

Loading black powder shotgun shells can be fun. Using all brass shotgun hulls is even more fun. The look of gleaming shells is a thing of beauty. My load development follows the methods set forth in Charly Gullet's book *Cowboy Action Shooting*. In this book, Charly outlines the basic methods he uses to load rifle, pistol, and shotgun ammo. The following is a list of the components I use when loading:

Magtech hulls	Large pistol magnum primers
Goex 2f black powder	7 ½ shot
Beeswax wad	Optional paper shot cup
½" fiber wad 11ga	¼" filler wad 12 ga
1/8" felt wad	Overshot wad 10 ga

I have been using Magtech brass shotgun hulls for several years and have yet to have a problem with them (except after stepping on one). The fiber, felt, overshot, and filler wads are purchased from Ballistic Products, and the paper shot cup is homemade. When I first started loading the shotgun, I used equal amounts of powder and shot (by volume, not weight). I



Components from Ballistic Products

patterned this load and found some pretty big holes in the pattern, so I increased the shot load which tightened the pattern and removed the large holes. Adding the paper shot cup has tightened the pattern even more. Now I usually can take down knock down targets easily, if I do my part.

STARTING OUT



De-priming tool and wood block

In a way, the loading process for me starts at the range when I am done shooting. The first step is to remove the primers, using a homemade tool. After I de-prime all the shotgun hulls, I place them in a plastic container filled with a mix of water and Simple Green. The drive back home seems to shake things up enough so only a little more cleaning is needed. I rinse the hulls and wipe off the residue from the outside and then, using a mop, give the

insides a quick scrubbing. I place them on a baking sheet and put them in the oven at the lowest setting (170 degrees in my oven) for 2 hours or until dry. They then go into a Hornady tumbler for an overnight cleaning. When I remove them, I occasionally find some sticky residue inside the hulls; this is cleaned with a cotton swab and some brake clean. Normally, I have a bunch of bright shiny hulls that look like new.

SIZING & PRIMING

Using a CH4D sizing die in a Lee Classic Cast Press, I resize the brass shells. The RCBS die has a threaded bushing for resizing, but I leave the die setup to do the



Resizing shell

crimping, and I only use the CH4D die to resize. To make the resizing easier, I place the shells in a loading block from Ballistic Products and spray them with Hornady's One Shot case lube. After sizing the case, on the down stroke I insert the primer. On new shells, the primer pocket can be tight, and I seem to smash a few primers in the process. As the cases get used, the primer pockets seem to loosen up a bit, and the primers insert more easily.



Shells sprayed with lube

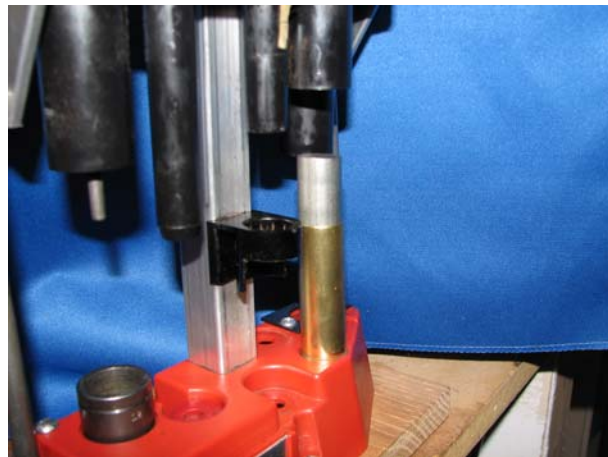
LOADING

Using a Lyman Black Powder dispenser, I load each shell with the desired amount of powder. I use the loading blocks and usually dispense powder in all 25 cases at a sitting. On top of the powder, I place a beeswax wad. Purchase a flat sheet of medium brood foundation beeswax from a beekeeping supply house. The wad is made either by using the case mouth of the shell as a die to cut the wax or by using a 3/4" punch, cutting out the number required before loading the shells. Following the beeswax



Brass shell, black powder, beeswax wad, felt wad, 1/2" and 1/4" filler wads, shot, homemade shot cup and over shot wad

wad is a 1/8" felt wad that has been saturated with Wonder Lube. [The beeswax helps to prevent lube migration into the black powder from the felt wad and also adds some anti-fouling characteristics.] On top of the lube wad is the 1/2" fiber wad and the 1/4" filler wad. These are all tamped down with a piece of 3/4" diameter bar stock (left over from making the de-priming tool). An important thing to note as these wads are being placed inside the hull is that they stay square with the sides and do not tip down at an angle. If they become cocked to one side, they must be removed and reset in place. Once all the other wads are in place, the optional paper shot cup can be inserted. Now add shot. I use the Lee Load-all II to dispense the shot and also to put an even amount of pressure on the wad column. On top of the shot goes the overshot wad. [I have labeled mine using a stamp available from Ballistic Products; other stamps can be found at craft stores.] I now square the overshot wad using a short section of 3/4" diameter bar stock and an arbor press. The Lee Load-all II can also be used for this step, but I prefer the results I obtain with the arbor press.



Using arbor press & Lee Load-all II to square overshot wads

FINAL STEPS

After squaring the shot wad on top of the case, I use an RCBS die to place a slight crimp on the case mouth. This will not hold the shot wad in place, so a method of gluing them in place is needed. I use a liberal amount of clear nail polish for gluing them in place. This is not the cheapest glue to use, but it provides a nice finish, color options are vast, and one bottle will do 25 shells, so no worrying about the glue drying out on you. I normally let the shells dry overnight before boxing them up. I use

Putting slight crimp on shell with RCBS Die



a Hornady shell stacker to stack the shells in and then slide the box over them, date stamping the bottom of each box with the date loaded.

ADDITIONAL DETAILS

Paper shot cups: These may seem labor intensive but have helped with knock down targets. I make them by first cutting a brown paper bag into 1- $\frac{1}{4}$ " wide strips. These are then cut to a length of 2- $\frac{1}{2}$ ". I now wrap them around a $\frac{5}{8}$ " punch, leaving about $\frac{1}{4}$ " of the end overhanging and taping it in place using regular Scotch tape. The overhanging end is then flattened and taped closed. That's it. They are easy to make in large batches and a great way to fill in time during commercials.



Punch, paper and finished shot cup

De-priming tool: Made from $\frac{3}{4}$ " diameter steel bar stock. I drill a hole in the end and press fit into it a roller bearing from a universal joint. This is also soldered in place, just to be sure. The inside walls of the cases are not perfectly straight, so the de-priming tool needs to be tapered. I first mark the end to be tapered with a circle, and then head to the bench grinder and rough cut the end. I use a file and a buffing wheel to smooth things over and make sure it fits inside the case. A base block is needed to knock the spent primers into. This can be made from wood with the appropriate size holes drilled to accept the case head. Also drill a clearance hole for the primers to drop out of and another hole for them to collect in. I use a rubber mallet to drive the primers out so I do not mar the de-priming tool.



De-priming tool, shell and wood block drilled on both sides

Wads: The $\frac{1}{4}$ " filler wad is optional, but your pattern may change. I mainly use it for a uniform fill height in the shells. I don't like it to look like the shell is not full.

Patterning: I would strongly recommend you check the pattern of your load anytime you change something. You sight in your pistols and rifles--think of this as sighting in your shotgun. You may be surprised (or not) about how your shotgun shoots. I place cardboard at normal shotgun target range and shoot at them to see the different load patterns.

CLOSING THOUGHTS

Please remember to use safe methods when loading and shooting. I have purposely left off my specific load data as your results will vary from mine. Some trial and error is to be expected in developing black powder shotgun loads. I give you these ideas as they have worked for me, but they may not work for you. If nothing else, they will give you a starting point.



Overshot wads, stamp and nail polish



RCBS and CH4D dies



Finished shells on Horandy shell stacker ready to be put in box