



Hydraulic Press Safety

ALWAYS WEAR SAFETY GLASSES OR A FACE SHIELD.

Things can always break under the pressures that you are working with. Plexiglass will withstand incredible pressure if it is fully supported on the back side, but if it is hanging over the edge, and the urethane pad starts to bend the area that is hanging over, you have instant shrapnel. Another example is using a pre-domed punch with a thin pad. This is pretty obvious if you stop and think about it, but it is not too unusual to stop someone using a punch with a 1/2" thick pad. This does three things; it ruins the pad by cutting it, the punch goes flying around the room as the pressure was excessive, and it very rapidly makes a believer in safety of the operator! The punches are for use with the contained block of urethane or forming box.

ALWAYS CENTER THE WORK.

Use of the tooling holes will automatically do this for you. If using matrix dies, or blanking dies, place them in the middle because you will get a more even impression, the platen will not tilt under pressure.

NEVER TRY TO EMBOSS OR USE BLANKING DIES WITHOUT THE TOP SPACER/S.

The top spacer is to make the tooling holes "go away". These holes can damage your die.

If you are using an electric pump it is important to never run the ram further than 5". If the ram extends more than 5" you will be pumping hydraulic fluid out of the pump's reservoir and into the rams reservoir.

This will keep the fluid from flowing back into the pump's reservoir and you will soon be out of fluid.

If this happens you will need to send the ram back for repair. The ram may leak profusely out of the fill hole.

ASSEMBLE YOUR WORK ON A PALLET AND SLIDE THE PALLET INTO THE PRESS.

This allows you to locate everything without disturbing anything. The way I describe this in the workshops is that "it is easier to assemble the pizza on a pan and slide the whole works into the oven, rather than trying to assemble the whole thing in the oven. I have been amazed at the utilization of crochet hooks, tweezers, hair pins and other such devices people use to try and fish something out of the press, when it is so easy to slide the entire pallet out. (The "pallet" is usually a urethane pad or acrylic sheet)

DO NOT EXCEED THE PROPER PRESSURE FOR THE JOB.

Check the chart for recommended pressure, WATCH what is happening inside the press!

ALWAYS LET THE RAM DOWN WHEN FINISHED FOR THE DAY.

The ram is slightly oily and an excellent dust and grit magnet. Every studio I have ever seen has a certain amount of chemicals and abrasive grit in it. Both of these are not good for the ram. For the same reason that you should cover your rolling mill rolls when not in use, let the ram back into its protective sheath.

ALWAYS BOLT TOOLING IN PLACE.

Never NEVER use a cast spoon stake in the press simply by placing it kinda' in the middle and hoping that it will not come out and get you!!! L The cast stakes are not designed for use in this fashion; they do not have a square butt on them; they are cast and will shatter, or they will simply come flying out of the press simply because they were not placed absolutely vertical. Tooling attachment holes are in the top platen of the press for this reason. There is simply no way that you can make sure that the stake is properly located unless you are bolting it in place. The slightest amount of angle is enough to cause it to fly out

NEVER, EVER, USE CAST IRON IN A PRESS.

I still have a minute piece embedded in my hand. Seems like I was in too much of a hurry to go get a piece of steel for a spacer and grabbed a cheap Taiwan drill vise that was handy. It exploded at about 5,000 pounds! Shrapnel every where.

Morale of the story:

- 1. Never get in a hurry!**
- 2. Use the proper tool for the job!**
- 3. Exercise little gray cells before pumping the press!**

Electric Pump

INSTALLATION & OPERATION

INSTALLATION:

Slide ram under the platen with the holes oriented to match the holes in the press frame. The platen will tilt slightly. Lift up on the lower edge of the platen and shove the ram into place. Align the holes and insert the two pins supplied. This ensures that the ram is centered in the frame.

Remove the cap fitting (9/16" wrench) on the lower side of the ram. Probably a small amount of oil will leak out and the availability of a paper towel will prevent creating a mess. Remove the matching plug on the hose end (1/2" and 9/16" wrenches) and screw the hose swivel fitting onto the protruding fitting on the ram. Use a pair of 9/16" wrenches to tighten the hose connection. Allow the hose to lay in a relaxed fashion before tightening. Retain the cap & plug, as they will be needed if the unit is returned for service.

OPERATION:

ALWAYS HAVE AT LEAST 1" OF TOOLING IN THE PRESS.

With the chrome lever toward you reading "**RETURN**", the platen will start down when you release the "on" button. When the platen has lowered as far as you want, flip the lever to the rear, reading "**HOLD**", and the platen will stop.

After reloading press for next operation, flip the lever back toward you, and push the "on" button. The lever can be moved back and forth under pressure, but it requires more effort.

OIL:

After using for the first time, when the ram goes all of the way down, air will be forced back into the pump. Check the oil level by standing the electric pump on it's end with the gauge end pointing up and remove the knurled knob. Oil should be up to the bottom of the threads. When replacing the plug, tighten by hand only.

TOP OFF WITH HYDRAULIC OIL. USE AW-46. Periodically check the oil level and top off as required. EVERY THREE MONTHS, CHANGE THE OIL!!!

(Credit Phil Poirier, Bonny Doon Manufacturing LLC, Cindy Eid)