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 carton box.
- ❖ Cut the packing straps.
- ❖ Remove the top panel of the carton box.
- ❖ The legs are separately packed and kept inside the box.
- ❖ Fix the legs to the machine. (Use double open-end wrench/spanner 17)
- ❖ Remove all packing materials.

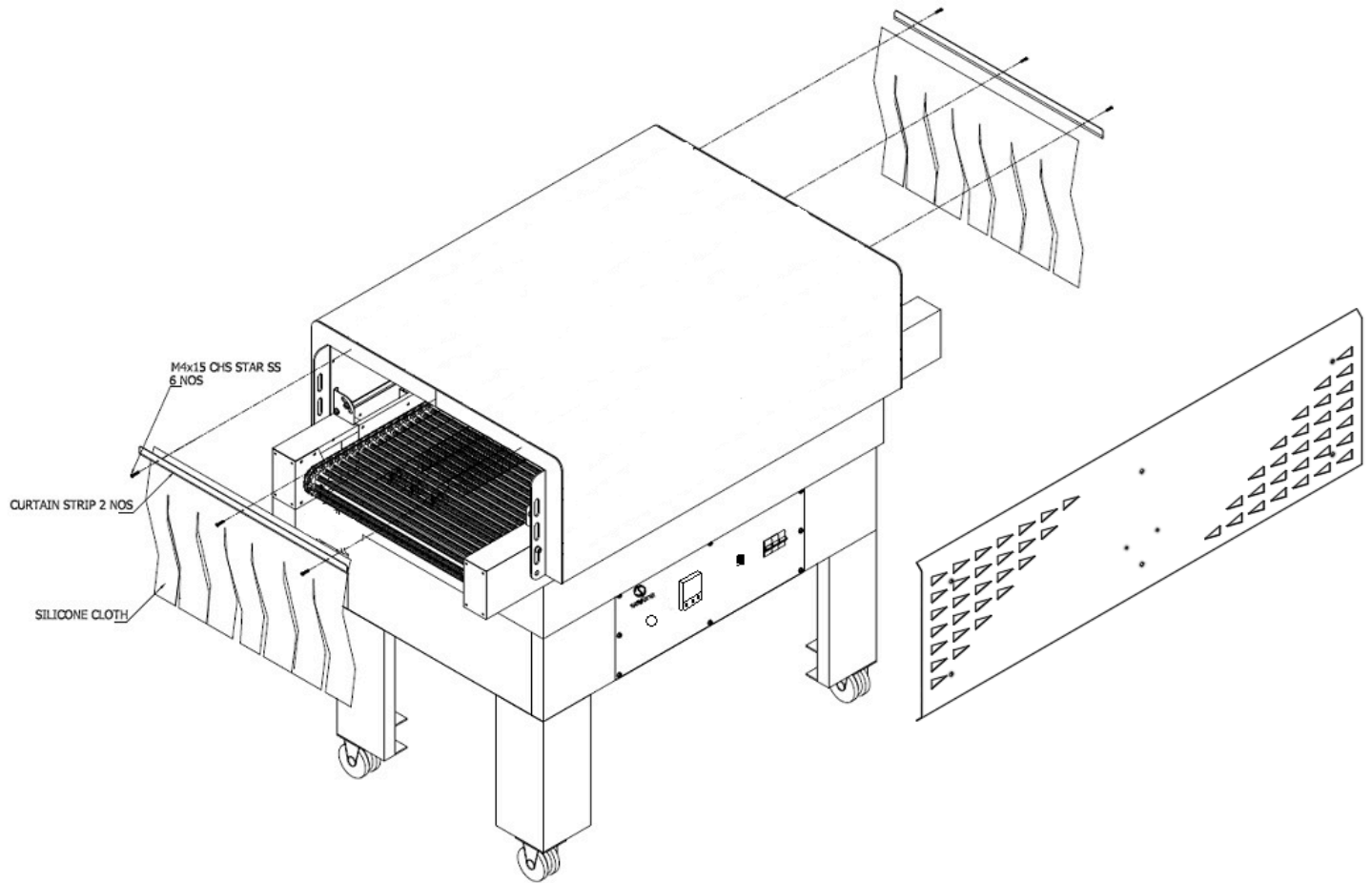
Tools required to unpack and assemble

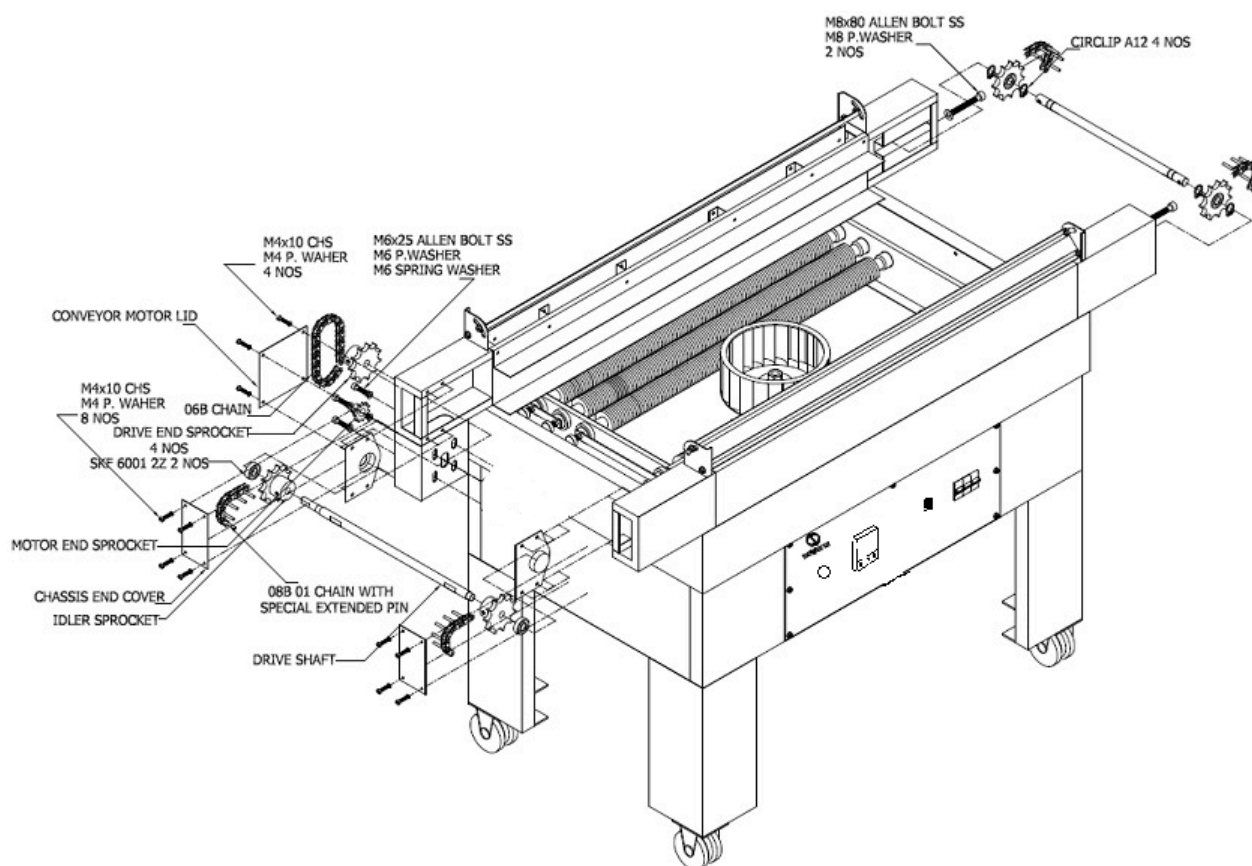
- a. Snap off cutter.
- b. Double open-end wrench/spanner 17
- c. Allen Key(5mm)

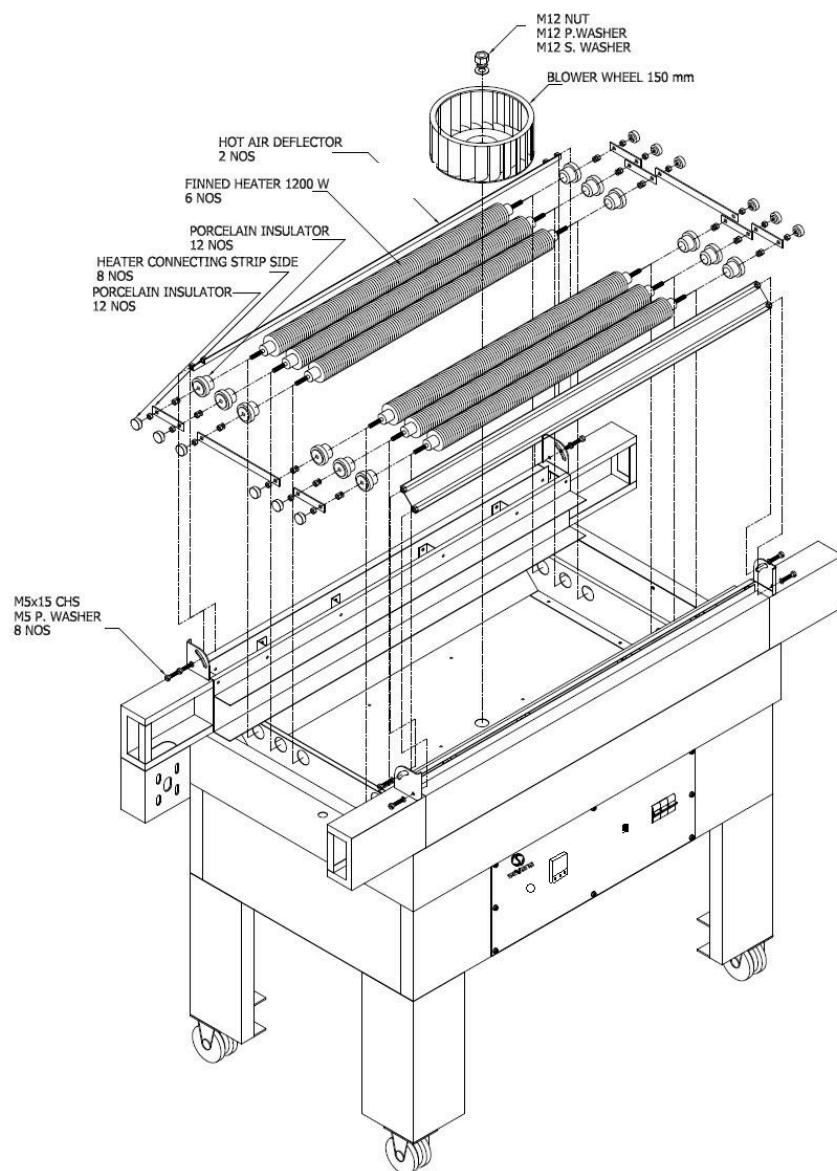
7. TECHNICAL SPECIFICATIONS

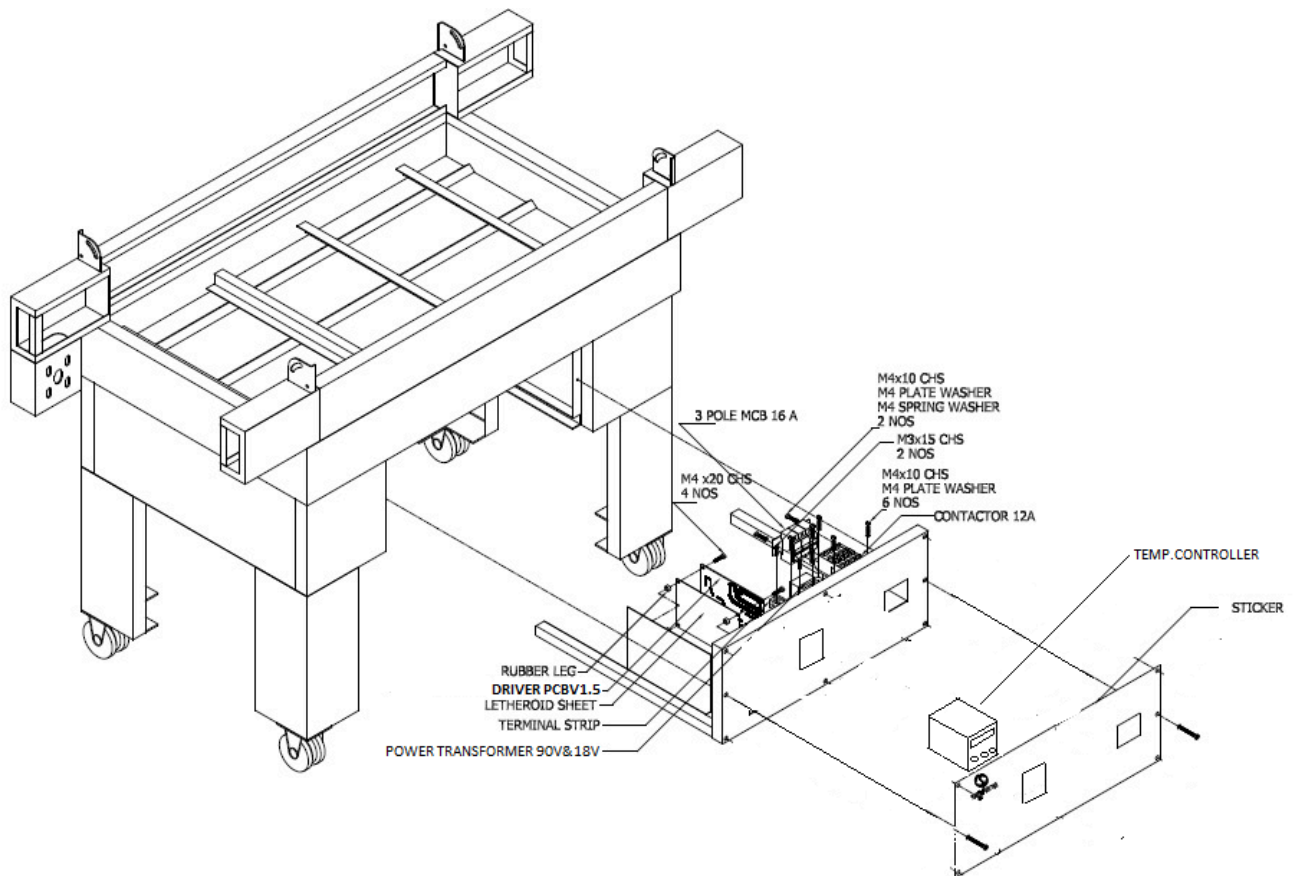
Model	QS 4525 DSTV
Window width (mm)	450
Window height (mm)	200
Voltage (V)	415/3P
Power (KW)	7.8
Maximum load weight (Kg)	5
Machine length (mm)	1200
Machine width (mm)	660
Machine height (mm)	1040

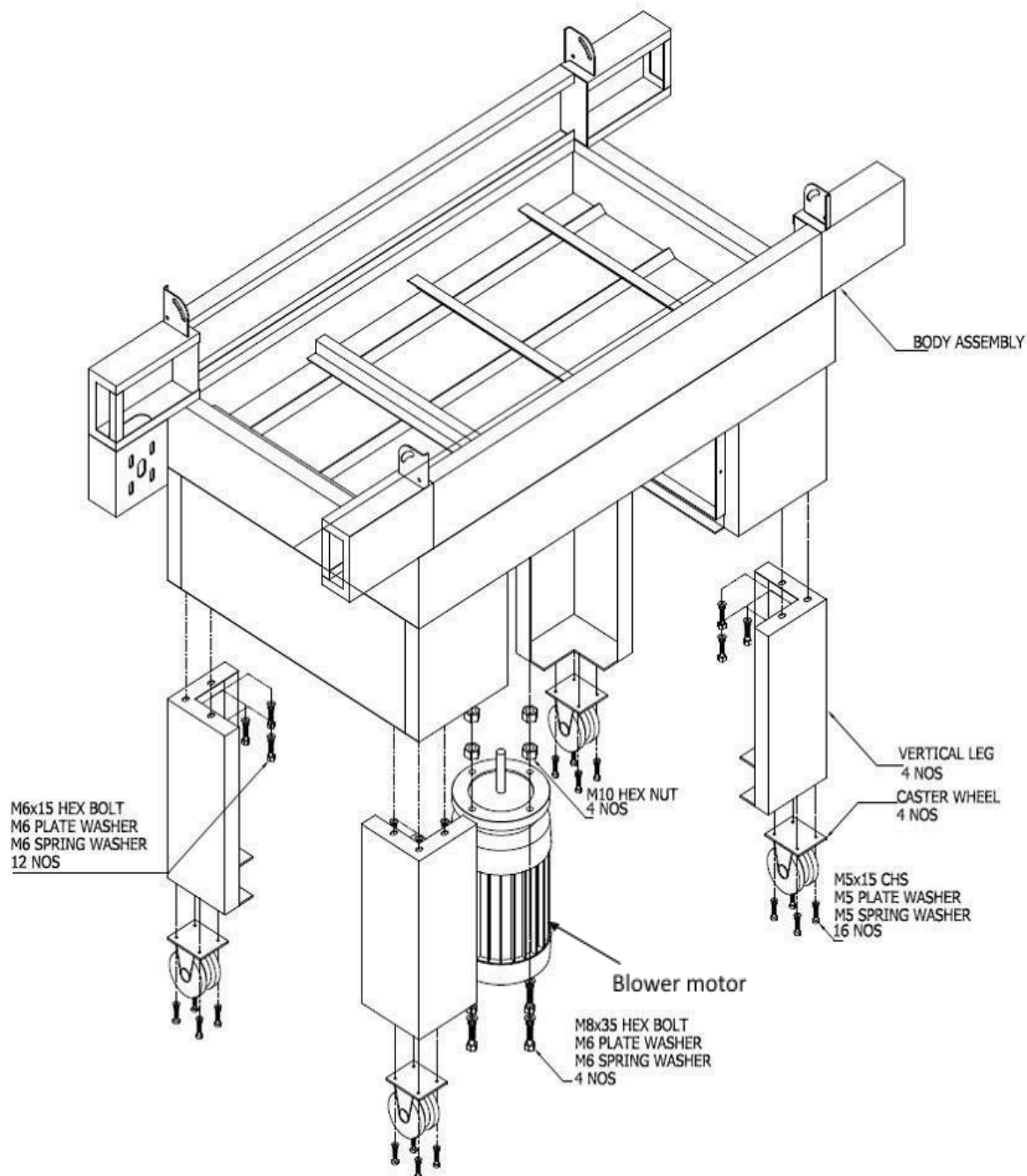
8. LIST OF PARTS











9. INSTALLATION

1. Keep the machine on the ground resting on the Hot chamber.
2. Bolt vertical legs to the chassis with the bolts provided.
3. Before starting the machine please ensure that,
 - (a) The chains are aligned with and rests on the sprockets. The links of the conveyor chain are properly engaged with the teeth of all the sprocket wheels.
 - (b) The conveyor rods are perpendicular to the conveyor chain. If otherwise, move the lagging chain slightly forward to align the conveyor rods perpendicular to both the chains.

10. POWER CONNECTION

The machine is provided with a five-core cable. The connections are to be given as follows:

Phase1	R - Red
Phase2	Y - Yellow
Phase3	B - Blue
Neutral	N - Black
Earth	G - Green/Gray

11. CONTROL PANEL



MCB
Heater Switch
Speed Controller
Temperature Controller

12. STARTING THE MACHINE

To start the machine, connect the machine to the appropriate power supply and switch on the MCB. The MCB is located at the right side of the machine. Then switch ON the heater switch. In the speed controller, set the switch to the "RUN" position. The conveyor speed can be adjusted using the knob. The temperature required can be set on the temperature controller by pressing the set and up/down button simultaneously. When the required

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temperature is reached, the red indication LED on the temperature controller turns off. Now the machine is ready for use.

13. SHUT DOWN/ SWITCHING OFF THE MACHINE

- Turn the Heater switch to OFF position.
- Keep the blower and conveyor running.
- Leave the machine in the above state for 15 minutes to cool down.
- Now the power supply to the machine can be switched OFF.

14. SHRINKING OPERATION

- a. Special plastic films which shrink on application of heat are used for shrink wrapping. The temperature required for shrinking each variety of film varies. This information can be obtained from the film manufacturer. Shrink films commonly available are,
 - ☐ Poly Vinyl Chloride (PVC)
 - ☐ Poly Olefin (POF)
- b. Insert the article in a preformed sleeve or tube of shrinkable film of suitable size. Seal the open ends and make a few holes on the film by pricking it with a pin. The corners of the film may also be sealed and cut off for better appearance. If open ends are desired, the ends of the tube need not be sealed. An L – Sealer can be used to make this easier and for better productivity.
- 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 shrinking is not sufficient, increase the temperature setting or reduce the conveyor speed. If over shrunk, reduce the temperature setting or increase the conveyor speed. By adjusting the temperature and conveyor speed it is possible to get the best result and productivity. Make final adjustments of speed and temperature after the temperature has reasonably stabilized.
- e. If POF or PVC film are used, to avoid conveyor rod marks on the product, adjust the conveyor rod supports so that conveyor rod support will fret the conveyor rods and the rods will rotate.

15. MAINTENANCE



CAUTION : Remove main supply before maintenance



Clean the machine daily after usage.

Remove any plastic leftover on the conveyor rods or sleeves.

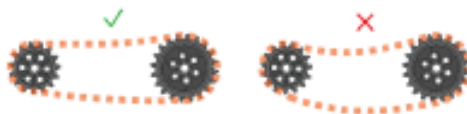


Apply high temperature grease on the chains and bearings.

Also apply grease to other moving parts.

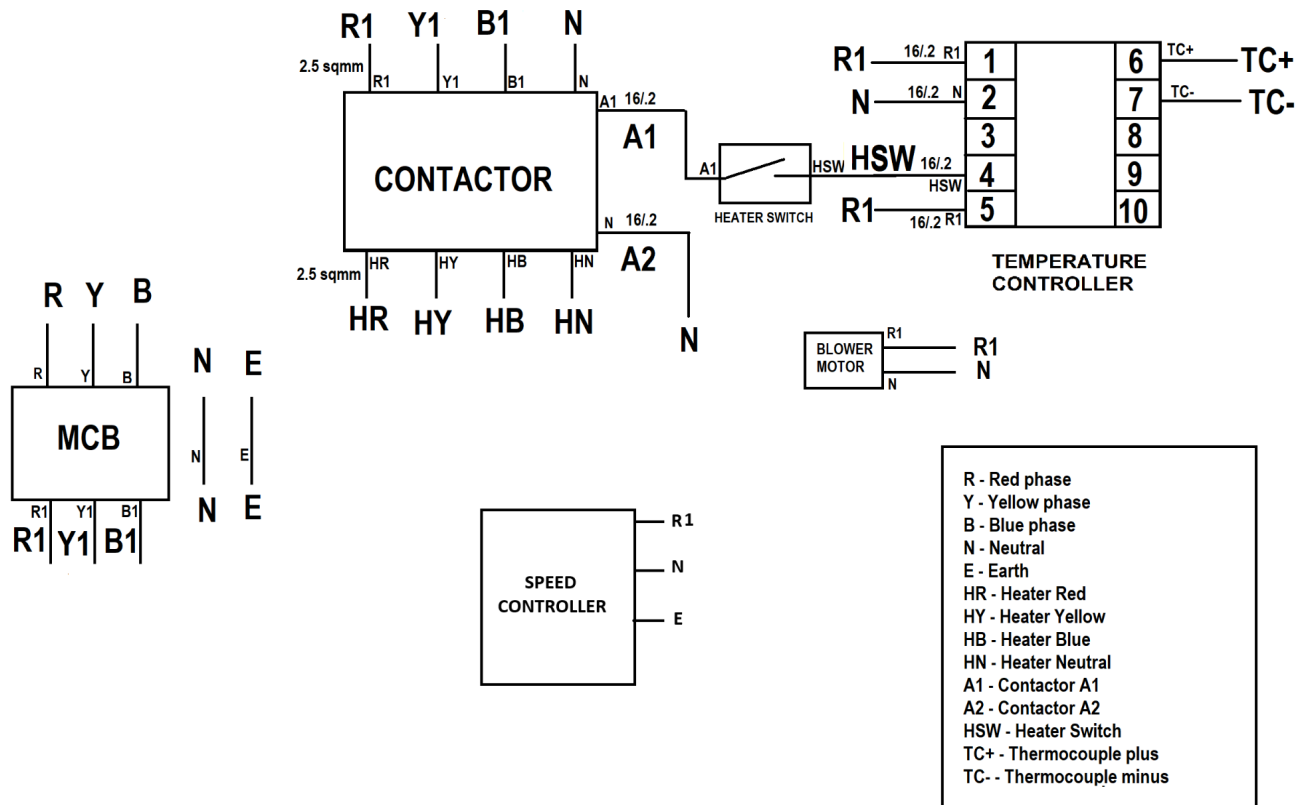


Check the conveyor chain tension. Adjust if required. If they are elongated beyond Adjustable limits remove two links from either side.



Inspect window curtains for damage.

16. ELECTRICAL SCHEMATIC



17. TROUBLESHOOTING

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No.	Complaint	Reasons	Remedy
1	Machine does not work.	1.No AC supply.	1.Restore AC supply.
		2.MCB tripped.	2.Check the wiring for any short circuit. If satisfactory, reset the MCB or replace the MCB.
2	Conveyor is not moving.	1.Conveyor speed changing knob in low position.	1.Increase the conveyor speed.
		2.Conveyor motor stalling.	2.Reduce the load on the conveyor. Tilt the machine with a slope towards the direction of conveyor movement to increase the load carrying capacity of the conveyor.
		3.Defective conveyor motor.	3.Replace the conveyor motor.
		4.Conveyor chain disengaged from the sprockets.	4.Engage the conveyor chain with the sprockets.
		5. Conveyor chain breakage.	5.Replace both chains together to avoid the mismatching of chains.
		6.Defective conveyor drive sprocket.	6.Replace the conveyor drive sprocket.
		7.Defective speed controller	7.Replace it
3	Conveyor chain slips from the guides.	1. Low conveyor tension.	1.Increase tension by adjusting the conveyor tension adjusters.
		2. Misalignment of sprockets and chain rails.	2.Align the sprockets and chain rails.
4	Air blower is not working.	1.No voltage supply at motor terminals.	1.Restore voltage supply at the motor terminals.

		2.Defective blower motor.	2.Replace defective blower motor.
5	Blower motor works, but the air turbulence fan does not rotate freely.	1.Shaft fitting Allen screw loose.	(a) Check the fan shaft assembly.
			(b) Ensure free rotation of the shaft and a little axial play.
			(c) Refit the fan assembly mounting plate.
6	Insufficient shrinking.	1.Heater switch is off.	1.Switch on the heater.
		2.Low temperature setting.	2.Increase the temperature setting.
		3.Temperature is not building up.	3.Refer to complaint no. 7.
7	Temperature is not building up.	1.Loose connection of heaters.	1.Make proper connections.
		2.Heater failure.	2.Replace the defective heater.
		3.Low temperature setting.	3.Increase temperature setting.
		4.Defective contactor to heaters.	4. Replace the contactor.
		5.Defective thermocouple.	5.Replace the thermocouple.
		6. Defective temperature controller.	6.Replace the temperature controller.
8	Excessive shrinking.	1.High temperature setting.	1.Reduce the temperature setting.
		2.Low conveyor speed.	2.Increase the conveyor speed.
		3.Defective thermocouple.	3.Replace the thermocouple.
		4.Defective heater contactor due to contact welding.	4.Replace the contactor.

9	Shrinking is not uniform.	1.Air turbulence fan is not working.	1.Refer to complaint no. 4.
		2.Air turbulence fan is rotating in the wrong direction.	2. Exchange connections to any two power supply phases.
		3.Some heaters are not working.	3.Identify and replace the defective heaters.
10	Abnormal sound and vibration.	1.Air turbulence fan loose.	1.Tighten the nut with which the air turbulence fan is attached to the blower drive shaft.
		2.Fan motor bearing failure.	2.Replace the defective bearing.
		3.Machine is not installed on a level surface.	3.Ensure that the machine is installed on a level surface.
11	Display shows fluctuating temperature values.	1. Defective temperature sensor.	1. Replace the temperature sensor.
		2. Defective temperature controller.	2. Replace the temperature controller.

18. SERVICE LOG

[illegible]