

Mechanical Power Press Safety

Jay Industries, Inc.

May 2020

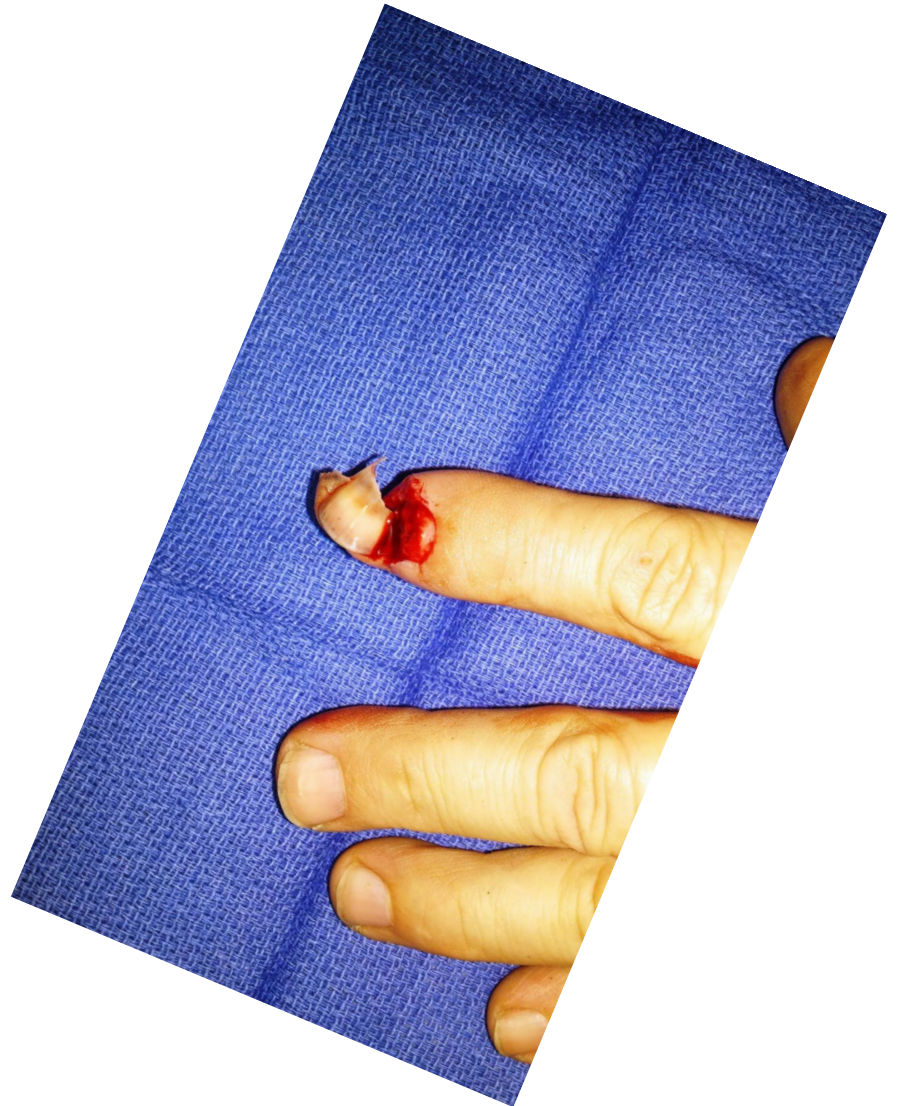
Power Press Force and Actions

- Very Powerful
- Can exert force more than 3,000 pounds per square inch
- Punch Metal
- Shear Metal
- Bend Metal



Power Press Injuries

- Every year 4,000 employees are injured and lose work time from power press accidents
- Half of those employees suffer an amputation



Ways to Prevent Injuries

- Know how your press works
- Every day make sure that hazards are addressed
- Keep your work area clean and organized



Power Press Operations

- Metal stock is placed into press at Point of Entry (manual or automatic)
- Operator activates a switch to activate operation
- Materials are removed manually or automatically



Types of Power Presses

- Full Revolution – once the clutch is engaged, the press cannot stop until it has performed a full stroke
- Part Revolution – press can be stopped mid-stroke



Power Press Dangers

- The greatest danger of injury is the point of entry
- Safeguards are designed to eliminate injuries
- Operators should never remove, tamper with, disable, or go around safeguards



Best Safety Practices



- Monitor hand action even when the press is not operating
- When placing or removing material, observe proper safe distances

Best Safety Practices



- If a part becomes stuck, use only tongs or tools approved by a supervisor or trainer
- NEVER REACH INSIDE TO UNSTICK A PART

Best Safety Practices

- Even when press is not operating, it may not be safe
- Never assume it is safe to reach inside the press
- Uncontrolled energy can build up and accidentally activate the press



Personal Protective Equipment

- Jay Industries, Inc. will provide you with the Personal Protective Equipment that you need
- Jay Industries, Inc. will subsidize steel toed boot and prescription safety glasses purchases
- You **MUST** wear your PPE



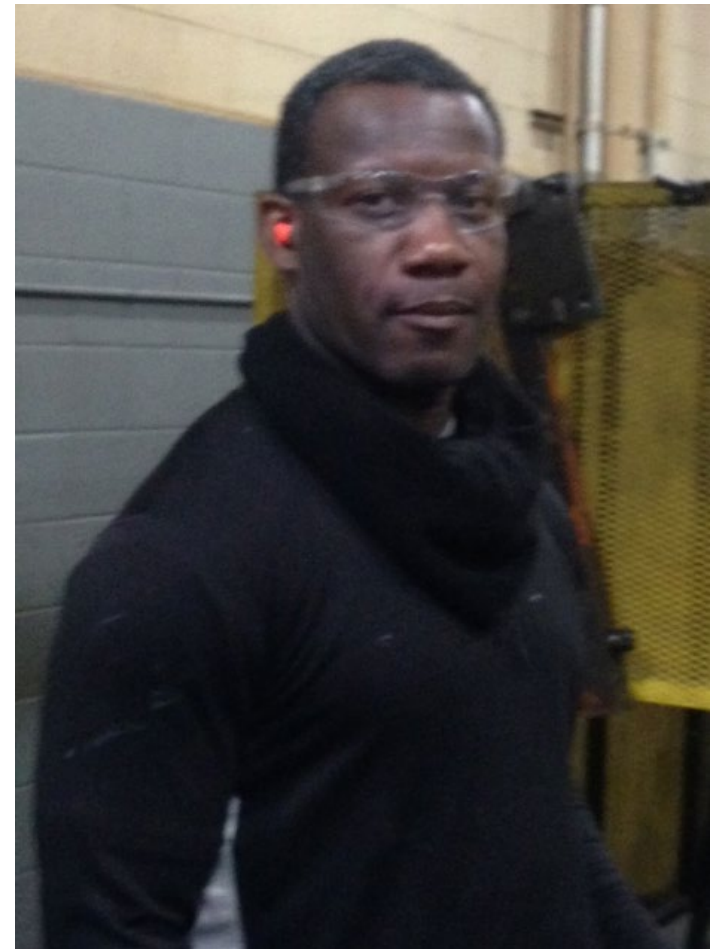
Safety Glasses with Side Shields

- Projectiles are a hazard
- Caused by improperly placed materials that are ejected when ram is engaged



Ear Protection

- High noise levels in the press room
- Hearing loss is irreversible



Gloves/No Gloves

- Protect against cuts and abrasions
- On some presses and during some operations, gloves can be a hazard
- Know your press and when to NOT wear gloves



Steel Toed Shoes

- Prevent crush injuries from:
 - tow motors
 - containers
 - dies
 - metal stock



Work attire

- Loose clothing, jewelry, and long hair can get caught in pinch points and rollers
- Keep attire neat and tucked in to avoid accidental contact with the press

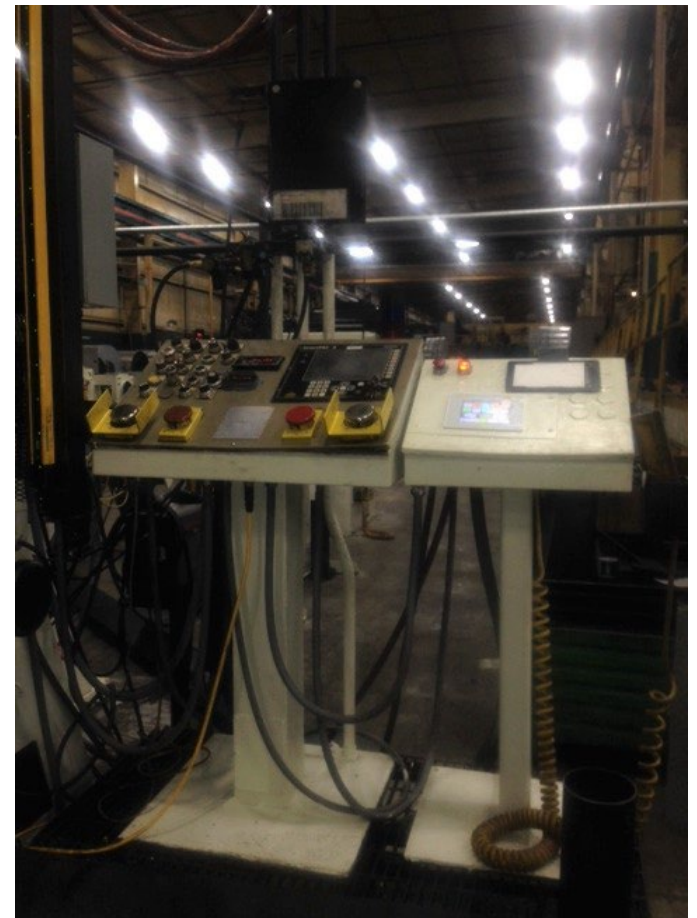


Injury Prevention

- Know your Equipment
- Check for hazards
- Use safeguards

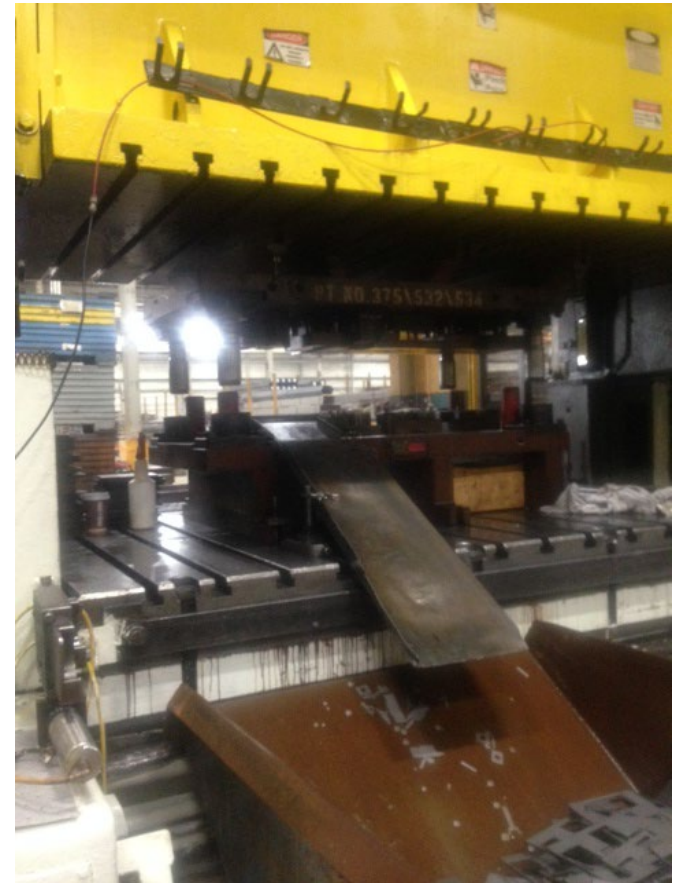
Before you begin...

- Check the machine for anything unusual
- Talk to the operator from the shift before
- Survey your work area to check for hazards or changes
- Perform a test run
- Make sure the emergency brake is working



During the shift...

- If a problem occurs, tell your supervisor
- Never reach inside – use the tools approved for clearing the press
- Follow lock out/tag out procedures



Housekeeping

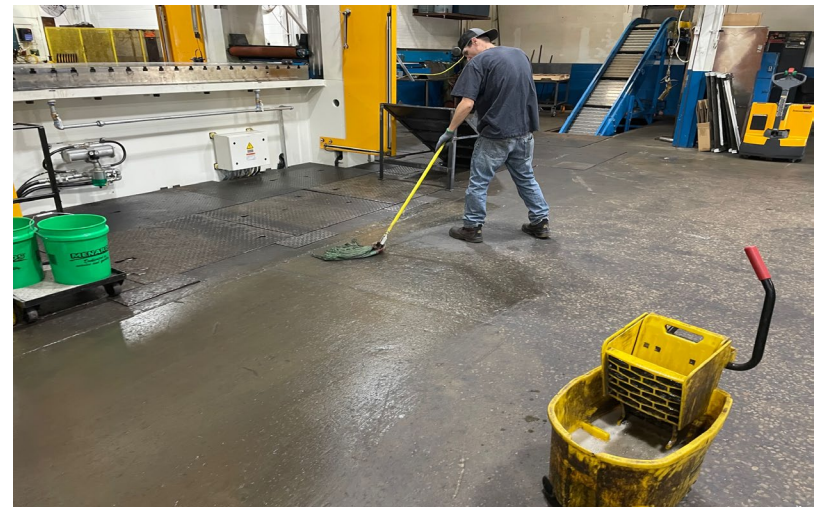
- Keep the floor clean and free of junk
- Clean up oil and liquids to prevent slips and trips
- Remove unused or unnecessary materials from the work area



5S Practices

- Keeping your work area organized and clean is important to the efficient and safe operation of your machine.
- Be sure to perform your daily cleaning tasks.
- Remove unused or unnecessary materials from the work area.

5S Explanation



Be aware of other hazards

- Tow motors
- Cranes
- Heavy Coils
- Slip, trip, fall hazards
- Moving objects



Press Guarding

- Physical barriers, like gates and guards
- Light curtains
- Pressure switches
- Hand controls
- Foot pedals
- **NEVER DISABLE A GUARD**
OR GO AROUND IT



Hand Controls

- Use as designed
- Don't use another part of your body to press the switch
- These keep your hands out of the press



Foot controls

- A switch or pedal to allow your hands to be free during press operation
- Avoid accidental activation by keeping floor clean free of hazards, like air hoses and cords
- Be attentive to hand and body positioning



Pressure Sensors & Light Curtains

- These detect when a person or object enters their field
- They stop the press when the field is interrupted
- Very effective but nothing is fail safe
- Stay aware and keep the proper distances



Summary

- Be aware of the hazards at your press
- Keep the work area clean
- Inspect your work area daily
- Observe all safeguarding
- Wear PPE



One incident can change your life forever

- Take Control
- Be aware of Hazards
- Observe safe work practices