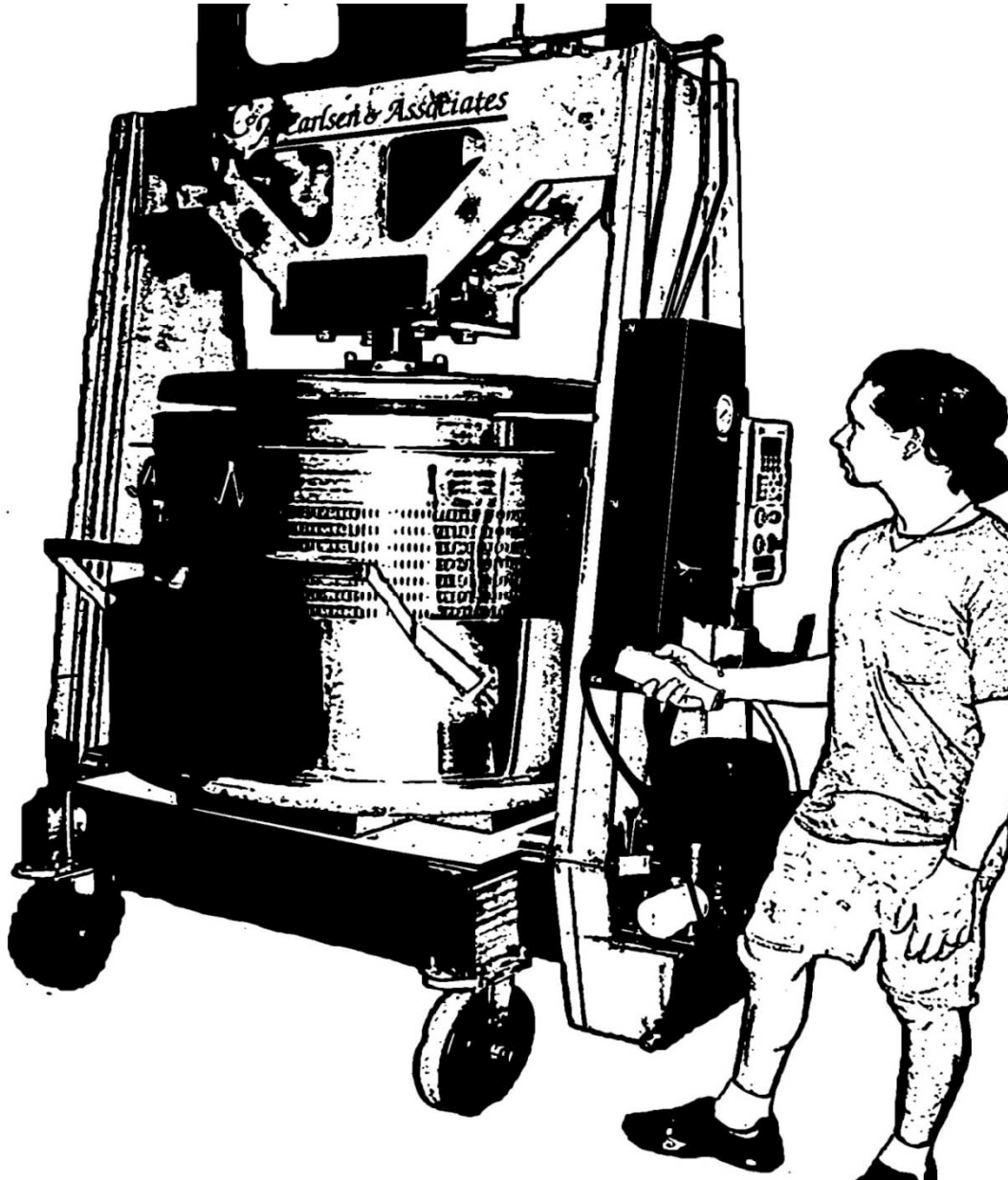


Carlsen & Associates

SALES, MANUFACTURING AND SERVICE

Basket Press Owner's Manual



Date Purchased _____

Serial Number _____

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Warranty

All Carlsen & Associates products are covered by the following two year limited warranty:

Seller warrants to the original user only that its products to be free from defects in material or workmanship for a period of 24 months from delivery date, but only when said products are operated at all times under normal operating conditions and procedures, in accordance with Seller's written instructions and the owner/operator manual supplied with each product. This warranty does not apply to replaceable parts or components normally subject to wear and replacement. Any misuse, improper operation or installation of any product, parts or equipment, as determined by Seller will void any and all warranty claims to the primary component as well as all supporting components. Any repair, modifications, or service performed by someone other than Seller or Seller's authorized technician will void any and all warranty claims to the primary component as well as all supporting components. Specific examples of voided warranty action include but are not limited to:

- **Damage caused by improper transportation or movement of machine.**
- **Damage caused by placing objects other than grapes into the machine.**
- **Connecting an improper power source to the machine that does not match the incoming power requirements as outlined in the owner operator manual.**
- **Placing the machine on a surface that is not level and in an environment that does not remain between 32° F (0° C) and 105° F (38° C). Storing the machine out of doors and exposed to direct weather.**

- **Any other use or condition which is contrary to specifications provided by Seller in product documentation, including the product manual and instructions.**

Unless stated specifically on a formal, official "Performance Warranty Document" signed by an officer or director level employee of the Seller and an employee of the Buyer who is authorized to make such representations, there is no performance warranty on products or warranty on process results. Buyer acknowledges that that Press yields are affected by a number of factors and conditions, and that no specific level of yield can be guaranteed other than in the Performance Warranty Document, if applicable.

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Buyer shall give immediate notice in writing to Seller if products or components thereof or performance (where applicable) appear defective, and shall provide Seller with reasonable opportunity to make inspections, tests and repairs using the most efficient and cost effective methods available for such products or components. If Seller is not responsible under the terms of this document and/or any formal performance warranty, Buyer shall pay Seller the costs and expenses of such inspection, tests and repairs.

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REPAIRS OR ALTERATIONS MADE BY BUYER WITHOUT SELLER'S WRITTEN CONSENT OR APPROVAL. IN LIEU OF REPLACING OR REPAIRING THE PRODUCTS, SELLER MAY, AT ITS SOLE OPTION, RETURN TO BUYER THE PURCHASE PRICE FOR THE PRODUCTS.

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Goods may not be returned to Seller without Seller's written permission. Seller will provide Buyer with a "Return Material Authorization" number to use for returned goods. All returns shall have freight and related costs prepaid by Buyer from point of origin.

Seller is not responsible for meeting state and local codes or ordinances, or other special codes not specifically stated in writing on the purchase document or contract.

TECHNICAL ADVICE -Seller may, at Buyer's request, furnish technical assistance, advice and information with respect to the products supplied under this contract, if and to the extent

that such advice, assistance and information is conveniently available, Seller has no formal obligation to provide such information, which is provided without charge at the Buyer's risk, and which is provided subject to the limited warranty.

Safety

Warning: This machine is powered by 3-phase high voltage electrical current. Have only qualified electricians make electrical connections. Always match incoming voltage to the voltage listed on the electrical box.

Warning: Do not run over the power cord with a forklift. Place cord in an area which does not have foot or vehicle traffic.

Warning: Never put hands or fingers under the press platen or carriage rollers for any reason.

Warning: When running the machine in “Auto” mode keep clear of press platen as it will move automatically and without warning.

Always use press on a level surface.

Initial Setup

- 1) Remove all packing material and padding that was used to protect the machine during shipping.**
- 2) Confirm voltage for which the machine was prepared to accept. The front panel of the electrical box has a decal which will read either 230 or 460 volt. Note: The machine was wired for the specific voltage required by the end user. While it is a relatively easy matter to change voltage, detailed instructions are beyond the scope of this manual and in any case should only be performed by a qualified electrician. Should the need to change voltage arise call for further instruction.**
- 3) Attach the correct cord cap (plug) to the power cord. Verify the plug configuration matches the voltage you're wiring the machine for. Turn the "Auto/Manual" switch to "Manual" on the front panel. Plug the machine into its power source. Press the "Start" button on the panel door. Verify the rotation of the motor, which should be clockwise as you look directly downward into the rear (fan end, which is up) of the motor. Swap any two of the three (hot) wire legs in the cord cap to make motor turn in the right direction. Note: The green wire always stays connected to the ground spade on the plug. Observe there is also a small yellow arrow sticker on the rear of the motor which also indicates proper direction. Note: When the motor is turning in the proper direction it's**

fairly loud; If it's a quiet hum and the rams don't work, the motor is turning the wrong way.

- 4) Confirm the main ram and side rams operate by pressing the pendant "Up/Down" button for a few seconds each way, and moving the lift ram lever up and down for a few seconds.**
- 5) Raise the platen to its highest position and shuttle the carriage into its lock point away from the basket/press pan assembly. Remove the spacer block from inside the basket that was used for shipping. Remove the large hairpin and washer which holds the platen wiper in place for shipping and remove the platen wiper. The drain plate remains inside the press pan. Replace washer and hairpin.**
- 6) Lift up the basket/press pan assembly and remove the fiberboard sheet used to protect the deck underneath for shipping.**

The press is now ready for use.

General Overview of Operation

This press utilizes a combination of manual and automatic operations to achieve the objective of extracting very high quality juice from red wine pomace. It's possible to operate the press manually and without use of the automatic feature, but the automatic feature permits the press operator much more freedom during the pressing cycle and is therefore recommended in almost all circumstances.

Here is the general overview of steps that must be performed in sequence to complete a press cycle:

- 1) Load pomace into basket that's been placed inside its press pan. Place platen wiper onto pomace.**
- 2) Roll the upper frame over basket and press the pomace using either manual or automatic methods.**
- 3) Lift basket off of pressed pomace using side lift rams, revealing a cake of relatively dry skins. Retract platen.**
- 4) Roll upper frame away from basket. Remove press pan using a forklift with bin-dumping attachment and dump cake. Rinse out debris from press pan with water.**
- 5) Return press pan to press. Roll upper frame back over press pan. Lower basket back into press pan. Roll upper frame away from basket once more.**

Detailed Operation:

1) Fill the basket that's been place inside its press pan with pomace. Be sure you've attached the vinyl splash guard onto the hooks on the basket and be sure you've attached a valve to the 2" Triclover drain outlet on the press pan. There are several ways to fill the basket with pomace, but the easiest way is to use the supplied hand-carry infeed hopper placed onto the basket opening. (See Figure 7). Use a forklift with bin dumper attachment to dump the pomace from your bin into the basket. Most users find this is easiest to accomplish if the basket/press pan assembly is placed on the machine for filling. To do this be sure that the upper frame is completely rolled opposite from where the basket/press pan assembly will be placed and the locating pin is locked into place. Position the basket/press pan assembly over the locating biscuit and lower slowly. The pan will self align if you are close to being directly over the biscuit, but for the first few placements have a helper guide your movements. It's a good idea to mark the location of the press pan with chalk or tape for easy alignment. See Figure 8. Note: Be sure your drain outlet is facing into the sump. You can fill the basket as full as to within an inch of the top or as empty as 12" from the bottom. Place the platen wiper on top of the pomace.

- 2) Roll the upper frame back over the basket/press pan assembly and observe that the locating pin locks into place.**
- 3) At this point you get to decide if you want to run the press cycle automatically as recommended or manually. If you choose manual pressing, simply lower the press platen down onto the pomace using the down button on the pendant. Be sure you've opened the Triclover outlet on the press pan and have attached a hose to the sump outlet. As the platen makes contact with the pomace you will notice that the upper frame will come off its track rollers and the two frames will make firm contact. See Figure 7. Take the pressure as read on the gauge to 1000psi. See Figure 5. From here forward simply add more pressure over the period of a half hour or so, finishing with pressure of about 3000psi as this is equivalent to about 5 bar.**

For automatic operation, lower the platen onto the pomace the same as described above. Switch the "Hand/Auto" switch to "Auto". The programmable logic control (PLC) display will show:

"F1-Automatic"

"F2- Programming"

See Figure 4. On the keypad press the F1 button once. The screen will display a program number that defaults to "0". Press "1" to get to the press program you will run. Note: There is only one completed

program loaded in the PLC memory and it is program #1. Press the “Enter” (green) button. Press F1 again and the screen will display the start of the program and immediately begin level 1. The main ram will automatically begin moving downward so be sure hands are clear. The program has 12 levels total, but the last 2 are not used, and the PLC simply cycles right through these last two levels to finish.

The press program is this ladder:

Level	Bar	Holding Time	Cycles
1	.6	.1 minute	10
2	1.0	1 minute	1
3	1.5	1 minute	1
4	2.0	1 minute	1
5	2.5	1 minute	1
6	3.0	1 minute	1
7	3.5	1 minute	1
8	4.0	1 minute	1
9	4.5	1 minute	1
10	5.0	1 minute	1

As you can see the total press cycle is just under 11 minutes.

Once the press cycle is complete the yellow indicator light on the front of the electrical panel will come on indicating the press cycle is complete. Toggle the “Hand/Auto” switch to “Hand”.

Note: The PLC memory contains 11 blank programs that the user may develop to customize the performance of the press. Refer to the PLC manual for further explanation.

The next steps are the same no matter if you manually pressed your pomace or used the automatic function. Lower the side rams down and engage the lift rings into the hooks on the basket. See Figure 9. Lift off basket from cake of pressed out grape skins using the side rams lift lever on control panel. See Figure 1. Be sure to retract the rams to the very top of their stroke. Manually raise the platen using the “up” button on the pendant until fully raised. Depress the pin lever to disengage pin from its locating slot. Roll the upper frame away from press pan until it engages locating slot on opposite end of lower frame. Remove press pan from lower frame with a bin dumper equipped forklift and dump contents in a suitable receptacle. Rinse the press pan to remove any extra debris. Return the press pan to lower frame and roll the upper frame back over the press pan. Lower the basket into pan. Disengage lift rings and retract side rams to fully raised position. Retract platen to fully

raised position. Now you are ready to begin once more at Step 1 to repeat this process.

Service and Care

With just a few exceptions this basket press is virtually maintenance free. Service intervals will vary dependent upon amount of use and storage conditions.

Pre-Season Check:

- 1) Check the press for any insect nests.**
- 2) Check the press for any hydraulic fluid leaks.**
- 3) Check the Neoprene hydraulic lines for cracking or damage.**
- 4) Check the hydraulic fluid level. See Figure 3.**
- 5) Clean the machine.**
- 6) Verify the PLC program by running it through its cycle.**

End-Season Storage Preparation:

- 1) Clean the machine. It's okay to pressure wash the press, but take care to cover the motor and electrical control box with plastic sheeting or tarp before you start. Avoid blasting water into these items.**
- 2) Open the control panel and place a bag of desiccant inside to absorb moisture.**
- 3) At the ends of both the side rams and main ram a few inches of rod will remain out of the cylinder. Put a light coating of food grade grease on this**

exposed area. The rods are hard chrome plated and will resist corrosion, but the grease will insure against its formation. Be aware the hydraulic lines should not be used as an attachment point for rope or bungies.

- 4) Cover the press with a tarp or other covering to block direct exposure to the elements.**

Long Term Maintenance:

- 1) Replace the hydraulic fluid filter every two years. See Figure 3. Note that there is a small gauge that indicates the degree to which the Filter is saturated. If it becomes saturated before the 2 year mark, change it earlier.**
- 2) Replace the hydraulic fluid every 5 years. Use only the fluid listed in the specifications.**
- 3) Check the Neoprene hydraulic lines for wear, checking, or cracking carefully. Service life is typically five to ten years, but life will be shortened if the press is left outside uncovered in the weather or stored inside near wine storage areas.**

Component Identification

Figure 1: Major Components

Figure 2: Control Panel

Figure 3: Hydraulic Fluid Filter and Saturation Gauge

Figure 4: PLC

Figure 5: Hydraulic Fluid Pressure Gauge

Figure 6: Hand Carry Infeed Hopper

Figure 7: Track Rollers

Figure 8: Marking Press Pan Location

Figure 8: Lift Ring

Major Components

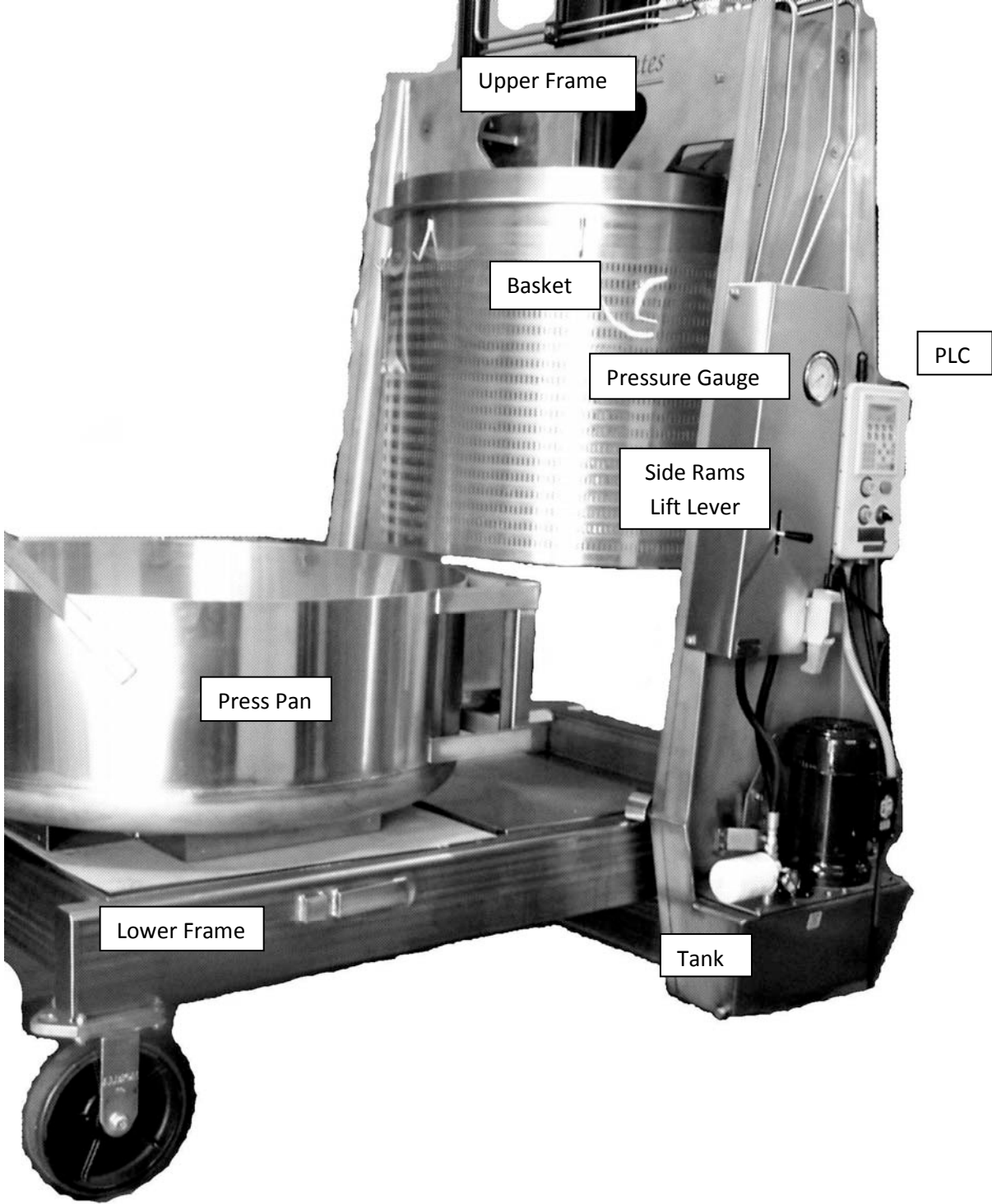


Figure 1

Control Panel



Figure 2

Hydraulic Fluid Saturation Gauge

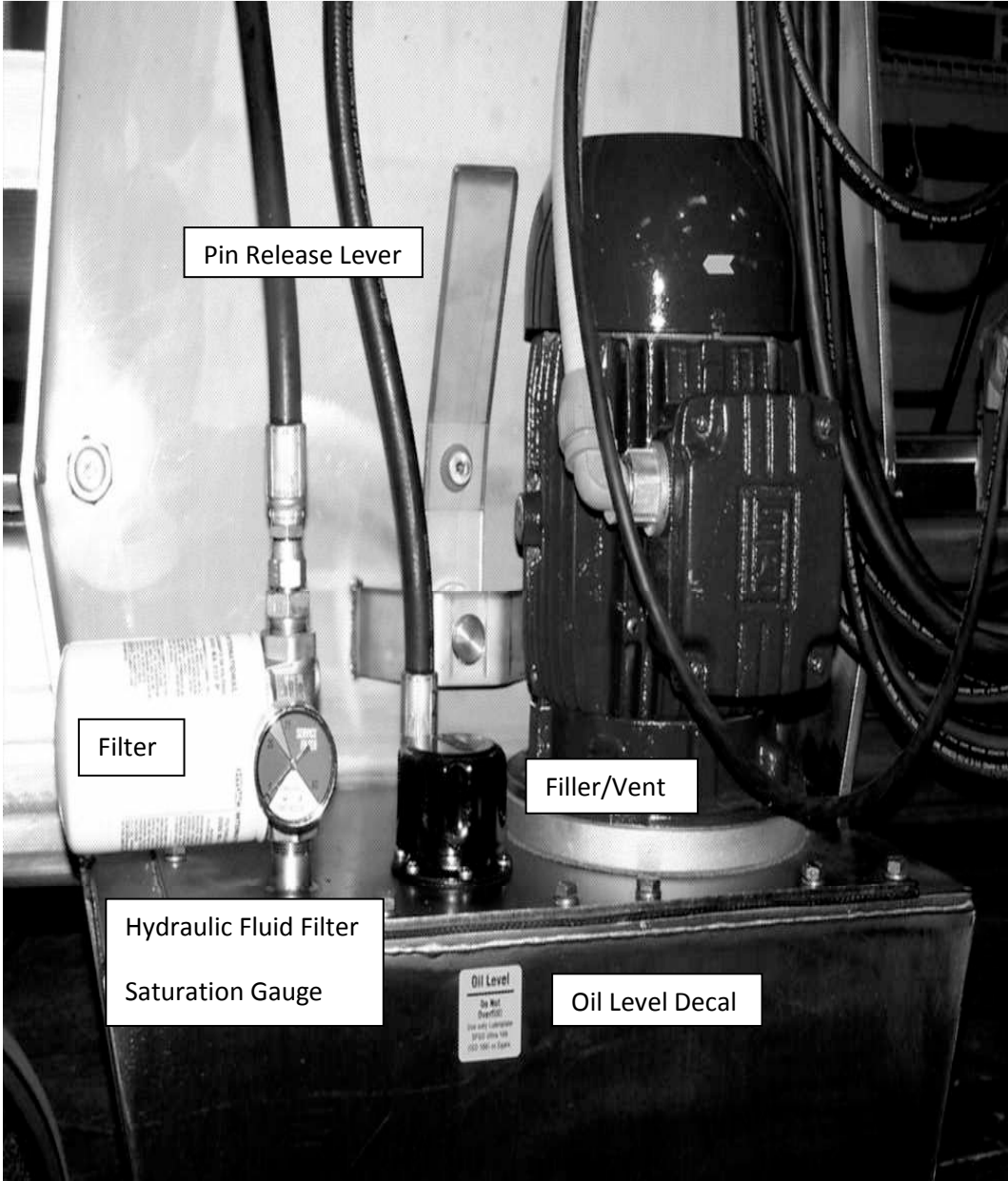


Figure 3

PLC



Figure 4

Hydraulic Fluid Pressure Gauge



Figure 5

Infeed Hopper



Figure 6

Track Rollers

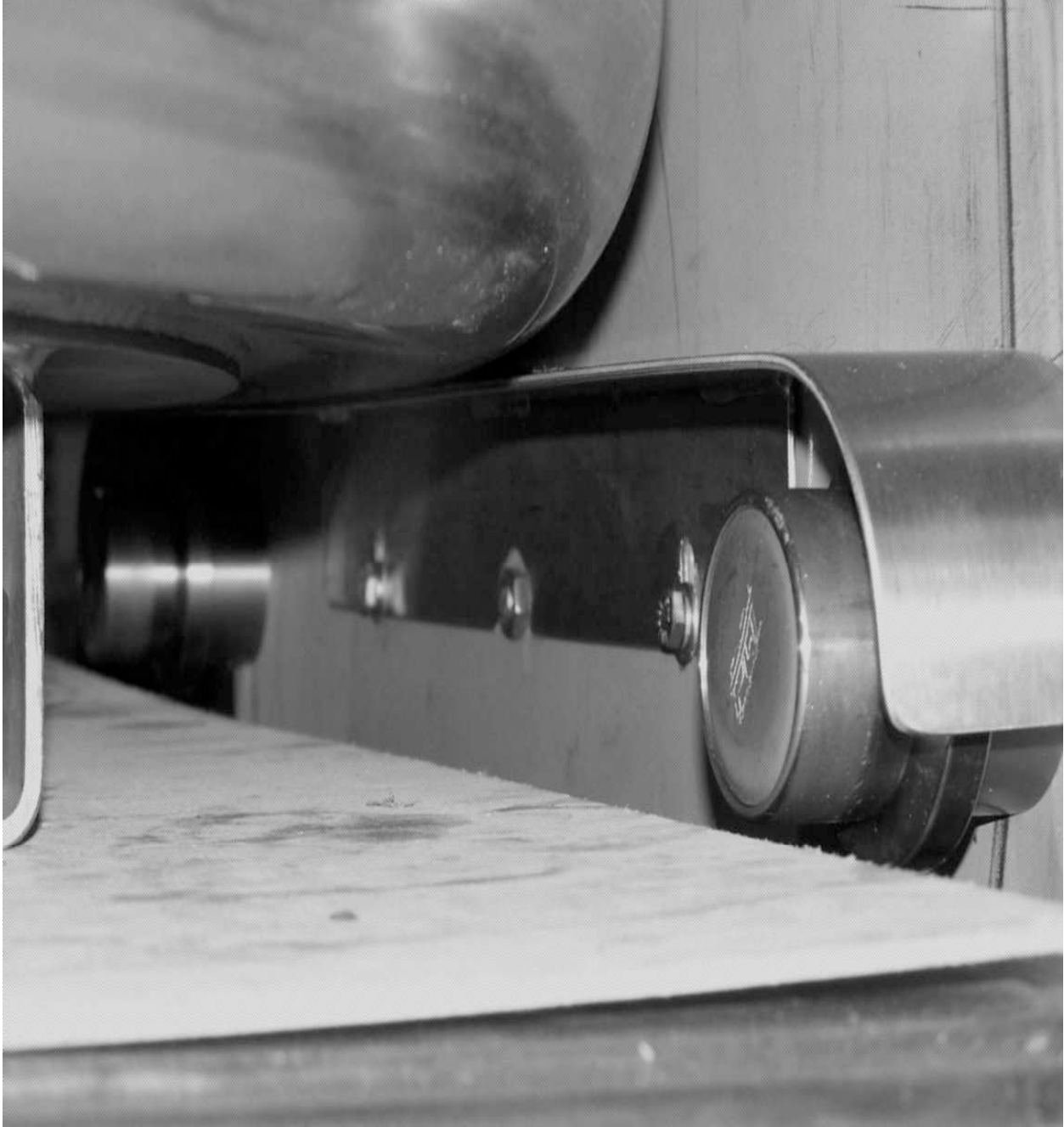


Figure 7

Marking Press Pan Location



Figure 8

Lift Ring



Figure 9

Specifications

- **Capacity: 8 HL per Hour.**
- **Full Extension or Retraction of Main Ram: 55 seconds.**
- **5 Hp WEG Electric Motor, 3ph 230/460V 1725RPM – 00518EP3ER184TC**
- **20 gallons Lubriplate SFGO Ultra 100 Synthetic L0983-062**
- **Delta 2 Stage Hydraulic Fluid Pump Model L24-2**
- **Pressure Transducer- Viatran 248BCGDMZU5**
- **Siemens S7-200 PLC Module**
- **Siemens OP-7 Operator Panel**
- **Contactors- Telemecanique LC1D25G7**
- **Overload- Telemecanique 230V LRD21, 460V LRD14**
- **Transformer- Micron B100MBT713XK**

