

Lockout-Tagout Posted Procedure

ID#: Press 102
Revised: 10/24/2023
Revised by: Derek Smith

Facility: BATTLE CREEK
Description: PCMC Pro Vision

Location:
Building #4

59

Lockout Points

Lockout Application Process

- 1) Notify affected personnel.
- 2) Properly shut down machine.
- 3) Isolate all energy sources.
- 4) Apply lockout devices, locks and tags.
- 5) Verify total de-energization of all sources. (**LOCK, TAG TRY**).

Lockout Steps

Step #	Action	Info	Verification
1) Electrical Main Disconnect E-1	The E-1 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to restart control panel. The Panel should not respond.
2) Electrical Secondary Disconnect E-2	The E-2 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to operate the Dryer Exhaust. The Dryer Exhaust should not respond.
3) Electrical Secondary Disconnect E-3	The E-3 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to operate Color Supply. The Color Supply should not respond.

4) Electrical Secondary Disconnect

E-4

The E-4 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.



Attempt to operate the Tunnel Supply. The Tunnel Supply should not respond.

5) Electrical Secondary Disconnect

E-5

The E-5 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.



Attempt to operate the Color Combustion. The Color Combustion should not respond.

6) Electrical Secondary Disconnect

E-6

The E-6 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.



Attempt to operate the Tunnel Combustion. The Mokon units should not respond.

7) Electrical Secondary Disconnect

E-7

The E-7 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.



Attempt to operate the Press Drive. The Press Drive should not respond.

8) Electrical Secondary Disconnect

E-8

The E-8 Breaker is located inside the elevated control room on the backside of the CI drum. Turn Breaker to the off position and lock out. Use a Circuit breaker lockout device.



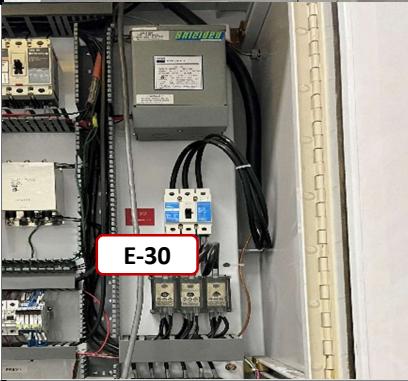
Attempt to operate the Machine Drive. The Machine Drive should not respond.

9) Electrical Secondary Disconnect E-9	<p>The E-9 Breaker is located inside the elevated control room on the backside of the CI drum. Turn Breaker to the off position and lock out. Use a Circuit breaker lockout device.</p>		<p>Attempt to operate the Unwind power. The Unwind power should not respond.</p>
10) Electrical Secondary Disconnect E-10	<p>The E-10 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the Rewind Power. The Rewind Power should not respond.</p>
11) Electrical Secondary Disconnect E-11	<p>The E-11 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the Wash Up. The Wash Up should not respond.</p>
12) Electrical Secondary Disconnect E-12	<p>The E-12 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the Control Power Transformer. The Control Power Transformer should not respond.</p>
13) Electrical Secondary Disconnect E-13	<p>The E-13 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the Sunday Drive. The Sunday Drive should not respond.</p>

14) Electrical Secondary Disconnect E-14	The E-14 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		E-14 Attempt to operate the Unwind2 Power. The Unwind2 Power should not respond.
15) Electrical Secondary Disconnect E-15	The E-15 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		E-15 Attempt to operate the Applicator Drive. The Applicator Drive should not respond.
16) Electrical Secondary Disconnect E-16	The E-16 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		E-16 Attempt to operate the Laminator Drive. The Laminator Drive should not respond.
17) Electrical Secondary Disconnect E-17	The E-17 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		E-17 Attempt to operate the Coater Drives P/S. The Coater Drives P/S should not respond.
18) Electrical Secondary Disconnect E-18	The E-18 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		E-18 Attempt to operate the Laminator Water Heater. The Laminator Water Heater should not respond.

19) Electrical Secondary Disconnect E-19	The E-19 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to operate the Metering Water Heater. The Metering Water Heater should not respond.
20) Electrical Secondary Disconnect E-20	The E-20 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to operate the Transfer/Applicator Water Heater. The Transfer/Applicator Water Heater should not respond.
21) Electrical Secondary Disconnect E-21	The E-21 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to operate the Enclosure Blower. The Enclosure Blower should not respond.
22) Electrical Secondary Disconnect E-22	The E-22 Disconnect is located inside the elevated control room on the backside of the CI drum. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to operate the Laminator Control Power. The Laminator Control Power should not respond.
23) Electrical Secondary Disconnect E-23	The E-23 Disconnect is located on the wall behind the press. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.		Attempt to operate the Chiller for Rollers. The Chiller for Rollers should not respond.

<p>24) Electrical Secondary Disconnect</p> <p>E-24</p>	<p>The E-24 Disconnect is located in front of the CI drum and underneath the Sterlco unit. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the Dryer Exhaust. The Dryer Exhaust should not respond.</p>
<p>25) Electrical Secondary Disconnect</p> <p>E-25</p>	<p>The E-25 Plug is located against the wall near operator side of the CI drum. Unplug and apply lock out. Use an electrical plug lockout device.</p>		<p>Attempt to operate the Annilox Hoist. The Annilox Hoist should not respond.</p>
<p>26) Electrical Secondary Disconnect</p> <p>E-26</p>	<p>The E-26 Disconnect is located on the cart, on the operator side of the press. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the South Cart Print Unwind. The South Cart Print Unwind should not respond.</p>
<p>27) Electrical Secondary Disconnect</p> <p>E-27</p>	<p>The E-27 Disconnect is located on the cart, on the operator side of the press. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the Middle Cart Rewind. The Middle Cart Rewind should not respond.</p>
<p>28) Electrical Secondary Disconnect</p> <p>E-28</p>	<p>The E-28 Disconnect is located on the cart, on the operator side of the press. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the North Cart Laminator. The North Cart Laminator should not respond.</p>

29) Electrical Secondary Disconnect E-29	<p>The E-29 Breaker is located inside the breaker panel labeled 208Y/120 VAC 3PH 4W. The panel is on the wall at the operator side of the press. Turn Breakers (#32,#34 & #36) to the off position and lock out.</p>		<p>Attempt to operate the Roll Hoist. The Roll Hoist should not respond.</p>
30) Electrical Secondary Disconnect E-30	<p>The E-30 Breaker is located on the backside of the press at the laminator unwind. Turn Breaker to the off position and lock out.</p>		<p>Attempt to operate the Laminator Unwind. The Laminator Unwind should not respond.</p>
31) Electrical Secondary Disconnect E-31	<p>The E-31 Breaker is located on the backside of the press at the rewind section. Turn Breaker to the off position and lock out.</p>		<p>Attempt to operate the Rewind Power. The Rewind Power should not respond.</p>
32) Electrical Secondary Disconnect E-32	<p>The E-32 Breaker is located on the backside of the press at the unwind section. Turn Disconnect to the off position and lock out.</p>		<p>Attempt to operate the Unwind Control Panel. The Unwind Control Panel should not respond.</p>
33) Electrical Secondary Disconnect E-33	<p>The E-33 Disconnect is located on the backside of the press. Turn Disconnect to the off position and lock out. Use a Lock and hasp device.</p>		<p>Attempt to operate the Sterlco #1 Laminator Metering Rolls. The Sterlco #1 Laminator should not respond.</p>

34) Electrical Secondary Disconnect E-34	<p>The E-34 Disconnect is located on the backside of the press. Turn Disconnect to the off position and lock out.</p>		<p>Attempt to operate the Sterlco #2 Laminator Xfer/Appl Rolls. The Sterlco #2 Laminator should not respond.</p>
35) Electrical Secondary Disconnect E-35	<p>The E-35 Disconnect is located on the backside of the press. Turn Disconnect to the off position and lock out.</p>		<p>Attempt to operate the Unwind Control Panel. The Unwind Control Panel should not respond.</p>
36) Pneumatic Main Air Supply P-1	<p>The P-1 Ball valve is located inside cabinet on backside of CI drum. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off from CI Drum Area. The CI Drum Area should not respond.</p>
37) Pneumatic Secondary Air Supply P-2	<p>The P-2 Ball valve is located inside cabinet on front of unwind section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off from Unwind Area. The Unwind Area should not respond.</p>
38) Pneumatic Secondary Air Supply P-3	<p>The P-3 Ball valve is located inside cabinet on rear of rewind section. Turn the Ball Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off from Rewind Area. The Rewind Area should not respond.</p>

39) Pneumatic Secondary Air Supply P-4	The P-4 Ball valve is located inside cabinet on front of unwind laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off from Unwind Laminator Area. The Unwind Laminator should not respond.
40) Pneumatic Secondary Air Supply P-5	The P-5 Ball valve is located inside cabinet on rear of laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Laminator Area. The Laminator Area should not respond.
41) Gas Supply G-1	The G-1 Ball valve is located above the CI drum. Turn Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Main Supply. The Main Supply should not respond.
42) Gas Supply G-2	The G-2 Ball valve is located above the CI drum. Turn Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Tunnel Burner. The Tunnel Burner should not respond.
43) Gas Supply G-3	The G-3 Ball valve is located above the CI drum. Turn Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Between Color Oven. The Color Oven should not respond.
44) Hydraulic Supply W-1	The W-1 Ball valve is located behind the elevated Sterlco unit in front of the CI drum. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Fresh Water Supply. The Fresh Water Supply should not respond.

45) Hydraulic Supply W-2	<p>The W-2 Ball valve is located behind the elevated Sterlco unit in front of the CI drum. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off Fresh Water Drain. The Fresh Water Drain should not respond.</p>
46) Hydraulic Supply C-1	<p>The C-1 Ball valve is located behind the elevated Sterlco unit in front of the CI drum. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off Chill Water Supply. The Chill Water Supply should not respond.</p>
47) Hydraulic Supply C-2	<p>The C-2 Ball valve is located behind the elevated Sterlco unit in front of the CI drum. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off Chill Water Return. The Chill Water Return should not respond.</p>
48) Hydraulic Supply W-3	<p>The W-3 Ball valve is located behind the #1 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off Fresh Water Supply Sterlco #1 Metering Rolls. The Fresh Water Supply should not respond.</p>
49) Hydraulic Supply W-4	<p>The W-4 Ball valve is located behind the #1 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off Fresh Water Drain Sterlco #1 Metering Rolls. The Fresh Water Drain should not respond.</p>

50) Hydraulic Supply W-5	<p>The W-10 Ball valve is located behind the #2 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off the Fresh Water Supply Sterlco #2 Transfer/App. Rolls. The Fresh Water Supply should not respond.</p>
51) Hydraulic Supply W-6	<p>The W-6 Ball valve is located behind the #2 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off the Fresh Water Drain Sterlco #2 Transfer/App. Rolls. The Fresh Water Drain should not respond.</p>
52) Hydraulic Supply W-7	<p>The W-7 Ball valve is located behind the #3 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off the Fresh Water Supply Sterlco #3 Laminating Rolls. The Fresh Water Supply should not respond.</p>
53) Hydraulic Supply W-8	<p>The W-8 Ball valve is located behind the #3 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off Fresh Water Drain Sterlco #3 Laminatig Rolls. The Fresh Water Drain should not respond.</p>
54) Hydraulic Supply C-6	<p>The C-6 Ball valve is located behind the #1 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.</p>		<p>Verify pressure has bled off Chill Water Supply Sterlco #1 Metering Rolls. The Chill Water Supply should not respond.</p>

55) Hydraulic Supply	The C-7 Ball valve is located behind the #1 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Chill Water Return Sterlco #1 Metering Rolls. The Chill Water Return should not respond.
C-7			
56) Hydraulic Supply	The C-8 Ball valve is located behind the #2 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Chill Water Supply Sterlco #2 Transfer/Appl. Rolls. The Chill Water Supply should not respond.
C-8			
57) Hydraulic Supply	The C-9 Ball valve is located behind the #2 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Chill Water Return Sterlco #2 Transfer/Appl. Rolls. The Chill Water Return should not respond.
C-9			
58) Hydraulic Supply	The C-10 Ball valve is located behind the #3 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Chill Water Supply Sterlco #3 Laminating Rolls. The Chill Water Supply should not respond.
C-10			
59) Hydraulic Supply	The C-11 Ball valve is located behind the #3 Sterlco unit against the wall on backside of press and near laminator section. Turn the Valve to the off position and lock out. Use a ball valve lockout device.		Verify pressure has bled off Chill Water Return Sterlco #3 Laminating Rolls. The Chill Water Return should not respond.
C-11			

Lockout Removal Process

- 1) Ensure that all tools and items have been removed.
- 2) Confirm that all employees are safely located.
- 3) Verify that controls are in neutral.
- 4) Remove lockout devices and reenergize machine.
- 5) Notify affected employees that servicing is completed.

Press 102 Specific Lockout Task List

LOCKOUT PROCEDURE - 1910.147

Purpose: To protect authorized personnel against the unexpected or unplanned startup of equipment energy while servicing equipment.

Scope: 1) Utilize this procedure for all scheduled PM shutdowns, any maintenance task that requires you to place your body in harms way of the equipment or if you have to leave the area while the equipment is in service. 2) Determine the specific machine task you plan to perform. 3) Only the identified authorized personnel are allowed to perform the lockout procedure.

Enforcement: Failure to properly follow lockout procedures may result in immediate dismissal.

LOCKOUT PROCEDURAL STEPS:

#	Step	Description		
1.	Notify	Notify all affected employees that the equipment will be locked out.		
2.	Shut Down	Properly shut down equipment following normal machine procedures.		
3.	Identify	Identify all appropriate energy sources from the task list below.		
4.	Isolate Energy	Turn "OFF" the appropriate energy sources (i.e. electrical, pneumatic, hydraulic pressure, etc.).		
5.	Lockout Energy	Apply lockout devices (locks & hasps). NOTE: Each individual places their own lockout locks, and if needed, their own hasp on the designated isolating lockout device.		
6.	Dissipate Energy	Release all stored or residual energy. After ensuring no one is exposed, verify the "TRY" step by attempting to operate the equipment using normal operating controls to make certain the equipment will not operate.		
7.	Perform Task	Perform required task and/or maintenance.		

Specific Task	Energy Sources Required Lockout Point			Authorized Employees
Shut power off to Machine	E-1			Maintenance
Work on the Sterlco Unit - CI Drum	E-24,		W-1,W-2,C-1, C-2	Maintenance
Work on the Rewind Hoist	E-29			Maintenance
Work on the Unwind Hoist	E-29			Maintenance
Work on the Control Solenoid				Maintenance
Work on fresh water in filter	E-24,		W-1,W-2	Maintenance
Shut Air off to the entire machine		P-1		Maintenance
Work on Rewind Pneumatics		P-3		Maintenance
Work on Unwind Pneumatics		P-2		Maintenance
Work on C.I. Drum / Visguards / Ink Pumps		P-1		Maintenance
Work on the Between Color dryer	E-2, E-3, E-5			G-3 Maintenance
Work on the Tunnel Dryer	E-2, E-4, E-6			G-2 Maintenance
Level rewind splicing unit	E-1	P-3		Maintenance
Working on dryer exhaust system	E-2			Maintenance
Working on print unwind cart	E-26			Maintenance
Working on print rewind cart	E-27			Maintenance
Working on Lam. unwind cart	E-28			Maintenance
Working on CI drum pneumatics	E-1	P-1		Maintenance

Working on Sterlco unit for laminator	E-33		W-3,W-4	C-6, C-7	Maintenance
Working on Sterlco unit for laminator	E-34		W-5,W-6	C-8, C-9	Maintenance
Working on Sterlco unit for laminating roll	E-35		W-7,W-8	C-10, C-11	Maintenance
Change #3 laminating roll or rotary union on MAIN PRESS	E-1,E-15,E-16,E-17				Maintenance
STERLCO UNIT	E-31		W-7,W-8	C-10,C-11	Maintenance
Any work where items cannot be isolated or separated from its energy source (Entire Machine)	E-1,E-2	P-1			Maintenance
DISCLAIMER: This list does not include all possible tasks that would require energy to be controlled. Any other task that involves removing a guard and/or putting oneself in position where an unexpected machine start-up could place them at risk, requires lockout. Questions must be directed to your Supervisor.					
LOCKOUT REMOVAL STEPS:					
1.	Check Machine	Ensure all tools or items have been removed and re-install all guards.			
2.	Notify	Notify all affected employees that the equipment will be taken out of lockout.			
3.	Verify Machine	Verify that the equipment controls are in neutral.			
4.	Remove Devices	Remove lockout devices.			
5.	Restart	Re-energize the equipment (follow normal start-up requirements).			
6.	Notify	Notify all employees that the equipment is ready for operation.			

102 Jog Procedure

No work is to be performed while the machine is in motion.	
Procedure	
1.	Check to make sure the area is clear.
2.	Utilize the closest jog button to where the work is to be performed.
3.	Push in the jog button (or push button remote). A startup warning alarm will go off to alert employees in the area that the machine is beginning to start moving.
4.	Wait for the warning buzzer to clear (3 second window)
5.	Push the jog button to job the machine.
6.	Wait for the machine to stop before reaching into it.
7.	Perform task and repeat steps 3 through 7 as needed.

Tasks Requiring Jog Power	
1.	Clearing Web Breaks
2.	Washing the Drum

INCH SAFE SERVICE METHOD
Inch Safe Service Method - (Minor Servicing)
<ol style="list-style-type: none">1. Inch (jog) the press forward2. Put the control on stop/safe3. Perform the necessary procedure (wiping, adjusting, etc.)4. Take the control off stop/safe5. Inch (jog) the press forward6. Repeat the steps as necessary <p>(Note: each employee involved in the minor servicing controls his own stop button)</p> <p>When two or more individuals are performing separate servicing operations on a machine or equipment, the Inch Safe Service Method is acceptable if each individual has exclusive control of the energy source and if the separate activities are considered minor servicing. Each operator must have access to his or her own safe button during the servicing operation.</p> <p>IMPORTANT: only employee trained in inch safe service method are permitted to use this alternate method.</p>
*** Any tasks beyond this list require Lockout ***

Special procedure in case of failure to remove personal lock

Employee is still on site	
1.	Contact employee.
2.	Ask employee to remove their personal lock from equipment/unit immediately.
Employee is not on site	
1.	Contact employee (by phone). This must be done by the supervisor accompanied by a second employee from plant team (not a manager or supervisor).
2.	Ask employee to come back to site and remove their personal lock.
If employee is not able to come back	
1.	Confirm with employee that there are no risks by removing the lock.
2.	Get confirmation from the employee that they are aware that the lock will be removed.
3.	Fill out the form "Removal of Personal Lock" (see Appendix 5-1E).
4.	Remove lock and continue operations.
If employee cannot be contacted	
1.	Get confirmation that employee has left the building.
2.	Verify that there are no risks by putting power back (evaluate risk).
3.	Place a clear sign on the equipment confirming that the lock has been removed in case employee should come back.
4.	Fill out the form "Removal of Personal Lock" (see Appendix 5-1E).
5.	Remove lock and continue operations.

Lockout-Tagout Posted Procedure

ID#:Lamination Pump-LC1H
Revised: 11/28/2023
Revised by: Derek Smith

Facility: BATTLE CREEK
Description: Lamination Pump

Location:
Building # 4

2

Lockout Points

Lockout Application Process

- 1) Notify affected personnel.
- 2) Properly shut down machine.
- 3) Isolate all energy sources.
- 4) Apply lockout devices, locks and tags.
- 5) Verify total de-energization of all sources. (**LOCK, TAG TRY**).

Lockout Steps

Step #	Action	Info	Verification
1) Electrical Main Disconnect E-1	The E-1 Disconnect is located on the lamination pump. Turn Disconnect to the off position and apply lockout device. Use a lock and hasp device.		Attempt to operate the Lamination Pump. The Lamination Pump should not respond.
2) Pneumatic Main Air Supply P-1	The P-1 is located on the lamination pump. Turn the Valve to the off position and lock out. Use a lockout device.		Attempt to operate the Lamination Pump. The Lamination Pump should not respond.

Lockout Removal Process

- 1) Ensure that all tools and items have been removed.
- 2) Confirm that all employees are safely located.
- 3) Verify that controls are in neutral.
- 4) Remove lockout devices and reenergize machine.
- 5) Notify affected employees that servicing is completed.

Lockout-Tagout Posted Procedure

ID#:Lamination Pump-LC2
Revised: 11/28/2023
Revised by: Derek Smith

Facility: BATTLE CREEK
Description: Lamination Pump

Location:
Building # 4

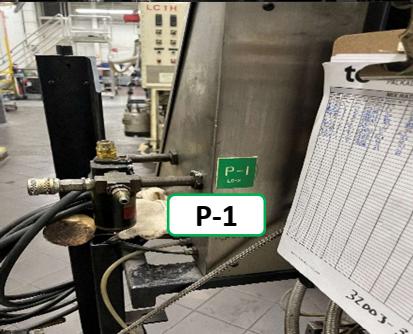
2

Lockout Points

Lockout Application Process

- 1) Notify affected personnel.
- 2) Properly shut down machine.
- 3) Isolate all energy sources.
- 4) Apply lockout devices, locks and tags.
- 5) Verify total de-energization of all sources. (**LOCK, TAG TRY**).

Lockout Steps

Step #	Action	Info	Verification
1) Electrical Main Disconnect E-1	The E-1 Disconnect is located on the lamination pump. Turn Disconnect to the off position and apply lockout device. Use a lock and hasp device.		Attempt to operate the Lamination Pump. The Lamination Pump should not respond.
2) Pneumatic Main Air Supply P-1	The P-1 is located on the lamination pump. Turn the Valve to the off position and lock out. Use a lockout device.		Attempt to operate the Lamination Pump. The Lamination Pump should not respond.

Lockout Removal Process

- 1) Ensure that all tools and items have been removed.
- 2) Confirm that all employees are safely located.
- 3) Verify that controls are in neutral.
- 4) Remove lockout devices and reenergize machine.
- 5) Notify affected employees that servicing is completed.

Lamination Pump Specific Lockout Task List

LOCKOUT PROCEDURE - 1910.147

Purpose: To protect authorized personnel against the unexpected or unplanned startup of equipment energy while servicing equipment.

Scope: 1) Utilize this procedure for all scheduled PM shutdowns, any maintenance task that requires you to place your body in harms way of the equipment or if you have to leave the area while the equipment is in service. 2) Determine the specific machine task you plan to perform. 3) Only the identified authorized personnel are allowed to perform the lockout procedure.

Enforcement: Failure to properly follow lockout procedures may result in immediate dismissal.

LOCKOUT PROCEDURAL STEPS:

#	Step	Description
1.	Notify	Notify all affected employees that the equipment will be locked out.
2.	Shut Down	Properly shut down equipment following normal machine procedures.
3.	Identify	Identify all appropriate energy sources from the task list below.
4.	Isolate Energy	Turn "OFF" the appropriate energy sources (i.e. electrical, pneumatic, hydraulic pressure, etc.).
5.	Lockout Energy	Apply lockout devices (locks & hasps). NOTE: Each individual places their own lockout locks, and if needed, their own hasp on the designated isolating lockout device.
6.	Dissipate Energy	Release all stored or residual energy. After ensuring no one is exposed, verify the " TRY " step by attempting to operate the equipment using normal operating controls to make certain the equipment will not operate.
7.	Perform Task	Perform required task and/or maintenance.

Specific Task	Energy Sources Required Lockout Point			Authorized Employees
Any electrical work	E-1			Maintenance
Any pneumatic work		P-1		Maintenance
Replace air lines		P-1		Maintenance

DISCLAIMER: This list does not include all possible tasks that would require energy to be controlled. Any other task that involves removing a guard and/or putting oneself in position where an unexpected machine start-up could place them at risk, requires lockout. Questions must be directed to your Supervisor.

LOCKOUT REMOVAL STEPS:

1.	Check Machine	Ensure all tools or items have been removed and re-install all guards.
2.	Notify	Notify all affected employees that the equipment will be taken out of lockout.
3.	Verify Machine	Verify that the equipment controls are in neutral.
4.	Remove Devices	Remove lockout devices.
5.	Restart	Re-energize the equipment (follow normal start-up requirements).
6.	Notify	Notify all employees that the equipment is ready for operation.

Special procedure in case of failure to remove personal lock

Employee is still on site	
1.	Contact employee.
2.	Ask employee to remove their personal lock from equipment/unit immediately.
Employee is not on site	
1.	Contact employee (by phone). This must be done by the supervisor accompanied by a second employee from plant team (not a manager or supervisor).
2.	Ask employee to come back to site and remove their personal lock.
If employee is not able to come back	
1.	Confirm with employee that there are no risks by removing the lock.
2.	Get confirmation from the employee that they are aware that the lock will be removed.
3.	Fill out the form "Removal of Personal Lock" (see Appendix 5-1E).
4.	Remove lock and continue operations.
If employee cannot be contacted	
1.	Get confirmation that employee has left the building.
2.	Verify that there are no risks by putting power back (evaluate risk).
3.	Place a clear sign on the equipment confirming that the lock has been removed in case employee should come back.
4.	Fill out the form "Removal of Personal Lock" (see Appendix 5-1E).
5.	Remove lock and continue operations.