

HYDRAULIC PUNCH AND SHEAR SOP

ACRONYMS

LOTO - Lockout/Tagout.

PPE - Personal Protective Equipment.

SOP - Safe Operating Procedure.

HAZARDS - What can cause harm?

- ▲ Noise
- ▲ Electricity
- ▲ Moving parts
- ▲ Sharp edges
- ▲ Manual Handling
- ▲ Poor housekeeping

PRECAUTIONS

- All operators are trained and competent to operate a Hydraulic Punch and Shear safely. Operator training should include:
 - Workplace induction
 - Safe operating procedures
 - Manufacturer's instructions
 - Nature of hazards
 - Fitting of PPE
 - Manual handling
 - Housekeeping
 - First Aid



**Turn the machine
OFF when changing
punch, dies, blades,
& making
adjustments.**

MAINTENANCE

- Follow LOTO procedures and record service/repairs information in Maintenance Log. Maintenance is conducted as per manufacturers' instructions and by qualified persons only
- When the machine is taken out of service for maintenance:
 - Shut off and isolate the power supply
 - The power supply is clearly labelled/tagged "do not use."



PPE



PRE-OPERATIONAL INSPECTION

- Follow the pre-operational checklist in the manufacturer's operational manual, ensure:
 - Blades are sharp
 - Moving parts are lubricated and free of dirt/rust
 - Feed table clear of debris
 - Guards in place, undamaged (include any motor or flywheels covers)
 - The emergency stop is tested and functional
 - Controls labelled and working correctly
 - The cutting table is free of scraps and tools
 - The foot pedal is guarded to prevent accidental activation
 - Ensure all equipment and leads are tested and tagged as required for use.

HYDRAULIC PUNCH AND SHEAR SOP

OPERATION

1. Operate in accordance with manufacturers' instructions
 2. Wear prescribed PPE
 - **Before commencing all operations, ensure the punch/shear/notching station is clear of any tools or debris**
 - **Punching:**
 3. Power the machine ON and place the workpiece between the punch and die
 4. Check to see that your workpiece is spanning the stripper plate and that adequate material is available beyond the stripper area to position the workpiece safely
 5. Ensure your hands are clear of the working area
 6. Depress the foot pedal to move the punch through the workpiece and into the die
 7. When the punch is complete:
 - a. Release the foot pedal
 - b. Automatically strip the material from the punch
 - c. Return the punch to its neutral position
 - **Bar shearing:**
 8. Power the machine up and place the workpiece on the feed table
 9. Push the workpiece under the material hold-down and into the blade area
 10. Position your workpiece to the desired cut and lower the material hold-down
 11. Tighten the hand-wheel to secure the workpiece in the feed table
 12. Ensure your hands are clear of the working area and depress the foot pedal to activate the shear station
 13. When the cut is complete:
 - a. Release the foot pedal to return the shear blades to their neutral position
 - b. Reverse the hand-wheel to raise the material hold-down and remove your workpiece.
- **Angle shearing:**
 - 1. Power the machine up and place the workpiece into the material hold down
 - 2. Push the workpiece through the angle hold-down and into the blade area
 - 3. Position your workpiece to the desired cut and lower the material hold-down
 - 4. Tighten the thumbscrew to secure the workpiece in the angle shear
 - 5. Ensure your hands are clear of the working area and depress the foot pedal to activate the shear station
 - 6. When the cut is complete:
 - a. Release the foot pedal to return the shear blades to their neutral position
 - b. Reverse the thumbscrew to raise the material hold-down & remove the workpiece.
- **Notching:**
 - 1. Power the machine up and place the workpiece on the feed table
 - 2. Push the workpiece under the tooling guard and into the blade area
 - 3. Position your workpiece to the desired cut
 - 4. Ensure your hands are clear of the working area and depress the foot pedal to activate the notching station
 - 5. When the cut is complete, release the foot pedal to return the top-notching blade to the neutral position automatically.