

## **FMJ? FPS? JHP? JSP? WTF?! – Understanding Ammo Types**

- By Joe Aiello / August 20, 2012

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Gun owners understand that actually having a gun is only part of the equation. Much like a car without gasoline, having a gun without ammo means that you essentially have a very expensive paperweight. Also, your costs for ammo can (and most probably, will) exceed the price you paid for the gun. When considering ammo purchases, you need to be aware of a few factors. Additionally, you will also need to know how to navigate through all the acronyms that are commonly used by manufacturers and understand what they mean.

There is a pattern that you will see over and over again where guns and shooting are concerned: Gauging your needs and selecting the right tool for the job. In my previous article, I explained that the most important consideration when purchasing a firearm is to know what purpose you want it to serve. The exact same thing must be considered when purchasing ammunition.

There are 4 basic points that identify ammunition. They are caliber, velocity, bullet weight and bullet type. Let's define these specific points:

### **Caliber:**

The caliber of the ammunition is the diameter of the bullet (or the diameter of the bore that it is to be used in) expressed in either fractions of an inch or in millimeters. So, a 9mm round is 9 millimeters in diameter, while a .40 caliber round is 0.40 inches in diameter.

While knowing what caliber you need to purchase is important, you must know the full name of the cartridge you need to buy. Only by knowing the full name can you be sure you are purchasing the correct ammunition for your firearm. Case in point: the .45 ACP (aka: the .45 Auto) cartridge is totally different from the .45 Colt. The 9mm NATO (aka: Luger, PARA or 9x19) is totally different from the 9mm Kurtz or the 9mm Makarov. The .38 Special is different from the .38 Colt or the .38 Super. Stamped on the side of your firearm is the full name of the cartridge it is chambered to fire.

### **Velocity:**

Printed on the side of the ammunition box will be the advertised velocity of the cartridges expressed in Feet Per Second (or, "FPS"). Knowing this is very important because, while many cartridges will be manufactured at a "standard velocity", there are times where ammunition may be specifically manufactured to be at either very high or very low velocity. Ammunition of differing velocities will cause changes in how much the gun recoils, how much muzzle flash you experience and will affect the point of impact of the round you fire. This is why you should always store ammunition in its original box and never mix all the rounds together.

A high velocity round can also be designated by a +P or a +P+ at the end of the cartridge name. This means that the ammo is loaded to higher pressures than normal. It is important that you only use +P or +P+ ammo in a firearm that is rated to handle these higher pressures. Your owner's manual should tell you if it is safe to use this ammo in your particular gun. You can also contact the manufacturer to determine if you should be using this ammo. Just be aware that when using higher velocity ammo, you can expect more recoil and you may experience more muzzle flash.

Lower velocity ammo tends to have less recoil, less noise and less muzzle flash. While this may be desirable to most shooters, understand that there are tradeoffs. In a semi-automatic (or, "autoloading") firearm, the use of low velocity ammunition may not generate enough energy to operate the gun's action. This can cause failures and jams while shooting. If you are experiencing consistent malfunctions with your firearm while using low velocity ammunition, you may need to switch to a higher velocity round.

### **Bullet Weight:**

The bullet weight is expressed in "grains". This is the weight of the actual bullet, not the weight of the entire cartridge. So, if you were purchasing .45 ACP ammo and saw that it was, "230gr.", that means the projectile weight of that round is 230 grains (NOT "grams"). A "grain" is a very small unit of measure used in firearms.

Keep in mind that the heavier the bullet, the more recoil you can expect. Bullets of different weight will probably have different points of impact. Also it is almost impossible to tell what the bullet weight is just by looking at the cartridge (as it is impossible to tell the velocity just by looking at the cartridge). So, this is yet another strong reason why you should always store ammo in the original box.

### **Bullet Type:**

There are literally dozens of advertised and marketed types of bullets. It would be a full time job for me to try and keep an updated list of every type available. That being said, most types available can be broken down into three basic categories: "Non-Expanding", "Expanding" and "Frangible".

### **Non-Expanding:**

Non-Expanding rounds are designed to keep their shape on impact. These bullets are generally a solid round made of lead (or may contain a steel core). Lead Round Nose ("LRN"), Wadcutter ("WC") and Semi Wadcutter ("SWC") belong in this category. Sometimes, the bullet core is encased in a copper jacket to help facilitate feeding in the firearm and reduce fouling in the barrel. These are referred to as Full Metal Jacket ("FMJ").

Non-expanding bullets tend to penetrate very deeply and, because they don't deform, make smaller holes in the target. They are also more prone to ricochet because of their design. Because of these characteristics and because they are a simple design that tends to be less expensive, they are best suited for target shooting and practice.

### Expanding:

Expanding rounds are designed to deform and expand on impact. This causes them to create a larger hole in the target and can reduce (or control) excessive penetration. Additionally, their tendency to deform on impact can help reduce (but never eliminate) the chance of ricochet.

Expanding rounds like the Jacketed Soft Point (“JSP”) have a copper jacket that leaves an exposed lead tip. These are designed to expand a little and penetrate more, which is why they are used for hunting. Hollow Points (“HP”) have a hole in the tip that is designed to make the bullet expand a lot and penetrate less, which is preferable for defense. Sometimes, a hollow point round will also have a copper jacket designed to help control the expansion. This would be referred to as a Jacketed Hollow Point (“JHP”).

Because expanding ammo is more expensive to manufacture, it is more expensive to shoot and is even commonly referred to as “premium” ammo. While you can absolutely use it for practice and target shooting, it can be cost prohibitive for the average shooter.

### Frangible:

Relatively new to the scene is Frangible ammo. This ammo is specifically designed to disintegrate in small pieces upon impact. The purpose of this type of ammunition is to give the lowest chance of over-penetration or ricochet.

This ammo tends to be extremely expensive and normally does not equal performance of traditional ammo types. It is for these reasons that it is normally used in specialized training and defensive situations. The Glaser Safety Slug and Shotgun Breaching Rounds are two types of frangible ammunition.

If you are buying ammo for defensive purposes, you must make sure that your choice of ammo will work reliably in your particular gun. A good rule-of-thumb is that you should shoot at least 100 to 200 rounds of your selected defensive ammo in your gun to ensure there are no feeding or reliability issues. Also, this will allow you to gauge how the ammo feels while shooting and where it impacts the target relative to your sights.

Finally, when shopping for ammo (especially if you happen to be shopping online), you may come across non-traditional or exotic ammo. This can be rounds you never heard of, manufacturers that make wild (even unbelievable) performance claims or even rounds that are normally reserved for military applications (like tracers or armor piercing ammo). All and all, these types of ammunition should be avoided. You should buy from only known and reputable manufacturers. There is a very good reason these large companies spend hundreds of millions of dollars in research, testing and development. Additionally, leave the tracers and the armor piercing stuff on the battlefield. Tracer rounds can easily cause fires and if made incorrectly, can cause damage to your firearm. Armor piercing rounds have way too much penetration potential, which is why they are prohibited at virtually every range as they cause massive and dangerous damage to the backstop.

When considering and selecting ammunition, the huge amount of choices out there can be a little overwhelming. This is why it's good to know some of the basics and if you have questions or concerns, you can always seek out knowledgeable people like the staff at Davis Shooting Sports.

I hope this article has been informative and helpful to you. To stay up to date on the latest class schedule, new articles, store specials and news, follow us on Twitter: **@NYGunTraining**.

Stay Safe!

-Joe