

Crimping Hammer Bullets (10-4-20)

1. Crimping pretty much never hurts performance, and usually improves it.
2. Use the Lee FCD crimp die. To prep the die:
 - a. wipe clean and lube the crimp die before its first use;
 - b. lube by putting a small amount of grease where the exterior of the collet fingers contact/rub the interior shoulder of the die body;
 - c. with a black Sharpie marker, make a mark on the die ring every 1/8T (T=turn) for reference when adjusting the die;
 - d. no modifications or further final finishing is needed with the Lee FCD.
3. To initially set the Lee FCD crimp die:
 - a. raise a loaded round to the top of the press stroke;
 - b. screw the crimp die down onto the round until the collet fingers come into really-snug hand-tight contact with the case mouth. This is the "zero" setting;
 - c. mark the crimp die body in line with one of the 1/8T marks;
 - d. lower the ram;
 - e. tighten the crimp die another 1/8 turn. This would be the "1/8T" setting. Though not visible and barely felt when applying, this produces a "light crimp", and is a good starting baseline for most all Hammer bullets.
4. If the rim of the case mouth falls on a top or a side of a ridge of a Parabolic Drag Reduction "ridge", crimping may change the bullet seating depth. This is especially true at deeper crimp depths.
5. Due to #4, preferably crimp the case rim into one of the valleys of the bullet to maintain a constant bullet seating depth as crimp is increased.
6. Start with a 1/8T crimp at the beginning of load development for Hammer bullets.
7. You should see some improvement in velocity and groups with the initial 1/8T crimp, but, the performance will probably continue to improve by experimenting with more crimp after load development in #6. And, there will be an optimum specific crimp where you will see dramatic improvement, before further crimping degrades performance.
8. As you increase the amount of crimp, groups will tighten up, and, then, loosen, again – just like going up in powder charge. In addition to tighter groups, you should also see faster velocities and lower ES with crimping.
9. To quickly find a good crimp setting, first do two 1/8T steps, then do a 1/2T step. Of course, going in all 1/8T steps until groups start to open up will be the best for fine tuning.
10. In addition to crimping, seating Hammer bullets deeper usually helps. Unless a specific optimum seating depth has already been found, consider starting load development with a bullet seating depth so that the rim of the case mouth is crimped into the PDR valley closest to the bullet nose.
11. In addition to crimping, tighter neck tension with Hammer bullets usually helps. .004" is a good starting value.
12. It is theorized that crimping helps because Hammer bullets tend to release at lower pressures. Crimping helps retain the bullet for just a little longer so the powder burn becomes well established, resulting in a more uniform pressure at which the bullet is released and engraves into the lands. Accordingly, the less bearing surface a Hammer bullet design has, the more likely crimping will improve its performance.