

Differences and Similarities of the 500 Auto Max to the 500S&W: Part 1 - About the 500 Auto Max

Some Background Info: [Big Horn Armory's](#) expertise and affinity for big bore cartridges, combined with consumer demand, led to the development of the 500 Auto Max. Greg Buchel, the owner of Big Horn Armory, wanted the power and versatility of the 500 S&W Magnum but in the popular AR platform. The problem was feeding rimmed cartridges from a box magazine is difficult, as is getting them to work with the locking and ejection system on an AR. Working with [Buffalo Bore Ammunition](#), Big Horn Armory developed the 500 Auto Max for use in the new [AR500 AR rifle](#). It is a rimless .500 Smith & Wesson Magnum that will feed from box magazines.

Some Technical Info: There are two main differences between the 500 Auto Max and the 500 S&W Magnum. The first difference is the previously mentioned fact that the 500 Auto Max is rimless. Technically it has a slight rim for a specific reason we'll get to in a minute. But shown side by side you can see the difference between the rim on the 500 S&W Magnum and the 500 Auto Max.



The other notable and critical difference is the 500 Auto Max headspaces on the case mouth with a taper crimp. This is in contrast to the 500 S&W Magnum that headspaces on the case's rim and use a roll crimp. Again, side by side you can see the difference. When properly

headspaced, a rimless cartridge has a slight amount of the case sticking out of the back of the chamber. This is what allows the firearm to use a recessed bolt face and plunger-style ejector.



Left: 500 Auto Max Right: 500 Smith & Wesson Mag

Some Reloading Info: One great thing about the 500 Auto Max is it doesn't require proprietary dies or tooling for reloading. If you're a 500 S&W reloader, you're practically already setup. If you're just getting into it, you just use all of the same dies and tooling for the 500 S&W Magnum.

The first thing to note is the shell holder or shell plate. This is where that slight rim comes into play. Big Horn Armory and Buffalo Bore designed the cartridge to still have enough rim to use the same shell holder and shell plate as the 500 S&W Magnum! These are readily available from most reloading equipment manufacturers.



The second thing to note is the reloading dies. Again, the 500 Auto Max was designed for easy reloading and accessibility by using the same dies as the 500 Smith&Wesson Magnum. As previously mentioned, the 500 Auto Max uses a taper crimp in place of a roll crimp. This is easily done by simply setting the crimping die to perform a taper crimp rather than a roll crimp. For simplicity, the reloader can simply buy a separate crimp die and leave it set to taper crimp the 500 Auto Max. Then it is just a matter of using the desired loading data including power, bullet seating depth, overall cartridge length, etc.



One great thing about the 500 Auto Max is that it is designed to use 500 Smith & Wesson loading data. So, if you have a favorite bullet and load for the 500 Smith & Wesson Magnum, you can now shoot it in a versatile and softer shooting AR platform, the 500 Auto Max!