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Common Handgun Bullet Styles

There are as many different styles or types of handgun bullets as there are people to make and shoot them. Sometimes the terminology describing the bullets is misused or the wrong terms are used to describe a bullet. While this may not matter much to the shooter it can be a problem if someone is making swaging dies and a customer uses the wrong word or words to describe what is wanted.

This is a short explanation of common handgun bullet types.



To the left is a 45 caliber bullet that is a true one-half jacketed bullet. Usually just called a half jacketed bullet. The nose or ogive of the bullet can be about anything that is wanted. Common nose shapes are a conical, truncated conical, Keith style, round nose, round nose-flat tip, target wadcutter, button nose wadcutter, and any number of custom shapes. The base of the bullet is most often flat but sometimes a cup base is used, much less often a dish base, and rarely a true hollow base. The defining feature of the half jacketed bullet is that the jacket only covers about one-half of the bearing of the bullet. As can be seen in the photo the jacket is just a bit more than half of the bullet's bearing leaving a considerable amount of lead exposed to the gun barrel. This is a rather inferior design of bullet as the exposed lead can foul the barrel more than a cast lubricated bullet, it is more costly than a cast bullet, and the lead core can sometimes pull out of the jacket when the gun recoils leaving an empty jacket in the cartridge.



An improvement on the half jacketed bullet is the three-quarter or partially jacketed bullet. Here the bullet jacket is longer and almost completely covers the bearing of the bullet. A small amount of lead must be exposed beyond the jacket mouth to prevent crushing the jacket when the lead core is seated. Like the half jacketed bullet any base style can be used and the nose shapes are nearly unlimited. Because the jacket covers almost all of the bearing there is less fouling of the barrel. The core of the bullet can still pull out under recoil leaving an empty jacket in the cartridge but the longer jacket grips the core better lessening the problem.

The half jacketed and three-quarter jacketed bullets are formed by first swaging a lead core in a core swage die and then seating the core in a core seat die. Any base and nose forming punch can be used however there are a few styles that work well and are usually used.

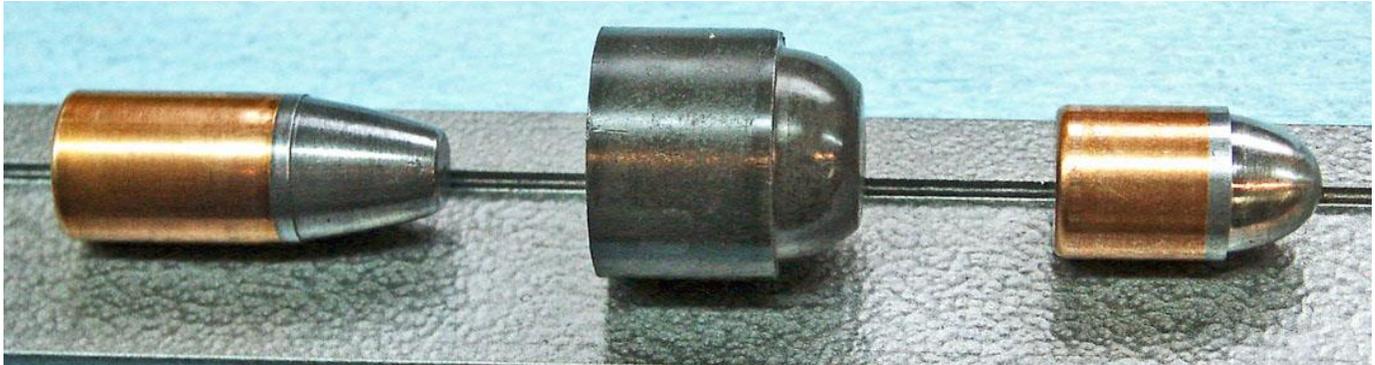


This is a fully jacketed bullet which is often incorrectly called an FMJ or Full Metal Jacket. This bullet has the jacket cover most of the ogive leaving the front of the bullet open. The bullet can have a hollow point, or an open tip, or a solid lead tip. The amount of lead exposed at the front of the bullet can vary but always the ogive will be covered by the jacket enough to prevent leading of the gun bore. The base of the bullet is covered by the jacket. The base can be flat or cupped.



The FMJ or Full Metal Jacket bullet has the ogive completely covered by the jacket. There is no exposed lead, no opening at the front of the bullet, and by design the bullet is not expanding. The base of the bullet is open and the core is exposed. Generally the bullet jacket is rolled over and flattened to prevent the jacket from being blown apart by the muzzle blast as the bullet leaves the barrel. This type of

bullet is required by the Hague Conventions of 1899 and 1907 for military use to limit unnecessary suffering in war. It is less effective for hunting or defense than a flat tip or hollow point bullet and given that civilians are not restricted by the Hague Conventions there is almost no need to use a true FMJ bullet.



The picture above is of a 458 rifle bullet, a 12 ga. shotgun slug, and a 45 pistol bullet. The bullets are all Semi-Wadcutter (SWC) bullets. It doesn't matter what caliber they are. It doesn't matter if they are long slugs for a rifle or short ones for a handgun. It doesn't matter if they are metal jacketed, paper patched, or all lead. What defines them is that they all have a step or shoulder where the bearing of the bullet and the ogive or nose of the bullet meet. All Semi-Wadcutter bullets, often simply SWC, will have the step.



Here is a true Wad Cutter bullet. The bullet is most often all lead with a cup or hollow base. But wadcutter bullets can be jacketed. The wadcutter bullet can have a flat face with no groove but more often has a groove in the bullet's face. The groove can be any width or depth wanted. The center of the face is usually slightly higher than the edge of the face so that when the bullet is seated in the cartridge case the edge will not be distorted. There is no single standard wadcutter bullet so it can be what-ever the maker wants.



This is a semi-wadcutter that has a short nose. It is often called a button nose. The nose shape can be anything that is wanted from a very short round nose to the short truncated conical shown here. The bullet is usually used for light, short range loads and is a good choice for paper punching at fifty yards or less. The bullet in the photo would be considered a three quarter jacketed bullet as the bearing of the bullet is almost completely covered by the jacket.



Another semi-wadcutter style that is popular is the H&G 68 Short. This design has the corners of the bullet's nose more rounded in order to improve feeding when used in autoloading handguns. It is a good short to medium range design and would be an effective defense or hunting bullet. Like most SWC types of bullet it could be made with or without a hollow point.



This is a semi-wadcutter style that has a round nose flat tip. A round nose like a 3/4E ogive is cut off to make a flat tip. The flat tip very much improves the bullet performance for hunting or defense. The rounded profile of the bullet with rounded corners at the flat tip improves feeding. The shape of the round nose can be anything wanted as there is no single round nose design.



A very popular semi-wadcutter is the Keith Style. Most bullet die makers produce a Keith style bullet and not a true Keith design. But Keith was not as concerned with the nose shape as he was with the design of the lube grooves. So long as the bullet had a flat tip he was satisfied. But the bullet shown is what is accepted as a Keith design. The bullet's nose can be longer if heavier bullets are wanted but most often for SWC bullets the nose must be kept a little shorter to keep the bullet balanced. Otherwise the bearing of the bullet will be too short.



This is a 3/4E round nose semi-wadcutter. The name, 3/4E, doesn't mean much of anything but it does indicate the ogive length. The length of the nose would be three quarters of one caliber. In this case the bullet has a diameter of .452" making the length of the nose .339" more or less. The round nose is a less effective defense or game bullet than a flat tipped bullet but it is a common style.



A truncated conical sometimes called a truncated cone or just a TC is shown. The TC style is simply a conical, like an ice cream cone, that has the cone cut off leaving a flat tip. The angle of the cone, the length, and the flat tip width are what-ever is wanted. There is no single TC design. It is a good bullet for most use but no better than the Keith style.



Conical point bullets are sometimes used for handguns. If used in a rifle and with a longer point the bullet would be called a spire point. This one has an 18 degree angle which makes it somewhat long for handgun use. A wider angle and shorter nose would be more common. But once again it is up to the bullet designer and no single design.

These are some of the more common handgun bullet designs. Others are sometimes wanted like the Webley Man Stopper and there is nearly no limit to what can be done. However some designs are of limited usefulness and offer few benefits compared to standard designs.