

Year of manufacture: 20_____



VASTEX
SCREEN PRINTING EQUIPMENT
Dri-Vault

Doc. #01-14-011E
Original Instructions

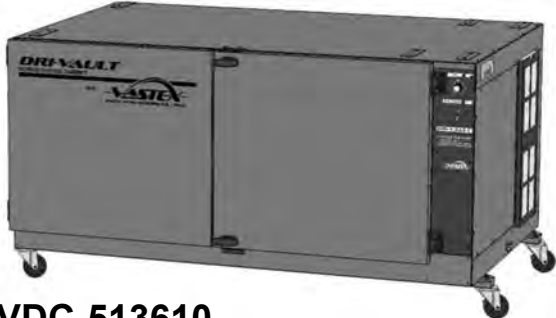
Assembly, Operating, and Maintenance Instructions
Dri-Vault VDC-253610, VDC-253624, VDC-513610
VDC-253610-DHO & VDC513610-DHO



VDC-253624



VDC-253610



VDC-513610

Contents

• Safety and Machine specs	2
• Assembly instructions	3
• Controls	4-5
• Operation, and Maintenance	6
• Troubleshooting	7
• Warranty	8

Page#

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Electrical Drawing #: _____ Rev: _____

Serial Number: VTX Date: ___ / ___ / _____

(Please log your machine's serial number and date of purchase for future reference.)

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

Safety Instructions

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

- 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 Screen Drying Cabinet is intended for the drying of emulsion on screen printing screens. 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.
- Never leave equipment unattended.
- DO NOT operate dry cabinet with any cover or guard removed.
- Operator must be familiar with controls of the dryer.
- Before starting production, the operator must check that all covers and guards are in place, no material has been left in the cabinet, and the exhaust duct is clear of any obstructions.
- Always turn off power at the main disconnect at the end of production.
- 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 Screen Drying Cabinet.
- **Noise and Vibration: This noise level produced by this equipment does not exceed 70 dB(A).**

Machine Specifications

Drying times will vary. Humidity, thickness and type of emulsion used, and the size of screens are factors in Dri-Vault curing time.

	VDC-253610	VDC-513610	VDC-253624
Defect Warranty	3 Year	3Year	3 Year
Maximum # of Screens	10 @ maximum size	(10) @ 51" x 36" / (20) @ 25" x 36"	24 @ maximum size
Maximum Screen Size	25" x 36" x 1.625" (63.5 x 91.4 x 4.12 cm)	(10 screens) @ 51" x 36"	25" x 36" x 1.625" (63.5 x 91.4 x 4.12 cm)
Smallest Screen Width	18" (46 cm)	No minimum size	18" (46 cm)
Blower (Free Air)	200 CFM (5.7 cmm)120v or 290 CFM (8.5cmm) 240volt	290 CFM (8.2 CMM)	350 CFM (9.9 CMM)
Overall Depth x Width x Height	39.5" x 34.75" x 29" (100 x 88 x 74cm)	37.9" x 62.5"x 32.3" (96.3 x 159.1 x 81.9cm)	39.5" x 34.75" x 81" (100 x 88 x 206cm)
Heater Wattage	1,250 Watts 120 Volts or 1,550 Watts 240 Volts	1,550 Watts @ 240 Volts	2 x 1,550 = 3,100 Watts 240 Volts
Electrical Power	120V / 10A / 1 Ph. / 60 HZ / NEMA 5-15P plug or 240V / 6A / 1 Ph. / 50/60 HZ / NEMA 6-15P	240V / 6A / 1 Ph. / NEMA 6-15P plug	240V / 16A / 1 Ph. / 50/60 HZ /NEMA 6-20P plug
Shipping Weight*	367 lbs (166.5 kg)	573 lbs (277 kg)	670 lbs (303 kg)
Shipping Dimensions*	43" x 43" x 48" [109 x 109 x 122 cm]	69" x 43" x 35" (175 x 109 x 89 cm)	43" x 43" x 84" [109 x 109 x 213 cm]

Putting this Equipment into Service —

To put your drying cabinet into use:

- 1.) Follow the assembly instructions on page 4 of this manual.
- 2.) Familiarize yourself with the controls and features of your unit (see page 5 and 6).

Using this Equipment —

To use your drying cabinet, follow the operating and maintenance instructions on page 7.

Assembly

1) Unpack your drying cabinet and remove the (4) lag screws (with a 7/16 socket) holding it down to the skid. Open the doors and remove the Shelves, the Center Tree (Wide Dri-Vault only), and any other items inside.

2) Slide the drying cabinet to the edge of the skid and install the (4) casters or levelers at each corner of the machine. Tighten the nut with a 3/4" wrench or a 3/4" socket.

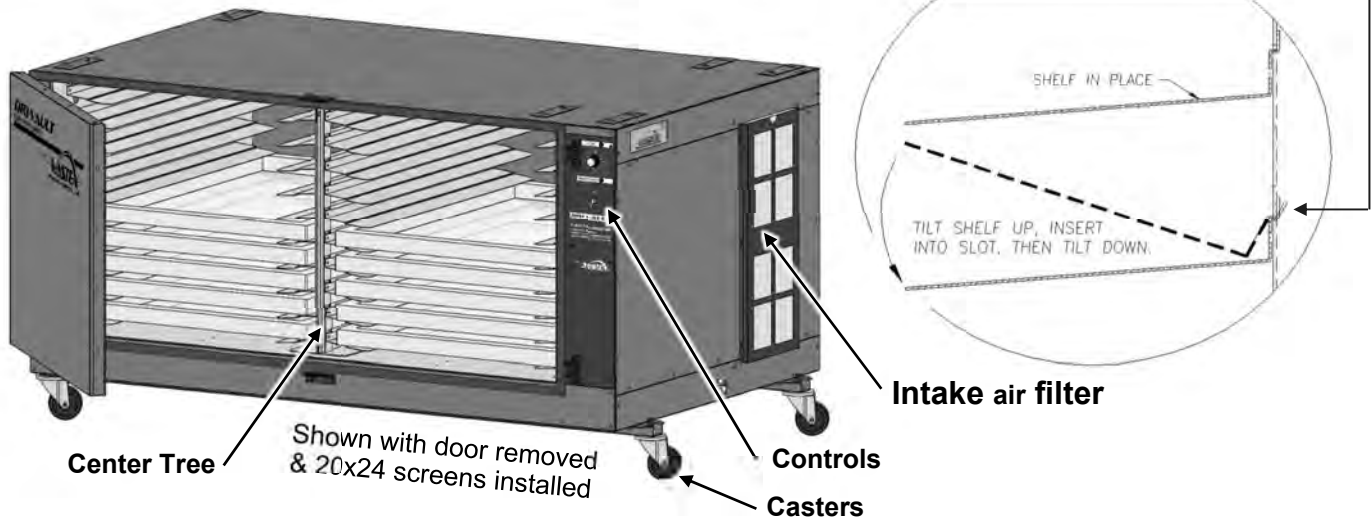
3) Clean the inside thoroughly, first vacuuming then wiping down with a damp lint free cloth. This should be repeated several times after turning on the unit to allow any trapped dust to be removed.

NOTE: Debris left in the chamber will contaminate screens and cause the image area to develop pinholes.

4) Unwrap the shelves and wipe clean with a damp lint free rag. Install the shelves onto the Center Tree (Wide Dri-Vault only), and inside walls of the drying cabinet. Install the shelves as shown.

NOTE: Be sure all 3 tabs of each shelf are properly seated!

VDC-513610 (Wide Dri-Vault) shown below



5) It is recommended that the exhaust be ducted outside to remove fumes and moisture from the work environment. Do not exceed (1) elbow (90 deg.), and/or 8 feet of straight duct. In the event this must be exceeded, a duct fan (booster) must be added to ensure proper airflow. If it is not exhausted to the outside, make sure the elbow provided is used and pointed to the ground to restrict light from entering the cabinet.

— **Power users:** For shops that want to have the fastest dry times with a full cabinet, it is highly recommended that you add a booster fan to the exhaust. This will draw the most amount of air through the cabinet and will decrease dry times. The booster should be sized to match or slightly exceed the machine's rated CFM(CMM).

— **Humidity is a big factor in dry times:** If your region is very humid, you should consider using your Dri-Vault in an air conditioned room. If that is not an option, adding a dehumidifier next to the intake of the Dri-Vault would decrease dry times and increase efficiency.

Controls

Models: VDC-253610 & VDC-513610

Red Pilot Light (Main Power) is located above the breaker/switch, when illuminated, it indicates the switch is in the “on” position, there is power to the unit, and the fan(s) will be on.

Breaker Switch is used to turn the machine on and off. In the event of a short or electrical failure, the switch will trip into the middle position. If the breaker will not reset, or it trips often, contact Vastex tech support or a licensed electrician.

Red Pilot Light (Heater) is located below the temperature controller, when illuminated it indicates the heat is turned on.

Variable Heat Control is used to control the temperature setting. The control has positions from LO to HI. The power to the heater(s) is cycled on and off to vary the temperature. The higher the number on the controller the longer the on cycle and shorter the off cycle time. The “HI” position keeps the power on constantly. Check the temp inside the cabinet with a laser temperature gun.



VDC-253610 & VDC-513610

Models: VDC-253624, VDC-253610-DHO, & VDC-513610-DHO

Red Pilot Light (Main Power) is located above the breaker/switch, when illuminated, it indicates the switch is in the “on” position, there is power to the unit, and the fan(s) will be on.

Breaker Switch is used to turn the machine on and off. In the event of a short or electrical failure, the switch will trip into the middle position. If the breaker will not reset, or it trips often, contact Vastex tech support or a licensed electrician.

Green Pilot Light (Control Output), when illuminated, it indicates the controller is calling for heat.

Red Pilot Light (Heater) is located above the heat on/off switch, when illuminated it indicates the controller is receiving power.

Red Pilot Light (Relay Output), when illuminated it indicates the relay contacts are closed and heater should be receiving power.

Temperature Control: Microprocessor Based PID Controller. Two digital readouts, top digital readout is the “Process Value” (PV), temperature at the sensor, bottom readout is the “Set Value” (SV), the temperature you set. All values are in Fahrenheit degrees standard but can be changed to Celsius. Four buttons along the bottom of the control unit, the two outside oval shaped are for setting operating parameters. (Factory set! Do not attempt to alter without 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 than the set value.



VDC-253624



VDC-253610 DHO & VDC-513610 DHO

Controls Cont.

1) **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 to 100 Degrees Fahrenheit before beginning auto-tuning.

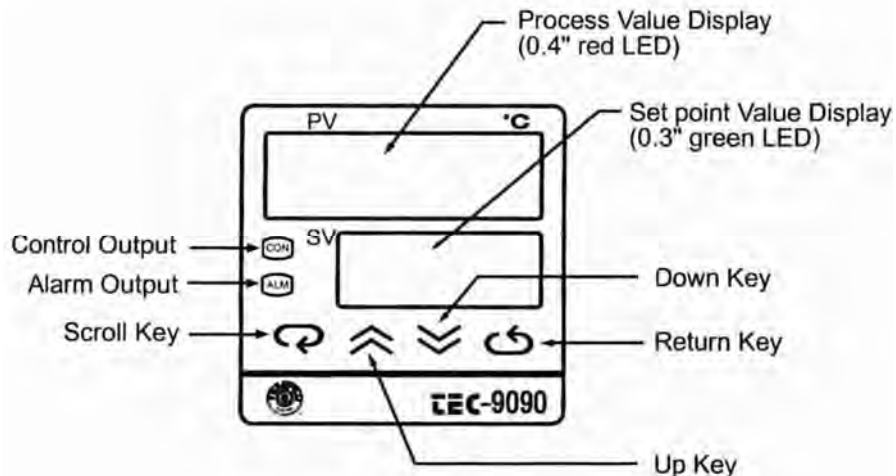
Procedure: a) Press the return key for at least 6 seconds (maximum 16 seconds). This initializes the auto-tune function. (To abort auto-tuning procedure, press and release the return key.)

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 ½ hour. Remember, while the display point flashes, the controller is auto-tuning.

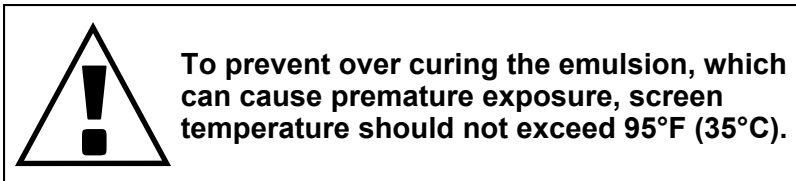
Note: If an AT error (AtEr) occurs, the automatic tuning process is aborted due to the system operating in ON-OFF control mode (PB=0). The process will also be aborted if the set point is set too close to the process temperature or if there is insufficient capacity in the system to reach the set point (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.

2) **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.



Operation

- 1) Before using the dry cabinet, make sure the inside is thoroughly **clean** and **dust free**. Never operate with dirty or missing intake filter.
- 2) Adjust the Center Tree to accommodate the size, and number, of screens you will be drying (Wide Dri-Vault Only). Insert the screens mesh-side (shirt-side) down onto the shelves. Screens should be free of dripping emulsion or water. Close and latch the door.



- 3) Turn on the power switch, set the temperature control, and allow the unit to run until the screens are dry. The unit should be run between 85°F and 95°F (29°C to 35°C) to properly dry the emulsion. It will take approximately 40 minutes to dry a fully loaded cabinet of coated screens at this temperature. Actual drying time will depend on your shop humidity and temperature. On digitally controlled units, set temperature to 90° F (32°C). On dial units, start on #6. Check temperature of a test screen with a laser temperature gun. Make adjustments up or down in order to get between 85°F and 95°F (29°C to 35°C). The cabinet can be operated with the heat and blower or the blower only.



Due to the location of the thermocouple some machines may have had an offset programmed into the temperature controller to more closely read the chamber temperature.

- 4) Once the screens are dry, turn the temperature controller to the off position. Allow the blower to run for 5 minutes after the heating element is shut off. This will cool down the heater to avoid damage to the controls. The screens can be stored in the cabinet until needed.

Maintenance

- 1) Every week, the intake filter should be checked and cleaned as needed. A dirty filter reduces air flow thru the cabinet and will alter the drying process. The filter should be replaced as necessary. Filter material can be ordered through Vastex.
- 2) It is important that the inside of the dry cabinet is keep clean. Periodic cleaning of the inside of the cabinet is recommended.
- 3) Check the exhaust duct for debris and clogging. Any restriction in the exhaust ducting will alter the drying process.

Troubleshooting

Machine controls operate normally, but drying inadequate

	Possible Cause	Solution
Poor airflow	Air inlet filter clogged	Clean / replace filter
Poor airflow	Exhaust clogged or restricted	Remove restriction
Poor airflow	Exhaust line too long, or contains too many right-angle fittings	Reduce length, number of fittings, or install booster fan
High ambient humidity	Humidity in room where unit is located	Move unit to air-conditioned room, or place dehumidifier near unit

No Heat

	Possible Cause	Solution
Main Power Pilot Light out	Main Power switch OFF Machine unplugged Loose connections / internal electrical fault Customer power failed or outlet failed Circuit breaker switch trips to center position	Switch Main Power ON Plug machine into outlet Check connections Check power at main disconnect Internal fault - contact Vastex
Main Power Pilot Light lit: VDC-253610 & VDC-513610 All other models	Temperature control knob set to "OFF" Is "HEATER" switch ON?	Set temperature control knob Set "HEATER" switch ON.
Main Power Pilot Light lit: All Models	Is "HEAT" light ON? "HEAT" light OFF	Possible bad heating element. Possible bad controller/thermostat

Pinholes / flaws in screen

	Possible Cause	Solution
Chamber contaminated	Debris in drying chamber	Wipe inside of chamber with lint-free cloth, then vacuum.

Safety during maintenance and troubleshooting: ensure that your equipment is de-energized and the line cord (if machine has a plug) or branch circuit breaker (if machine is hardwired) is locked out before removing any panels or performing any troubleshooting or maintenance on internal parts. Only a qualified electrician or technician should perform testing on any internal components while equipment is powered. Allow time for heating elements to cool before removing any covers or panels. De-energize equipment before servicing filters or cleaning drying chambers.

Stability during use, transport, assembly, dismantling, testing, foreseeable breakdowns: This equipment is designed and expected to be stable under all foreseeable conditions, so long as the procedures in this manual are followed.

Safety during transport, handling, and storage: This equipment does not present any special safety risks. When moving the equipment, be aware of the following weights:

VDC-253610: 367 lbs (166.5 kg)

VDC-513610: 573 lbs (277 kg)

VDC-253624: 670 lbs (303 kg)

Essential characteristics of tools which may be fitted to this machinery: This equipment is not designed to be used with any additional attachments or tools, other than as specifically listed in this manual.

Vastex Warranty

Doc#01-00-005D Revised 2/20/2018

(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 manufacturer 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, three (3) years for all other complete machines (including F-Flash), fifteen (15) 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. All equipment is thoroughly tested and inspected before packaging. This warranty does not cover minor cosmetic damages that occur during shipment that do not affect the functionality of the equipment.

(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 manufacturer defects in materials or workmanship during the 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 cannot be returned once installed unless proven defective.

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.

Updates: V1000 to 3 year warranty 01/09/12, Heater warranty to 15 years 01/02/2012.

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

- 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.
- 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.
- (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.
- 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.
- 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.
- 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.
- 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.
- (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.
- 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.
- 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.
- This contract shall be governed and shall be construed according to the domestic laws of the Commonwealth of Pennsylvania.
- 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.
- This agreement shall inure to the benefit of and be binding upon the parties hereto, their respective successors and permitted assigns.
- 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.