

VASTEX

SCREEN PRINTING EQUIPMENT

EC-II-30 & EC-II-54 **Conveyor Drying System** **Instruction Manual**



Machine Serial # _____

Electrical Drawing # _____ REV__

This manual contains the following documents:

- Safety Instructions
- Introduction & Overview
- Assembly Instructions (Quick Setup Guide)
- Belt Installation and Tracking (Quick Setup Guide)
- Proper Dryer Venting (Doc# 01-15-003)
- Operation and Maintenance
- Trouble shooting
- 01-00-005 Warranty
- 01-00-006 Warranty
- 01-00-015 Terms and Conditions

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Safety Instructions for the VASTEX Conveyor Drying System

The Instruction Manual and Safety Instructions must be read and understood by anyone operating the Vastex Conveyor Drying System.

- The operator should read and understand the instruction manual before operating this equipment. Store instruction manual and safety instructions near equipment for easy access to operators.
- VASTEX Conveyor Drying System is intended for the curing of non-flammable inks on screen printed materials. Do not use for any other purpose unless authorized by Vastex International, Inc. Use of this equipment for any other purpose can be dangerous and may cause damage to this equipment voiding the warranty.
- It is recommended that the area around this equipment be designated as a work area and only authorized employees are allowed in this area.
- Children and pets must be kept clear from the work area.
- Do not place any objects on top of the drying chamber, surfaces are hot.
- Never leave equipment unattended.
- Do not operate conveyor or dryer with any cover or guard removed.
- Operator must be familiar with controls of the dryer and conveyor.
- Never put excessive load on the conveyor belt.
- Before starting production, the operator must check that all covers and guards are in place, no material has been left on the conveyor, and the work area is clear of obstructions.
- Switch on and verify conveyor belt is moving before turning on the heat.
- Allow dryer to cool to 300 degrees before switching off conveyor.
- Always turn off power at the main disconnect at the end of production.
- In case an abnormal symptom occurs, for example excessive vibration, noise, and strong smell or smoke development, turn off the VASTEX Conveyor Curing System and contact a qualified technician.
- Immediately turn off the VASTEX Conveyor Curing System if products become jammed in the drying chamber or conveyor belt.
- Do not remove any cover or guard until power at the main disconnect is switched off and locked out. No unauthorized persons are to be allowed inside the control boxes.
- Turn off and lock out power at the main disconnect before cleaning and maintenance.
- Only qualified technicians should be allowed to make repairs on the VASTEX Conveyor Drying System.

EC-II-30 & EC-II-54 Conveyor Drying System

Introduction:

Thank You for purchasing your printing equipment from Vastex International Inc. Vastex has been designing and building printing equipment since 1960. We have knowledge and experience, and are proud to supply the printing industry with quality equipment at an affordable price. You can be confident your purchase will give you years of trouble free service.

Features:

- 10 Year heater warranty
- Three system control variables
 1. Variable DC belt speed control
 2. Digital PID temperature control
 3. Infrared focusing
- Scrub Air, forced hot air, ideal for delicate materials or water based inks.
- Exclusive patented belt tracking system
- Advanced control and heater diagnostics
- Teflon coated fiberglass belt
- 2" to 7" heater to belt clearance
- Wide conveyor feed and exit openings
- Powered exhaust
- Air-cooled outer cabinet and control box
- (2) 3000 Watt heaters for EC-II-30
- (2) 6000 Watt heaters for EC-II-54
- Expandable in the field! Add chambers and / or belt extensions

Options:

- Additional chambers can be added in 36" increments
- Conveyor extensions in 18" and 36" increments
- Add DC volt meter
- 3 phase electrical hook-up
- Laser temperature gun
- Exhaust Booster

Overview:

Curing Plastisol with infrared

Plastisol ink will fully cure when it reaches a minimum of 320 degrees throughout. The ink must reach this temperature to bond to the garment. The temperature displayed on the controller is the temperature at the face of the heater not the ink on the garment, refer to the section "Setting Proper Temperature". Cure times vary depending on ink color, garment color, thickness of ink, ink manufacturer, and humidity in room.

Curing water based inks with infrared and air

For water based inks the moisture must be forced out before proper cure can be achieved. This makes high wattage heaters, forced hot air and a powerful exhaust necessary components of the drying process.

Always vent dryer exhaust outside of the shop.

How your Vastex Dryer measures temperature

The control system in your dryer is generally characterized as a "closed loop system". The controller is connected to a sensor located under the heater. A shield around the sensor helps to isolate it from rapidly changing environmental conditions. The controller cycles the heater on and off as needed to maintain the set value. The operator selects the set value.

Setting proper temperature

It is important to understand the difference between the temperature at the sensor and the temperature at the garment, or more accurately, in the ink. Because the sensor is directly under the heater, it sees a much higher temperature than what is seen at the substrate. You must set the temperature higher to compensate for this difference.

Two methods to determine ink temperature are heat guns and temperature tapes. Heat guns are easy to use, but measure the temperature at the surface of the ink only. Temperature tapes will measure the internal temperature of the inks. This is the temperature that is most important. Both the controller set point and the distance between the garment and the heater will affect the ink temperature. A good starting point is 725 degrees controller set point, 25 seconds in the heat chamber and 3" distance between the heater and substrate. Make adjustments as needed to achieve full cure.

(Note: You are curing with infrared heat. Infrared, when at high temperature emits a wave length that will heat up the ink faster than the garment. Running the machine at lower temperatures and slower speed will be inefficient and can cause scorching because the garment will lose its natural moisture.)

Quick Setup Guide



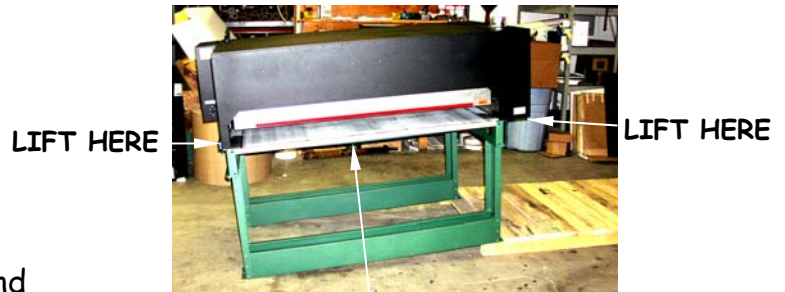
Getting Started:

- Read complete Quick Setup Guide and Safety Instructions within main manual before starting to assemble and operate your Conveyor Drying System.
- See instruction manual for operating tips and trouble shooting.
- If dryer is used at voltages other than 240 volts it will be necessary to run automatic tuning of the controller. See automatic tuning section of instruction manual.

Tools Required:

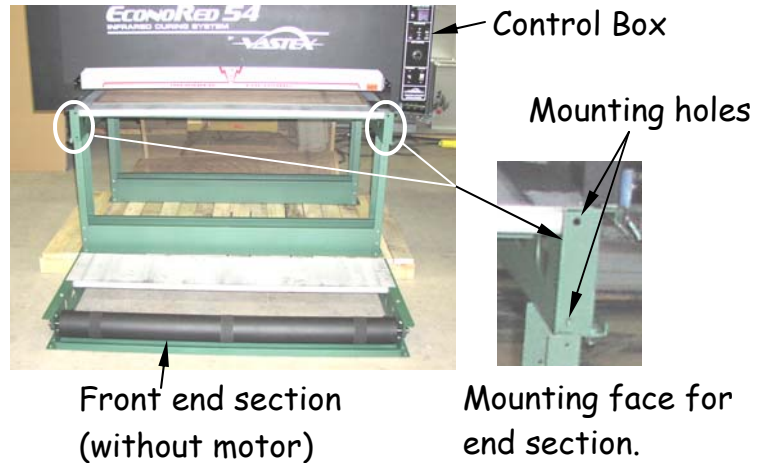
Hammer, pry bar, (2) 9/16" wrenches, 7/16" wrench, 1/8" allen hex wrench (supplied), & utility knife

1. Remove the straps, plastic wrap, and wood frame from the dryer pallet.
2. Remove both conveyor end sections and belt from the pallet and set aside.
3. Carefully slide the dryer and conveyor assembly off the pallet and onto the shop floor. **Lift from ends only Do Not lift from sides.**
4. Position front end section (section without motor) on the floor in the front of the dryer as shown. Locate 3/8 bolts, flat washers, lock washers, and nuts from hardware bag. Two 9/16" wrenches are required. Raise one side and attach with hardware as shown below through the upper mounting hole. Do not tighten at this time. Carefully raise the other side and insert both upper and lower bolts, washers, and nuts. Install remaining bolt on first side and tighten all bolts. Use the same procedure for installing rear end section.



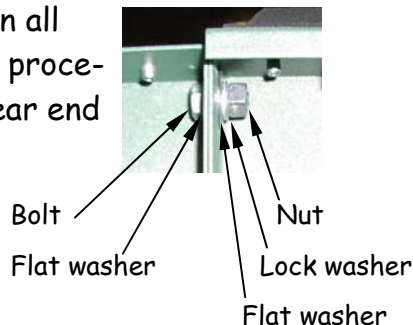
DO NOT LIFT FROM SIDES

Front of dryer shown



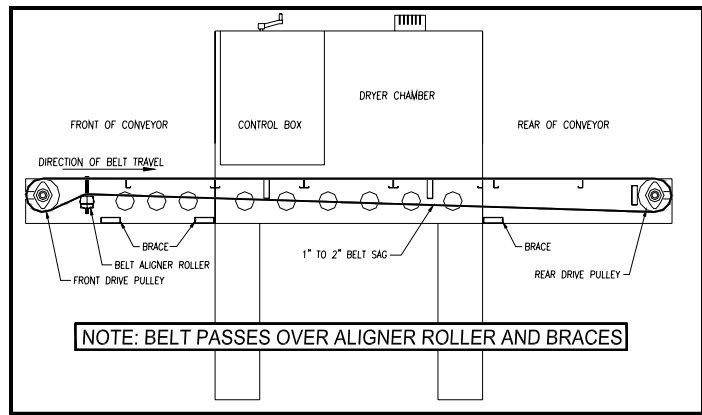
Front end section (without motor)

Mounting face for end section.



Both end sections should now be in place with all bolts fully tightened.

- Install the belt as shown on diagram to the right. Both sides of aligner roller must be fully down to install belt. Thread the belt over the belt aligner pulley and around both end pulleys. With both ends of belt on top and the belt end connectors interlaced insert belt connecting pin.



- Install the crank handle onto the shaft on top of the chamber. Align set screw to flat on shaft and tighten with 1/8" allen wrench. Raise heaters to full up position.
- The 4" exhaust stack should be vented outside. See next page for venting recommendations.
- Have a licensed electrician complete the electrical hook-up and fill out the warranty card. Send it back to us to validate your warranty.
- Plug the wire from the conveyor motor into the rear of the control box.
- Using the adjustor screws raise both sides of the **belt aligner roller** approximately 1".
- Turn on the system switch and then the belt speed control. Check that the belt is moving and running in the center of both pulleys. Belt tracking is done at the front of the conveyor. See belt tracking procedure below.
- If belt is tracking you are now ready to put your dryer into production.

CAUTION!
DO NOT TURN ON HEATERS IF THE BELT IS NOT MOVING. DAMAGE TO BELT WILL OCCURE IF HEATERS ARE ON WITHOUT BELT MOVING.

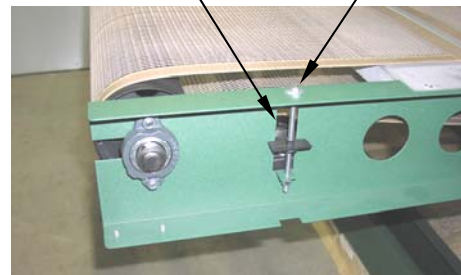
Belt Tracking

(Move in small increments while belt is moving. Do not leave conveyor running unattended.)

- If the belt is slipping, add belt tension by raising equally both sides of aligner roller. 1-2 inches of belt sag at the bottom side is desirable. To raise roller turn adjustor screw clockwise.
- Belt moving to the left**, raise left side of aligner by turning adjustor screw clockwise 1/2 turn at a time.
- Belt moving to the right**, raise right side of aligner by turning adjustor screw clockwise 1/2 turn at a time.
- If belt is tracking off center at the drive roller, slightly loosen bearing bolts, (2) 1/2" wrenches needed. Turn adjustor screw clockwise to move belt toward motor end of pulley and counter clockwise to move belt away from motor end of pulley, retighten all bolts. Re-check belt tracking at front end.

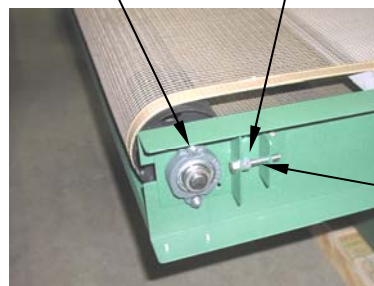
Note: Do not over-tighten belt, 1" to 2" belt sag is desirable.

Belt aligner pulley Adjustor screw



Conveyor Front End

Bearing bolts Drive roller adjustor



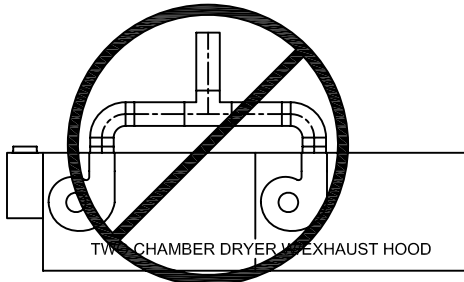
Conveyor Rear End

IMPORTANT READ BEFORE OPERATING DRYER

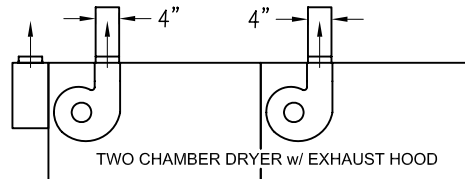
Restricting the dryers exhaust will effect the operation of the dryer. Excessive heat buildup within the chamber may damage the exhaust blower. Proper venting is important.

EC-II SERIES SINGLE & DOUBLE CHAMBER DRYERS

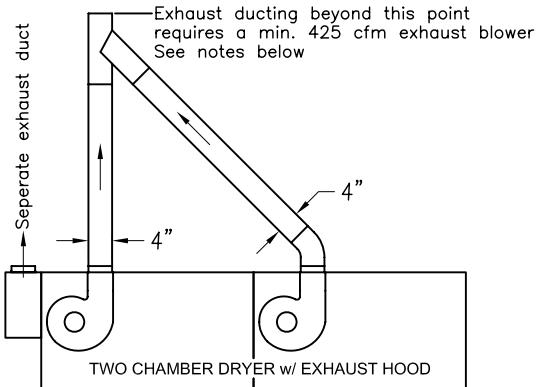
The Exhaust Hood is an option for all Vastex Dryers



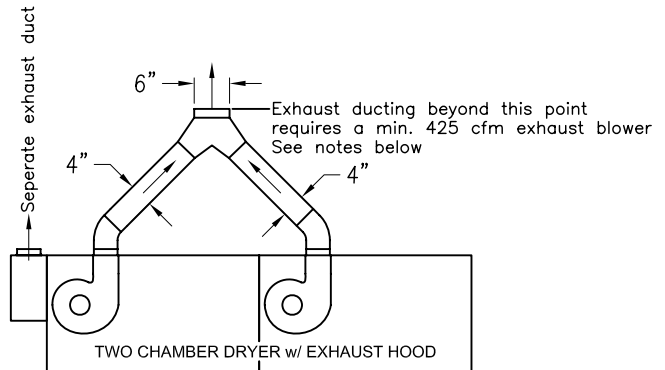
Exhaust blower damage will result
WRONG



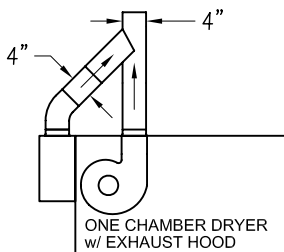
SEPERATE EXHAUST DUCTS
See notes 1 & 2
ACCEPTABLE



45° TEE WYE DUCTING
Exhaust stack blower is required
See notes 1 & 2
ACCEPTABLE

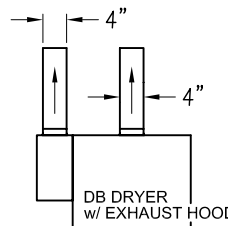


WYE JOINT DUCTING
Exhaust stack blower is required
See notes 1 & 2
PREFERRED

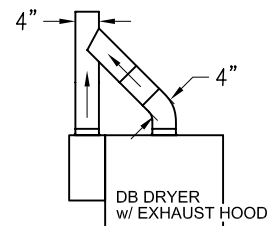


45° TEE WYE DUCTING
See notes 1 & 2
ACCEPTABLE

EC-I & DB SERIES DRYERS



SEPERATE EXHAUST DUCT
See note 1 & 3
ACCEPTABLE



45° TEE WYE DUCTING
See note 1 & 3
PREFERRED

Note:

- 1.) If the exhaust duct length is greater than 6ft. and/or if more than one elbow is used, an exhaust booster is required.
- 2.) EC-II Dyers with exhaust duct lengths greater than 20ft. consult a HVAC installer to determine proper size duct to maintain min. of 425 cfm.
- 3.) DB Dryers with exhaust duct lengths greater than 20ft. consult a HVAC installer to determine proper size duct to maintain min. of 250 cfm.

Operating the Conveyor Drying System:

1. **System Fuse**, two fuses located in the control box protects all electrical controls, fan, and belt motor.
2. **System Switch**, turns on power to the controls. Allow heaters to cool down before turning off system switch or damage to the belt could occur. **(Caution: This does not shut down power to all machine systems. Before maintenance or entry into the machine, shut off power at the main disconnect and install a lockout device.)**
3. **Belt Speed Control** varies the speed of the conveyor belt. Dryers equipped with an optional DC volt meter can use the table below as a reference for setting belt speed. **Sprocket ratio is shown on a label located near the conveyor drive. Use the correct table found below.**

Single Chamber: Motor Sprocket: 12 tooth
3' of heat Pulley Sprocket: 24 tooth

Volts	Time Thru Chamber
8	3m 25s
9	3m
9.5	2m 45s
10	2m 38s
10.5	2m 30s
11	2m 20s
11.5	2m 15s
12	2m 10s
12.5	2m 2s
13	1m 54s
13.5	1m 50s
14	1m 46s
14.5	1m 42s
15	1m 36s
15.5	1m 32s
16	1m 29s
18	1m 17s
20	1m 9s
22	1m 2s
24	56s
26	52s
28	47s
30	44s
32	41s
35	37s
38	33s
40	31s
44	29s
50	25s
60	21s
70	17s
80	15s
100	12s

Double Chamber: Motor Sprocket: 12 tooth
6' of heat Pulley Sprocket: 18 tooth

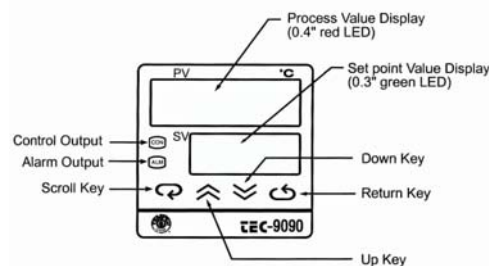
These times will vary with different size sprockets

Volts	Time Thru Chamber
9	4m 55s
9.5	4m 28s
10	4m
11	3m 35s
12	3m 5s
13	2m 54s
14	2m 40s
15	2m 26s
16	2m 15s
18	2m 7s
20	2m
22	1m 35s
24	1m 25s
27	1m 15s
30	1m 5s
35	56s
40	49s
45	43s
50	39s
55	35s
60	31s
65	30s
70	28s
80	24s
90	20s
100	18s
110	17s
120	15s
130	13s

For any machine longer than a double chamber, please use the single chamber chart and multiply "Time Thru Chamber" by the number of chambers your dryer has

4. **Tempco Microprocessor Based Auto Tune PID Controller** is used on this unit. Automat Tuning of controller has been performed at the factory for all 240v machines. Refer to section 4.4.1 for Automatic Tuning. The front of the control has two digital readouts. The top is the "Process Value" (PV), which is the actual temperature at the sensor. The bottom is the "Set Value" (SV), which is the temperature you set the machine to (see page 4 "Setting proper

temperature"). All values are in Fahrenheit degrees. There are four buttons along the bottom of the control unit. The two on either side that are oval shaped with arrows are for setting operating parameters. (*Factory set. Do not attempt to alter without first consulting a VASTEX factory rep.*) The two buttons in the middle, the "up arrow" and the "down arrow," are for adjusting the "Set Value"(SV). A green light (CON) will illuminate when the controller is calling for heat (output on). A red light (ALM) will illuminate when the actual temp is higher by some predetermined amount than the set value. With the power on, push the up arrow and the SV temperature will climb. The longer you hold the button, the faster the SV will climb, it will start climbing by one, then ten, then hundreds. Set the desired temperature and allow approximately 15 minutes for heat up. As the temperature at the sensor approaches the set point, the controller starts to cycle off & on to slow its rise. The first couple of times the controller is used it may overshoot the set point while it's learning the characteristics of the heater. YES, the controller does teach itself how to respond to the heaters. Refer to the trouble shooting section for Controller Error Messages.



5. **Automatic Tuning** has been performed at factory for all 240v machines. Automatic Tuning must be performed by the customer for the following reasons. When equipment is other than 240v (e.g. 208v), replacing a controller, replacing a "J" sensor, and/or new heating elements. Controller set point value must be set between 700 to 750 degrees before beginning auto-tuning.

- Procedure:**
- a.) Press the return key for at least 6 seconds (maximum 16 seconds). This initializes the auto-tune function. (To abort auto-tuning procedure, press and release the return key.)
 - b.) The decimal point in the lower right hand corner of the PV display flashes to indicate that auto-tuning is in progress. Auto-tune is complete when flashing stops.
 - c.) Automatic Tuning may take up to $\frac{1}{2}$ hour. Remember, while the display point flashes, the controller is auto-tuning.

Note: If an AT error (**AtEr**) occurs, the automatic tuning process is aborted due to the system operating in ON-OFF control mode (PB=0). The process will also be aborted if the set point is set too close to the process temperature or if there is insufficient capacity in the system to reach the set point (e.g. inadequate heating power available). Upon completion of auto-tuning the new PID settings are automatically entered into the controller's non-volatile memory.

6. **Manual Mode**, Press and hold both the scroll and return key for 6 seconds to enter manual mode. Display on controller will show H000. Press the up or down arrow to set percentage of time the heater will cycle on and off. (i.e. Setting of 80.0 will cycle heater on 80% of time and off 20%). Controller can remain in this mode while resuming production. Replace malfunctioning "J" Sensor and proceed with Auto Tuning.

7. **Main Power Light** indicates there is power going into the control box. (**Caution do not enter any part of this machine if the power light is on.**)
8. **Control Output Light** cycles on and off at the same time as the controller output light on the controller. It verifies the controller output voltage is going to the relay coil.
9. **Relay Output Light** cycles on and off at the same time as both controller output lights. It indicates that the relay is working properly. If these lights do not flash together the relay may not be functioning correctly and require replacing.
10. **Heater Lights** cycle on and off with the Relay and Control Output Lights. If one or both of these lights are not working, you may have a burned out heater. Contact Vastex for tech. support.
11. **Scrub Air Switch** turns on the forced air blower.
12. **Temperature Switch** turns the heaters on and off. When shutting down the dryer, the Temperature Switch should be switched off 5-10 minutes before switching off the System Switch. When the controller indicates no higher than 300 deg. it is safe to shut off the dryer.
13. **"J" Sensor** is located below against the face of one heater and is covered by a shield.
14. **4" Exhaust Duct** should be vented outside to expel fumes from work area. An exhaust booster must be added if the exhaust duct is greater than 6ft, and/or if more than one elbow is required. (**Note: Restricting the dryers exhaust can affect the operation of the dryer causing excessive heat buildup within the chamber and fumes to fill the chamber and work area. The excessive heat buildup in the chamber may damage the dryers exhaust blower. Proper venting is important.**)
15. **Infrared Heaters** are state of the art made with the finest materials available. They emit medium wave infrared heat, perfect for curing plastisol inks. EC-II-30 dryers use 24-inch wide heaters, 3000 watt @230 volt and EC-II-54 dryers use a 6000-watt heater @230 volt. The heater connections are located in the trough outside of the heater connected with high temperature terminals. This makes repair or replacements a rare but simple operation. There are two heaters per module.

Maintenance:

Before any maintenance or entry into the machine, shut off power at the main disconnect and install a lockout device. Never operate machine with guards or covers removed.)

1. **Electrical connections** can loosen over time due to constant heating and cooling. Retighten all electrical connections every three months.
2. **Lint Buildup** will accumulate over time.
 - The exhaust blower, located on the left side of the machine, and any air paths leading to the blower should be **cleaned every 3 months** depending on usage. To perform the cleaning, remove the two black covers on top of the chamber and the blower box cover, (left side of machine). Remove the lint buildup and any other foreign matter around the air slots and the blower "squirrel" cage.
 - **Every six months** the top covers and the baffle beneath should be removed to clean around the heaters and any area lint accumulated.
3. **Motor and Elevator Chain** can loosen over time. Inspect every three months. Tighten and lubricate when necessary. The motor chain is located at rear of conveyor under a cover. The elevator chain can be accessed by removing the lid and baffle on top of the chamber.

Trouble Shooting:

DO NOT enter any part of this machine until power is turned off and a lockout device is installed.

Vastex E-mail assistance

Purchasing & Product Info:

sales@vastex.com

Electrical Support:

stech@vastex.com

Tech Support, Mechanical Setup, and Operation

techsupport@vastex.com

Screen Printing Issues & Support:

printech@vastex.com

Symptom	Cause	Solution
power light is out, no heat or belt movement	no power to control box	check power source (fuse or breaker)
power light is on, no heat, belt moves	faulty "j" sensor (see controller error codes) faulty relay faulty heater faulty controller	replace "j" sensor replace relay contact service tech contact service tech
temperature fluctuates, heat to high, heat to low	fan or air blowing into chamber loose heater connections faulty relay voltage change	remove air source tighten all connections replace relay auto tune controller (see section 5)
belt stopped or erratic movement	motor not plugged in loose sprocket set screws belt too tight or loose worn motor brushes	check / tighten motor plug tighten set screws check belt tension, 1"-2" belt sag replace brushes

Controller Error Codes

Symptom	Cause (s)	Solution (s)
SbEr	Sensor break error	Replace RTD or sensor Use manual mode operation
LLEr	Process display beyond the low range set point	Re-adjust LL , L value
HLEr	Process display beyond the high range set point	Re-adjust HL , L value
AHEr	Analog hybrid module damage	Replace module. Check for outside source of damage such as transient voltage spikes
AtEr	Incorrect operation of auto tune procedure Prop. Band set to 0	Repeat procedure. Increase Prop. Band to a number larger than 0
oPEr	Manual mode is not allowable for an ON-OFF control system	Increase proportional band
CSEr	Check sum error, values in memory may have changed accidentally	Check and reconfigure the control parameters

Vastex Warranty

Doc#01-00-005B Revised 10/15/07

(1.) Vastex, hereinafter referred to as “seller” warrants only to its original “purchaser”, who holds a copy of the original invoice and is the original end user of the equipment in question, its new equipment against defects in materials or workmanship on a pro-rated basis. Warranty period begins from date of shipment to the buyer and will only apply to customers paid in full. Warranty periods are as follows: one (1) year for E-1000, and V-1000, three (3) years for all other equipment (including F-Flash), ten (10) years for infrared heaters (excluding F-Flash) installed by Vastex in a new dryer, three (3) years for replacement infrared heaters, and one (1) year for replacement parts. Rubber blankets, light bulbs and glass on exposure units are particularly subject to wear while in use. Wear is not covered by this warranty but as stated above only manufacturers defects are covered. All sales made through Vastex dealers must be certified by that dealer before a warranty replacement is issued.

(2.) This warranty is expressly contingent upon the buyer delivering to seller, at the address below, with all transportation charges prepaid, the part or parts claimed to be defective within the above mentioned warranty periods stated in paragraph one. The defective part or parts will be repaired or replaced at the discretion of Vastex International, Inc. If the equipment in question is less than one (1) year old, it will be shipped to the customer at no charge, with an RGA issued by Vastex for the defective part. The defective part must be shipped back to Vastex freight prepaid within 30 days or the account will be billed. If the equipment is more than a year old, the part will be shipped after we receive the defective part. If it's necessary to expedite the movement of parts and to minimize down time to the buyer, the replacement part shall be supplied on a C.O.D. basis. If testing and analysis of said part by the seller or its supplier discloses that said part is defective, the cost of said part will be refunded to the buyer on a prorated basis.

(3.) Except as otherwise provided herein, the equipment is being sold “as-is”. Final determination of the suitability of the equipment for the use contemplated by the buyer, is the sole responsibility of buyer, and seller shall have no responsibility in connection with the suitability.

(4.) All warranties implied by law, including the implied warranties of merchantability and fitness are hereby limited to workmanship and defective parts to a warranty period stated in paragraph one. The express warranty and remedies contained herein and such implied limited warranties are made solely to the sole warranties and remedies and are in lieu of all other warranties, guarantees, agreements, and other liabilities, whether express or implied, and all other remedies for breach of warranty or any other liability of seller, in no event shall seller be liable for consequential damages.

No person, agent, distributor, or service representative is authorized to change, modify or extend the terms hereof in any manner whatsoever.

These terms and conditions are an essential part of the transaction between the parties and constitute the entire agreement between them with respect to the same.

Some states do not allow limitation on how long an implied warranty lasts of the exclusion or limitation of incidental, or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Infrared heaters are the only replacement parts covered for a period of (3) years from date of shipment and contingent to receipt of payment in full.

Electrical components can not be returned once installed unless proven defective.

Please refer to doc. 01-01-006 for warranty implementation help.

Please refer to doc. 01-00-015 for specific terms and conditions of sale and the limited warranty.

Please refer to doc. 01-00-017 for V-2000HD printer warranty.

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VASTEX WARRANTY IMPLEMENTATION SHEET

Please read this document in order to fully understand the warranty.

Doc.# 01-00-006

Your new Vastex equipment is protected against *manufacturers' defects by our warranty, completely explained in doc# 01-00-017 for the V2000-HD series manual printer and in doc# 01-00-005 for all other Vastex manufactured equipment. Please refer to these documents for the **warranty term and specific concerns about the warranty. The following are some important facts and requirements for the proper implementation of the warranty.

1.0 Everything is covered!

2.0 **Warranty Term is defined as: Ship date from VASTEX to the date the item in question is returned to VASTEX for inspection and repair.

3.0 *Manufacturers defects are defined as: Parts determined to be defective in workmanship which will lead up to a premature failure. The determination will be made only by the manufacturer of the item in question.

4.0 To take advantage of the warranty the following steps must be taken:

- 4.1 The equipment must be paid for in full.
- 4.2 The item in question must be shipped to VASTEX for evaluation with all shipping costs incurred by the buyer.
- 4.3 If the item is deemed as a manufacturer's defect it will be repaired or replaced within 2 business days from the time received. The shipping cost back to the customer located in the continental United States will be paid by VASTEX if a warranty item.
- 4.4 **If the item in question must be replaced immediately and is more than a year old, it will have to be purchased at list price and will be shipped COD. A pro-rated credit will be given promptly if the returned item is a valid manufacturer's defect.**
- 4.5 If the equipment was shipped less than a year before the date of the service call and a technician confirms the part needed for repair, the replacement will be shipped before the replacement is shipped back. An RGA will be issued and must accompany the old part to VASTEX within 30 days or the account will be billed.

5.0 Important facts about the condition of shipped equipment:

- 5.1 Dryers are partially assembled with the belts tracked and the machine run at full temperature for a min. of 1 ½ hours.
- 5.2 Printers are partially assembled, inspected, and adjusted for all heads down prior to partial disassembly and packing.
- 5.3 Exposing units are fully assembled and tested with the maximum screen size for vacuum integrity, timer operation and light output.

6.0 This document is in addition to the standard warranty and only helps the customer understand how to take advantage of the warranty. In no way does this document override the standard warranty or the terms and conditions of sale and the limited warranty doc# 01-00-015.

Please see doc# 01-00-015 for specific terms and conditions of sale and the limited warranty

VASTEX
INTERNATIONAL

1032 N. IRVING ST.
ALLENTOWN PA. 18109 USA

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Vastex International, Inc.

TERMS AND CONDITIONS OF SALE AND LIMITED WARRANTY Doc.#01-00-015

1. Buyer's order will constitute an offer in accordance with the terms hereof and such offer, upon acknowledgment of Seller, will constitute the agreement between Buyer and Seller. Buyer's order after such acknowledgment by Seller will not be subject to cancellation, change or reduction in amount, or suspension by Buyer of deliveries, unless prior to such action Buyer has obtained Seller's written consent. Notwithstanding anything to the contrary in Buyer's Purchase Order or other communications, the parties agree to be bound by these Terms and Conditions. Acceptance of the product by the Buyer shall be deemed to constitute unconditional acceptance of these Terms and Conditions.
2. Any of these terms, conditions and provisions of Buyer's order which are inconsistent with Seller's acknowledgment and these Terms and Conditions of Sale shall not be binding on the Seller and shall be considered not applicable to any sale so made. No waiver, alteration or modification of any of the provisions on either side of the document shall be binding upon Seller unless agreed to in writing by Seller.
3. (a) All prices are F.O.B. Seller's Plant and method of delivery and routing shall be at Seller's discretion, unless specifically otherwise stated herein. Notwithstanding any agreement to pay freight, delivery of products purchased hereunder to a common carrier or licensed trucker shall constitute delivery to Buyer and be determinative of the date and time of shipment and all risk of loss or damage in transit shall be borne by Buyer. If the Buyer fails to accept the goods from the common carrier or licensed trucker, the Seller shall be entitled to claim payment from the Buyer. Seller shall arrange for storage, the risk and the cost, including insurance costs, to be borne by the Buyer (and Buyer agrees to pay such amounts upon demand) except if the failure to accept delivery is due to any of the exceptions noted in Paragraph 4.

(b) Terms of payment shall be as stated on invoice.
4. It is understood that deliveries will be made in accordance with Seller's regular production schedule. Every reasonable effort will be made to meet the Buyer's required delivery dates but Seller will not be liable for damages or be deemed to be in default by reason of any failure to deliver or delay in delivery due to any preference, priority, allocation or allotment order issued by the Government, whether Federal, State or local, or causes beyond its control including but not limited to, Acts of God or a public enemy, acts of Government, fires, floods, epidemics, quarantine restrictions, strikes, lockouts, freight embargoes, severe weather, unavailability of materials or shipping space, delays of carriers or suppliers or delays of any subcontractors. Should delay in delivery be caused by any of the circumstances mentioned in this paragraph, such extension of the delivery period shall be granted as is reasonable under the circumstances of the case. Should delay be caused by an event not specifically mentioned in this paragraph, damages will be limited to cancellation of the purchase order without penalty, and refund of any monies deposited or prepaid on the purchase order with no liability for any consequential or incidental damages.
5. Seller reserves the right to increase the prices prior to Seller's acceptance of order and/or after expiration of any price quoted by Seller.
6. Unless otherwise stated in writing, Seller's prices do not include sales, excise, value-added or other taxes. Consequently, in addition to the price specified herein, the amount of any present or future sales, use, excise, value-added or other tax applicable to the manufacture, sale, purchase or use of the products hereunder shall be paid by Buyer, or in lieu thereof, Buyer shall provide Seller with a valid tax exemption certificate acceptable to the taxing authorities.
7. Seller reserves the right, at any time, to revoke any credit extended to Buyer because of Buyer's failure to pay for any products when due or for any other reason deemed good and sufficient by Seller and in such event, all subsequent shipments shall be paid for prior to at delivery at Seller's option.
8. (a) SELLER'S LIABILITY SHALL BE LIMITED TO SELLER'S STATED SELLING PRICE PER UNIT OF ANY DEFECTIVE GOODS AND SHALL IN NO EVENT INCLUDE BUYER'S MANUFACTURING COSTS, LOST PROFITS, GOODWILL, OR ANY OTHER SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, ARISING OUT OF THE AGREEMENT, THIS CONTRACT, THE SALE OF THE PRODUCTS TO THE BUYER OR THE USE OR THE PERFORMANCE OF THE PRODUCTS. Seller may at its discretion repair, replace or give the Buyer credit (pro-rated) for such defective products.

(b) Notwithstanding anything herein to the contrary, Seller shall have no liability for alleged defects with the products which are not specified in written notice from the Buyer to the Seller within thirty-six (36) months from the date of shipment of machines. Seller shall pass to Buyer any warranty received by Seller from the manufacturer of Limited Life Components, which in most cases is 12 to 18 months.

(c) Seller shall have no liability under this Limited Warranty unless Buyer has paid in full for the products. Further, this Limited Warranty is expressly contingent on Buyer's delivery to Seller, all costs prepaid, the defective part(s) within thirty-six (36) months of shipment to Buyer, together with a written statement specifying the alleged defect(s). Any replacement part(s) shall be shipped to Buyer on a C.O.D. basis.

(d) SELLER SPECIFICALLY EXCLUDES ALL WARRANTIES, EXPRESSED, IMPLIED OR OTHERWISE, EXCEPT AS STATED EXPLICITLY IN THESE TERMS AND CONDITIONS OF SALE. SELLER DISCLAIMS THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
9. The remedies herein reserved by Seller shall be cumulative and in addition to any other legal remedies. No waiver of a breach of any portion of this contract shall constitute a waiver of continuing or future breach of such provision or of any other provisions hereof.
10. These Terms and Conditions constitute the entire agreement of the parties. No amendments, changes, revisions or discharges hereof in whole or in part shall have any force or effect unless set forth in writing and signed by the parties hereto. This contract shall not be assignable by Buyer voluntarily by operation of law or otherwise without Seller's written consent.
11. This contract shall be governed and shall be construed according to the domestic laws of the Commonwealth of Pennsylvania.
12. Anything herein to the contrary notwithstanding, any action for alleged breach by Seller of the contract between the parties, including but not limited to any action for breach of the warranties herein set forth, shall be barred unless commenced by Buyer within one (1) year from the date such cause of action accrued.
13. This agreement shall inure to the benefit of and be binding upon the parties hereto, their respective successors and permitted assigns.
14. **All notices required by this contract to be given by either party shall be sent in writing or by facsimile and shall be addressed to the last known address of such other party. Notices shall be deemed to have been received on the fifth business day following deposit in the mail.**