Swaged Paper Patch Bullets: The Ultimate in Accuracy!

Benchrest shooters of the 1800's first discovered the inherent precision of the swaged bullet for use in their long range "slug" guns. The early "pound" dies, in which lead was made to flow at room temperature by striking a hardened steel piston with a large brass mallet, proved beyond any doubt that swaging was the more accurate way to form a bullet. Corbin's modern dies make the process easy:

The 1-inch diameter -S dies can be used with alloys up to Bhn 8-10 (depending on shape and caliber), and are recommended for calibers up to .458 diameter. The -S dies fit the S-Press (CSP-1), or the Hydro-Mite (CSP-1H) press.

The 1.5-inch diameter -H dies can handle any lead alloy, and can be used to make calibers as large as 1-inch diameter. These dies fit either the Mega-Mite (CSP-2), the Hydro Junior (CSP-2H), or the Hydro-Press (CHP-1).

The correct diameter of swage die depends on the thickness of paper, and on the fit you wish to achieve in your bore. Some shooters like the finished bullet to be a push fit down the bore. But for breech-loaders, the best fit is normally such that the bullet itself is an easy fit on top of the rifling. In a 45-70, for example, the bullet swage die would make a .448-inch bullet. You would then wrap twice with 0.0025-thick paper to make a final diameter of .458, exactly to the bottom of the grooves.

A rule of thumb is to subtract four times the paper thickness from the groove to groove depth, and make the swage die this diameter. That is, die size = bore size + (2 x rifling depth) - (4 x paper thickness). Paper with high linen or cotton content is best, as wood pulp paper tends to tear apart too easily. Quality linen paper can be wet and stretched as thin as .0005 inches!

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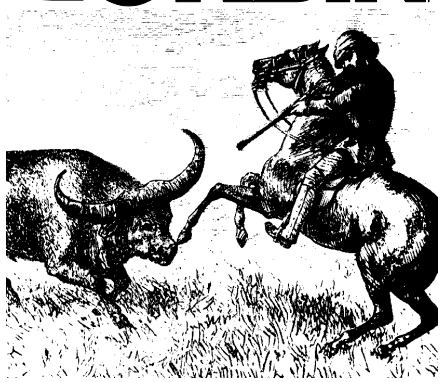

Paper Patched Bullet Swages

Traditional cup-based, 1-E ogive (1-caliber length elliptical curve) bullets with fouling scraper shoulder are swaged precisely using the Corbin LSWC-1-M, -S, or -H die, in a single stroke.

To make bullets having a smooth ogive (no fouling scraper shoulder), you need two dies: the CSW-1 core swage, and the PF-1 point former. You can control the diameter of the meplat (nose flatness)by simple adjustment of the die, and by reversing the bullet for a final, gentle tap to smooth the nose. The traditional design calls for a cup base, into which the "tail" of the patch is rolled.

One swage die set will make almost any weight, while holding the diameter precisely to tolerances up to 100 times tighter than can be achieved with casting. The legendary precision of swaged bullets is easy to achieve with Corbin's modern swaging equipment.

Use Corbin's lead wire to eliminate the fumes and danger of hot lead, or Corbin's piston-and-cylinder core moulds (adjustable weight, multi-cavity) to utilize scrap lead for the raw material.

Swaged bullets are faster to make, as well as more accurate than cast bullets. The precision of swaging comes from flowing metal at constant room temperature instead of melting and cooling it, and the diamond-lapped, high precision swaging dies that form bullets under tons of pressure. Even perfect round balls can be swaged, with the BSK-1 ball swage kit.