

## Machine and Equipment-Specific Lockout Tagout Procedure

Instructions: Departments can utilize this document to prepare a machine or equipment-specific lockout tagout procedure. Current revisions must be maintained by the responsible department or area.

All authorized employees and contractors must review and adhere to this procedure when performing service to the equipment referenced in this document.

<b>Responsible Department/Area:</b>	<b>Building:</b>	<b>Specific Location:</b>
<b>Type of Equipment:</b>	<b>UMBC Equipment or Asset Tag/ID:</b>	<b>Prepared by (Name):</b>
<b>Approved by (Supervisor Name):</b>	<b>Date Completed (mm/yy):</b>	<b>Date of Previous Revision (mm/yy):</b>

<b>Hazardous Energy Identification</b>			
Check all that apply			
<input type="checkbox"/> Chemical	<input type="checkbox"/> Mechanical	<input type="checkbox"/> Electrical	<input type="checkbox"/> Thermal
<input type="checkbox"/> Pneumatic	<input type="checkbox"/> Radiation	<input type="checkbox"/> Hydraulic	<input type="checkbox"/> Other (describe)

<b>Identify Required Personal Protective Equipment</b>

<b>List of Authorized Employees</b>
List names of the employees that are authorized to perform lockout tagout on this machinery or equipment



**Normal Shutdown Methods**

Identify the steps to be taken to perform an equipment shutdown. Ensure all affected employees are notified prior to beginning shutdown.

<b>Energy Source and Magnitude</b> Volts, Amps, PSI, etc.	<b>Energy Isolating Device Location</b> (building/room)	<b>Lockout Device and Application Method</b>	<b>Testing/Verification Method</b> How zero energy is confirmed	<b>Picture</b> Visual of energy isolation point

**The machine or equipment is now locked out and servicing may be performed. Stop and contact supervision if the equipment or machinery cannot be locked out, fails verification, or if additional steps are identified. Do not proceed to perform servicing or maintenance. Additional steps identified require this procedure to be modified accordingly.**

**Steps Required for Startup and Return to Service**

List equipment or machine-specific steps for startup and return to normal operations. Ensure that affected employees are notified prior to initiating startup procedures and upon return to normal operations.


See next page for general shut down and return to service procedures.

## **Six Step General Lockout/Tagout Procedure**

This is the general procedure to be followed when performing any lockout tagout operation, in addition to any machine or equipment-specific procedures as applicable.

### **Step 1: Prepare for Shutdown**

The authorized employee shall investigate and identify all sources of energy utilized by the equipment to be serviced, to understand how to effectively disconnect or eliminate such sources.

### **Step 2: Shut Down**

Power down the equipment to be serviced and notify all employees that will be affected by the shutdown. This includes equipment operators and any other employees that will be working in the area.

### **Step 3: Isolate**

Isolate the machine or equipment to be serviced from all identified energy sources. Typically, this is achieved by actions such as closing valves, flipping circuits, or disengaging lines.

### **Step 4: Lockout/Tagout Application**

The authorized employee attaches a lock and tag to each energy-isolating device once the device(s) is in a safe or off position. The lock must prevent the device from being able to be reengaged, reconnected, switched on, or placed into an otherwise activated position.

A tag shall then be placed in the same point or as close as safely possible to the lockout device so that it is clearly visible to affected employees. The tag must contain the warning messaging "DANGER: DO NOT OPERATE" or "DANGER: LOCKED OUT" or similar language. The tag must also contain, at a minimum, the name of the authorized person who applied the lock and tag and their contact information.

### **Step 5: Stored/Residual Energy Check**

The authorized employee checks for stored or residual energy remaining in the equipment. Any energy should be relieved, released, restrained, discharged, or otherwise freed from the equipment.

### **Step 6: Isolation Verification**

The authorized employee will verify that the equipment is fully isolated and de-energized from all energy sources to confirm it is safe to begin work.

### **Lockout/Tagout Removal and Returning Equipment to Service**

The following steps shall be taken to ensure safe removal of lockout/tagout devices and restoration of energy to the serviced equipment, following the completion of work:

- The authorized employee(s) will perform a full inspection of the work area and equipment to ensure all equipment components are intact and ready to resume operation.
- The authorized employee(s) shall inform all affected employees that lockout/tagout devices will be removed and energy will be restored to the equipment.
- Affected employees and department leadership will be notified once equipment has been fully re-energized and normal operations may resume.