

Dixie *Slugs*

Home of the Original Terminator

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The .357 Magnum and Hard Cast Bullets

"The Hunter/Shooter that says a properly loaded .357 Magnum is not a viable hunting cartridge for medium game is either uninformed or has never used one...JCG"

I will not belabor you with the history or introduction with the .357 Magnum. All that has been hashed out enough! The purpose of this write up is to make you aware of how to properly set up your handgun to use hard cast heat treated bullets. You must first decide if your handgun is to be used with hard cast or jacketed bullets, they don't mix well!

So, let's assume you have decided to set it up for hard cast heated bullets! The first consideration is the handgun, assuming it is a revolver. In order to get the full potential from your handgun, heavy weight bullets are in order. This means the pressure will be high, but safe. Certain models have proven to be best. Smith & Wesson's Mod. 686's, Mod 28's, and mod 37's are the best of that company. Ruger Single Actions and double Action .357 Magnum revolvers meet the criteria for strength also.

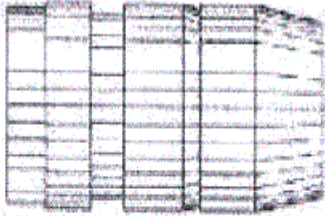
The next is some mechanics. All of the chamber throats must be exactly the same diameter! This is the single most important factor in accurate hard cast shooting! Everything else follows suit! Some people can do this themselves, but is best done buy a qualified gunsmith, if you can find one. If not, send the gun back to the factory custom shop.

The next concern is the bore. Some models have high spots where the barrel is screwed into the frame, etc. Unless this is severe, leave it alone. Have your gunsmith check this. The smith should also tell you what the exact chamber throats are. We will discuss this later.

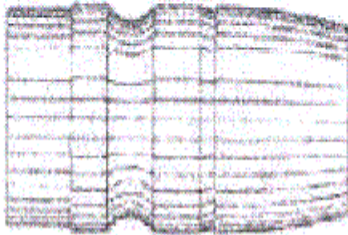
We are now ready to prepare the revolver's bore for hard cast. First of all, all copper fouling must be removed and I mean all! There are various cleaning solutions that work; the best I have used is Shooters Choice. Spend plenty of time on this! Once you can see no copper fouling, it is time for the next procedure. This is done with a tight patch and Flitz (paste). Saturate the patch with Flitz and give the bore a good working over. Spend twice as much time as you think is needed. This procedure will not remove any metal from the bore, but will burnish the surfaces of the land and grooves! After all this is done, you are ready to consider hunting bullets.

Over the years, I have hunted and tested many .357 Magnum hard cast bullets. None were what I considered the best, so I set about designing specialized heavy hard cast examples. Elmer Keith's designs were the best, but did not have the meplat area needed for the best

tissue destruction. Working with my friend, John Anderson of Rock Island Ballistics, a series of specialized hard cast bullets were designed. The following samples are for the .357 Magnum and are game bullets... ..Pure and Simple!



This is the .358" 180 gr. Semi-Truncated Cone Wadcutter GC. It has a meplat of .290" and a Sectional Density of .201 which makes this bullet an excellent game design, giving deep penetration along with adequate tissue damage. This bullet is designed to feed in the Marlin rifles. Excellent in handguns! Meplat Area @ .0661 sq. in.



This is the .358" 175 gr. "X"reme Meplat Cast GC. It has a meplat of .300" designed for maximum tissue damage in the .357 Magnum. With a Sectional Density of .195, it will drive deep and insure a large permanent wound channel! Meplat Area @ .0707 sq. in.

Notice the meplat diameter and area, compared to other .357 Magnum hard cast bullets. These bullets have been used for deer and wild hogs.

If you reload, some consideration is in order when selecting your brass cases. You will note that these bullets are a full .358" diameter and thinner brass cases are better than the thicker nickel case. Midway makes excellent brass cases. There are some powders that excel with these heavy bullets, namely WW296 and Hodgdon Lil'Gun. Magnum primers should be used with these powders. All recent loading manuals have loads using these powders.

Most Shooter/Hunters are not aware of the fact that hard cast bullets can be pushed to a higher velocity than an equal weight jacketed bullet with the same pressure. This is due to less friction with the hard cast vs. jacketed bullets. This alone is a plus factor for hard cast! Concerning the chamber throats diameters, the sized diameter of the hard cast bullet should be the same diameter of the chamber throats, or no more than .002" larger. Never Less!

Some ballistic exercises to consider:

Gates Force Factor

Over the years there have been dubious calculations applied to External Ballistics, the worse being the "Steam Boat" formulator Kinetic Energy!

This says a bullet a certain weight and velocity develops a certain Kinetic Energy (ft. lbs), regardless of it being a solid, hollow point, or soft point or whether it expands or not! Any hunter that has done "Gut-Pile Analysis"

knows better! Water in tissue can't be compressed, only moved! Meplat Area causes the movement of the water in tissue. The more water moved the more tissue damage.

Tissue damage is a product of Velocity and Meplat Area, where Penetration is a product of sectional Density and Velocity! The property designed handgun bullet balances these important two requirements!

Here is a formula to calculate Force Factor used in comparing one bullet's design against another.

(Wgt. of Bullet in grs. divided by 7000) X Velocity X Meplat Area = Factor)

Conclusion

I can only hope that I have cleared the air concerning the use of the .357 Magnum on medium game. There are other considerations like controllability. If you can't shoot well, you can't hit well! Even with a full power heavy cast bullet loads, the .357 Magnum's recoil can be controlled well. Is it better than larger caliber? Maybe and maybe not! Again the controllability factor comes into play! Is it capable of use on wild hogs and deer? Absolutely!

James C Gates - Dixie Slugs

