SAFETY OPERATING PROCEDURES, Origin Labs, Welding Lab

Hydraulic Shear

METHOD OF OPERATION

* A shear is lowered adjacent to the work table to make straight, shear cuts of thin metal (i.e. steel, aluminum)

Maximum Shearing Capacity: Mild Steel: 16 gauge

Maximum Shearing Capacity: Stainless Steel: 20 gauge

MACHINE HAZARDS

*Amputation by Blade	
*Pinch point by workpiece	
*Flying Debris	

^{*}Controls: Fixed guard, distance, hand and body placement .

PPE/Safety Measures

*Safety Glasses	*Long hair tied back and away from face
* Work gloves – required for thin metal or	*Form fitting clothing, without rips and frays
material with potentially sharp edges	

^{*}Controls: Controls: hand/finger placement on work piece during cycle

^{*}Controls- safety glasses

Guards and Devices

Clamp/Shear/Point of operation guard

Operational Notes

Capacity:

Maximum Shearing Capacity: Mild Steel: 16 gauge Maximum Shearing Capacity: Stainless Steel: 20 gauge

DO NOT EXCEED CAPACITY: If you're unsure about material type and gauge, ask shop supervisor for help

BACK GAUGE: is not accurate. Cuts should be measured, with a measuring tape, from the cutting edge of the work table's edge

REAR OF SHEAR HAZARDS: Do not operate machine while persons are to the rear of the machine (i.e. retrieving scrap)

Be aware that scrap falls from the table after operation during cut

RAKE: Must be adjusted based on material thickness

The capacity of this machine is 16 ga soft steel, so if this is being cut, then rake should be set to high

Ask supervisor for help determining rake based on material type and thickness

Be sure your material will be clamped prior to operation to ensure it does not move during operation cut

Other Info:

NEVER place any fingers beyond the WHITE guard

Sequence of Operation

- 1. Start the machine
- 2. Ensure all clear
- 3. Press the GREEN button to activate the machine. Ensure the EMERGENCY STOP button is pulled OUT.
- 4. Ensure clamp and blade are in the uppermost position.
- 4. Set rake according to material type and thickness (ask for help if unsure)
 - (cut a test piece to be sure)
- 5. Measure and place material for cut
- 6. Hold material while keeping fingers on top of work piece to avoid pinching when the piece is clamped
- 7. Ensure all clear
- 8. Activate the shear via foot pedal
- 9. Release the footpedal once cut is complete.

Never

*Exceed the capacities of the machine

*Place any fingers beyond the white guard

Maintenance Notes/Service by Operator

Contact Shop Supervisor/qualified person for:

Blade change

Lubrication service