

<https://www.loaddevelopment.com/preparing-brass-for-reloading/>

What load development method do you use to find a new load?

I am pretty old school, and will set my starting charge. Work up in .2-.3gr increments until start getting pressure. Usually about 10 shots for this. During this I will chrono and log the velocities looking for wide flat spots. Once I get a target window I will drop a couple grains below and load up .2-.3 grains thru the load and again I go a few grain above the node. Loading 3 rounds per test weight seated with .020-.030" jump on the bullet.

An example for my dasher load would look like this: 31-31.8 Varget with a 109 berger Hybrid.

3 shots 31, 31.3, 31.6, 31.8.

At this point I will already have an idea what the rifle is liking. I will then pick the middle of the node. Test .020 and .060" jump.

Most of the time I have had good luck around .050-060" jump with Berger bullets. Don't be afraid to jump the bullet.

Now that I have the optimal range. I will take the 3 test loads and shoot at 740 yds which is the distance I can use on a buddy's farm.

I have never been a fantastic group shooter so I will sometimes make a couple trips on different days just to confirm there wasn't a fluke group.

I will usually load 10 rds of each test weight. For example again on my Dasher 31.3, 31.5, 31.7, shooting 5 shot groups from low charge to high. Go down range to take notes while the rifle cools. Then I will shoot the charges in reverse order from high to low 5 shot groups.

Another thing I tend to differ on is I don't get too wrapped up in SD numbers. I watch how the rifle groups more than numbers. I have seen on couple occasions that I have a charge that has a lower SD like in the 2 range but the charge weight with an SD of 6 will be more consistent at distance so that's what I roll with.

What sequence do you follow when reloading fired brass?

First, I always toss my brass into a simple tumbler with corn cob media. Nothing special, just trying to get all the match dust and crap off of it. Next, I'll decap with a universal decapping die and set get the brass into reloading blocks. After that, each tray gets sprayed down with Hornady's One Shot or I may use dry lube to prep them for heading into the FL sizing dies. The brass then goes through the FL die with the correct neck bushing and checked periodically with a comparator to make sure I'm getting the correct shoulder bump that I like to be at. For me, that's two thou. Some people do less, some people do more, but one thing you'll never hear me say, is that all I did was neck size. Never. Ever.

With sizing complete, it goes into a separate tumbler, still with corn cob media, and tumbled again. I don't like having residue from One Shot on the case, so I choose to tumble it. You don't have to, it's just my personal preference. From tumbling, the primer pockets get checked for debris such as media stuck in the flash hole, or excessive carbon build up. It's very rare I use a primer pocket cleaner, but sometimes it's necessary.

The brass then gets chamfered and deburred necks, and set off to the side to be primed. I still use a traditional hand priming tool for PRS/NRL brass and the same type of priming tool for F Class, but

equipped with a pressure gauge so I can control which brass makes the grade. If the pockets are too loose (PRS or F Class) it's either set to the side, or goes directly into the scrap bin. The ones set to the side I use for wildcat development fireforming.

After priming, the cases get set on the granite plate which is the powder section of my benches, and I begin to set up my scales for whatever powder/weight I'll be throwing. I use a combination of different scales, but my go-to's are the Auto Trickle's over a Sartorius. In my opinion, the Sartorius and FX-120i setups are overkill for practical matches, but I can't deny the consistency or speed.

Once powder has been thrown, they head over to arbor presses for seating. I seat mainly with chamber style dies due to the consistency and concentricity. Plus they are, in my opinion, so much faster than seating on a regular press. After coming out of the die, I check every single round for seating depth. I know a bunch of people right now are rolling their eyes, but I'm anal about seating depth. That may just be the riflesmith in me, but I want it to be on the number.

Finally, I check a couple pieces in my rifle to ensure everything's good to go (Firing pin removed from bolt). Nothing worse than getting to a match and your brass won't chamber because you didn't bump the shoulders enough, or seat the bullet far enough back

Do you anneal your brass and why?

I do, but not as often as others might. I generally have it annealed every 5 – 7 firings. Reason for that is, I build all of my rifles. I have wonderful sponsors, but I'm the one spinning the barrels and cutting the chambers. I know how tight of headspace I keep with each barrel that leaves my business. With my personal stuff, and the guys that I sponsor, each barrel has a tight tight headspace. What that means, is I can generally get more brass life out of that brass due to it not stretching like how a SAAMI spec chamber from a manufacturer might.

In my opinion, that gives me a little leeway with my annealing schedule, and so far I haven't had any issues. Matter of fact, I had a previous lot of Lapua brass that lasted for 37 firings before finally giving up the ghost and finding the scrap bin. All that brass was on the 5 – 7 firing rotation. Good enough for me.