



Not “The Good Old Days”!

(Lee’s New Classic Cast Press)

By Mark Trope

So often we hear the statement, “Things aren’t like they were in the good old days”. When it comes to reloading equipment, we can rejoice that things aren’t like in “the good old days”. Reloading equipment is so much better now than in decades past!

In the not so distant past, one had few real choices in selecting bench mounted reloading tools. Prices tended to be high, as only a few companies made tools were worth considering. Some tools were very high quality, however, the manufacturers output was very small, prices very high and delivery schedules unreliable. The larger concerns could deliver on a regular schedule, but prices tended to be high. Often, when customers requested simple, common sense features to be added, it took years to get those features incorporated into designs, if it happened at all. Sometimes good designs were hampered by a lack of quality control. All too often, press rams & die stations were misaligned!

Then Richard Lee, president of Lee Precision, www.leeprecision.com, who had his super successful Lee Loader hand tool, decided not to rest on his laurels. He went into the bench mounted tool & accessory line. When he did, Lee Precision turned the reloading business on its collective ear! Since Lee was starting with a “clean sheet of paper” he had innovative designs that cost less to produce and sold for far less than the competition.

The other companies sat up & took notice, fast! Prices on many of the “old line” company’s products quietly began to come down. Other companies, who hadn’t upgraded products in a long time, introduced new designs. All this worked to directly benefit the reloader. In the intervening years, Lee has continued to expand its line, and introduce new, innovative products.

This year Lee has introduced the Lee Classic Cast Press, a cast iron, O frame, compound leverage, bench mounted reloading press.

Before we look at Lee’s new press, let’s discuss the attributes that make a press “best quality”. To begin with, the first priority is alignment between the ram and die station.

How Hard Is It To Line Things Up?

Believe it or not, making two holes align with each other across an open gap is one of the toughest jobs in machine shop work. It calls for accurate machines that exceed the capacity for that job and well designed & built holding fixtures for the work piece. Tooling must be expertly selected and sharp. Computer Numerical Control (CNC) machines can only do so much. It still takes a keen programmer, a dedicated operator and an uncompromising quality assurance inspector to produce good work!

The ram must line up exactly with the die station in the top of the press. If there is any misalignment between the two, it will show up when a straight-sided case is resized. The edge of the case mouth will catch on the edge of the die. The shell holder allows a bit of grace since brass doesn’t fit tightly in the shell holder slot. However, more than a few thousandths misalignment will show up fast! I’ve seen “famous name” presses where the alignment was so bad, a 44 Magnum case had to be tipped against the edge of the shell holder to get it in the die mouth! The next criteria for a good press are fit & finish.

Fit is how well the parts mate, being neither too tight or too loose. Parts should fit together smoothly without binding, catching or making a lot of noise as the ram is raised & lowered. Finish refers to how cleanly the machined parts turn out. All the edges should be straight without burrs. The ram should have a bright, almost glassy look to it, not rough looking, or tool marks showing. The last criteria for a press is frame design.

A well-designed press will have sufficient mass in the frame to allow all the normal reloading tasks without frame stretch or flexing. Just because a press weighs a lot doesn’t mean the mass has distributed to the proper

places. A well-designed frame will also take into account linkage geometry. Energy applied to the press handle should translate into a smooth flow of pressure to the ram. Anything after the criteria's we've just discussed is simply a matter of features. Now let's look at Lee's new press.



Lee Classic Cast Press

In a word, this press is amazing. It incorporates the best features found on today's presses, yet is innovative in its own right.

To begin with, I mounted the Lee Classic Cast Press to a piece of 3/16-inch thick steel plate. The press has 3 mounting holes. Holes are far better than slots. The pattern allows for even displacement of clamping force on the press's base.

Speaking Of Pattern, Why Don't They Give Us a Mounting Template?

When mounting a press, it would be nice if they gave us a mounting

template. Nothing fancy, just a cardboard template, about the thickness of the backing from a pad of paper, with the holes for the bolts punched out. This way it could be traced, and the holes precisely marked. Here's an old machinist's trick. Get a pointy tap. A tap that just slides in the holes through the press frame, with just a tiny bit of play. Then rap on the tap with a plastic hammer and you will have well center-punched holes for drilling in either wood or metal. If your bench is wood, use carriage bolts installed from under the bench. If your mounting surface is metal, drill & tap. To get classy, get studs from a hardware store and install them in the plate. Studs have much more clamping power than machine bolts!

The Lee Classic Cast Press's frame opening is as large as the largest frame opening in the business. With a shell holder installed, there is 4 ¼ inches of space, plenty of room for the largest cartridges. The handle can be mounted either on the left or right side, however, instead of just allowing left or right mounting of the handle, Lee has taken it two steps further.



Handle Attachment & Spline Assembly

The handle mounts on a spline arrangement; so, the handle can be mounted at any angle the operator desires. However, the length of the handle can also be adjusted by sliding the handle deeper through the mounting assembly. Some may question why a person wouldn't want the lever at its longest length, where, of course, the most amount of leverage is. There are times when less leverage is better, like when flaring the mouths of rifle cases for seating cast bullets, or when a more sensitive feel is desired. Last year I acquired a Lee Reloader "C" press for just that purpose. I wanted a smaller, more sensitive feeling press for flaring rifle case mouths, so, I could gage through my hand when I had the right amount of flare. By just loosening one bolt, the Lee Classic Cast Press's lever can be adjusted to any length,

angle or side of the press. Speaking of the lever, the Classic Cast Press's lever is a hollow steel, blued tube topped with a large wood ball grip. The tube is said to have a more balanced feel than a solid bar.



PVC Drain Tube For Old Primers

A sore point on most presses is the nasty grit from primers falling in the plastic primer catcher. The grit is extremely abrasive, and usually winds up coating the upper ram and makes a general mess. I know reloaders who have picked up an old, used press, to be used as a decapping station only, and reserve their good press for all other reloading chores. A select few presses are equipped with hollow rams that pass spent primers out through the bottom. The Lee press is a member of this select fraternity! Taking a cue from the folks in Cortland, the Classic Cast Press's hollow 1 1/8 inch diameter ram ends in a nipple, which is fitted with a clear PVC tube. The tube has a plastic cap, which can either be left in place, and the tube emptied of old primers at the reloader's convenience, or the cap can be left off and the tube routed to a small collection container.



Primer Arm in Press Ram at Raised Position



Primer Being Seated In a 30/06 Case

Many older presses are equipped with a spring-loaded primer arm that prime in the middle of the stroke. They work well, but have little “feel” to them. Geometry dictates the best place for a press mounted priming arm is at the bottom of the stroke, where a sensitive feel is encountered, and that’s where you’ll find the Classic’s priming arm. The Classic Cast Press’s priming arm simply slides in and out of position. It is not pinned or bolted to the press in any fashion, yet it works automatically & flawlessly! Lee didn’t stop there though, unlike all other presses, which require a change in primer plugs when

switching from small to large primers, Lee included two complete primer arm assemblies. Simply lift it out and slip in the other. Recall we said the Classic Cast Press was South Paw friendly? That also extends to priming. The ram can be easily reversed and the primer arm will be on the other side of the press!

The linkage and pins are all hardened and extremely well fitted. There are even two oil holes in the upper pivot points. The compound leverage linkage is plated in dichromate, an extremely corrosion resistant coating. The linkage has a positive stop, so dies or shell holders cannot be damaged. Speaking of dies & shell holders, if you ever feel the need to reload the 50 caliber BMG cartridge, then all you need to do is remove the shell holder insert from the top of the ram and install a 50 BMG holder, unthread the bushing from the top of the press and it will accept 1 ¼ -12 50 BMG dies!



A Level Insures a Fair, Accurate Test of Ram Alignment

After setting up the Classic Cast Press, and routing the primer drain tube to a waste container, I put a level across the press to ensure it was sitting true. Then a .44 Magnum carbide-resizing die and shell holder were installed. I proceeded to resize over 100 .44 Magnums & Specials. A straight-sided case requires more pressure to resize than a tapered case and any misalignment will show up. I wanted to see if any would catch on the die, or if any primers would pop out of the ram, so, I resized them as fast as I could. As machinist's say, the Classic Cast Press's ram & die station are aligned exactly "Dead Nuts". Every piece of brass entered without a hitch.

Exactly one primer failed to go down the drain tube, and flew out. That only happened when I worked very fast. At normal speeds this didn't happen. Later on I worked with .38 Specials, 30/06's 45/70's, every primer went down the waste tube.

The priming system works perfect and has great sensitivity, you can feel the primers as they seat, and I doubt anyone would ever crush a primer pellet with this priming system.

Another thing I like about the Classic is the spring that retains the shell holder in the ram. It is plenty secure, however, you don't have to force in the shell holder. The Classic easily handled every reloading chore I threw at it.

I can wholeheartedly recommend the Lee Classic Cast Press as a best quality tool for anyone looking for a heavy duty, cast Iron frame press that will last several lifetimes. The thought and care which went into its design and production, is self-evident. With retailers like www.midwayusa.com selling the Lee Classic Cast Press for \$59.99 it's a true bargain in today's reloading market.

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