



# Dan Wesson Forum

Reloading Roundtable

Equipment Basics

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## So what's the deal with all the different types of presses?

### Single Stage?

**Mike:** Hands down the RCBS RockChucker wins every time. Used and abused you cannot wear one out. I have a few of them and used them for heavy resizing, forming cases, and accuracy work. Built like a tank, and compound leverage for heavy duty use.

**Dean:** I prefer the single-stage press for load development. For small batches, I still use the single-stage press a lot...it is easier to initially set up than changing all the dies or toolheads and priming bars, powder charge bars, etc. For super-accuracy loading, nothing beats Wilson hand dies and an arbor press, like those made by Sinclair. They are slow and tedious, but they make perfect ammo.

**LB:** RCBS 2. My first and still the only press I have ever needed. It's simple, strong, with very few parts to wear out. I can't begin to imagine how many strokes the handle it has had over 25 years of use. I have never found a caliber it won't handle, probably wouldn't do a 50 BMG but I don't have one of those. Maintenance is easy, a little oil now and then and wiper her off once in a while.

**Phil:** I have an RCBS Rock Chucker as well as an RCBS single stage non-Rockchucker, don't remember the model

### Turret?

**Dean:** Nothing beats the Redding T-7 turret press, period

**Mike:** I used to have a Lyman turret, and it served it's purpose, but it never really grew on me. Good for running batches of ammo fairly quickly, as you can do it in stages.

**Andrew:** I do all my loading on a Lee Classic Turret. I love it. I don't personally use the auto-index feature, so I use mine more like a single stage with "really quick change dies"

### Progressive?

**Mike:** Back in the day I had a few Dillon 550's... thought they were great, but pricey. One day I tried a buddies cheap, crappy LEE 1000 and I fell in love with it—I now own 3 of them. They run flawlessly if you take the time to set them up properly and keep them lubed. I use them for all my 38/357 and 9mm loads. Sometimes I run big batches of 223 also. No telling how many zillion rounds the 9mm press has through it. You get a bullet with every pull of the handle, and it is fully automatic. Oh yeah, I sold the Dillons right after I tried the LEE.

**Andrew:** I've never used one. I have friends who use Dillon 550s to load large quantities of .45ACP, and can't stop cranking them out.

**Dean:** A Dillon press is the best out there for a progressive. The 550B and up can use any manufacturers die sets and will load rifle and pistol cartridges. I don't need the high-volume loading of a Dillon 650, so the 550B is perfect for me. It handles rifle and pistol cartridges easily. It is a manual indexing press, which for me is better, as I control the shellplate...any changes or possible errors are quickly made without risking a loaded round and no powder. One must be more careful with an auto-indexing press to be sure each operation is done on each



case. If you need to pause and back up to check something, it is a bit more demanding to get it going correctly again.

**Dean:** The only maintenance required for most presses is to clean them once in awhile. You will get primer dust, tumbling media, brass shavings, and bullet shavings on them through normal use. Clean them, and keep the press ram especially, clean and lubed. My Dillon gets the recommended 10W-30 motor oil lube on the ram a couple times a year. I have never broken a press, but occasionally, I will tear apart my single-stage and give it a thorough cleaning.

## What are the different kinds of dies all about? Do they need special care?

**LB:** Carbide dies are nice as there is no need to lube, but either work fine. Bottle neck cartridges usually use two dies and straight wall cases usually use 3 dies. Some guys use a fourth die to crimp separately from the bullet seating as a matter of preference. Anything can break or wear out but it has never happened with any of mine except for de-capping pins.

**Mike:** I'm pretty much an RCBS fan, but I have just about every brand of die out there. I definitely prefer Carbide, but I still have some old steel dies that require lots of lube. Most of my pistol are 3 die sets as well as a few rifle. My accuracy stuff also includes neck sizing dies only. I usually polish the insides of my accuracy dies to make them perfect. If you actually wear out a set of dies... Congratulations!!! I reload A LOT, and I've never worn out any dies—take care of them and they take care of you.

**Phil:** All my straight wall pistol dies are carbide, I hate case lubing. I have primarily RCBS dies, but all my Supermag dies are Redding. I have a few sets of Lee dies, but I would not buy them again, I do not like their performance when it comes to creating consistent cartridges. I do take the dies apart every so often and clean them thoroughly with a solvent to get all the grime out of them so they don't score cases. The seating dies especially get a build up when using lubed lead bullets and need cleaned frequently.

**Dean:** If there are carbide dies available, I will get them. Lubing cases is not one of my favorite tasks, so the carbide, or equivalent is a lot faster for me. Titanium Nitride or Titanium Carbide, by other manufactures do the same thing...size without the need to lube straight-wall cases. For bottleneck cases, I replace the sizing button with a Carbide one for smoother neck-sizing. They are available from Redding and RCBS. I have never broken any dies, regardless of manufacturer, but you need to keep them clean. They have a preservative when new which must be cleaned off before use. Usually, once a year I will clean the insides of the dies, more often if cast bullets are used.

**Andrew:** I almost always buy the Lee Deluxe 4 die sets (with the factory crimp die.) If you are reloading using military brass (9mm, 5.56mm, 7.62mm) be careful with the decapping pins. I had a bad run where I broke several on my .308 sizing die. Carbide dies are so much easier for pistol rounds. No need to lube the cases.

You can't go wrong with the Lee Factory Crimp die. It costs 19.99, and easily crimps rounds as hard as you want. The pistol Factory crimp die also resizes the loaded rounds to remove any bulges that may result from overcrimping.



**Dean:** As far as the number of dies in the set, a 2-die for rifle and a 3-die for pistol are adequate. The third die, the neck-sizer on rifle sets, or the fourth die for pistols, the separate crimp die, is usually not used by me. I prefer bushing-type neck-sizing dies for rifles and my pistol cases are crimped separately with a Redding Profile Crimp die.

## I know there are different ways to measure powder...

### Scales? Powder measures/droppers?

**Andrew:** I use a Lyman DPS 3. It integrates a scale and powder dropper. It is a little slow on small charges, but great for large capacity rifle rounds. It is very accurate with all types of powder, and I can store pet loads in its memory.

**Phil:** I have an RCBS Little Dandy powder dispenser that utilizes preset numbered charge holders. It comes with a chart that is a guide only that lists many powders and what each numbered charge holder should deliver. I only use this on target velocity rounds when mass producing them, such as 45 ACP and 38 special and 45 Colt. This tool is not intended for the most extreme in accuracy in my opinion, just mass production for a single stage loader like me.

I also have a Redding pistol / rifle powder measure that I use for most everything else, it is an adjustable dial type measure and has two different charge holders for different types of powder and different volumes. This is used for all my other loading except very large rifle cases and loads that are on the edge of "hot". In those two instances, I hand weigh each charge so no errors occur. In those instances as well, they are not mass produced so the extra time spent is not a real inconvenience.

**Dean:** Measures work by volume, which we convert to grains, so depending on atmospheric conditions in your reloading room; they may need to be re-adjusted on different days. Most scales come with check weights...use them to setup your scale and verify accuracy. I find the powder dippers to be the least accurate in throwing repeatable charges, consistent technique is critical and difficult to maintain. Most quality measures will throw charges within a tenth of a grain difference.

My preference is for the powder measures with a micrometer adjustment on them. After getting the correct charge, I record the micrometer setting for future uses. I made up a spreadsheet for my measure to record all the settings for each powder I use and each amount. This will get me right on the next time I reload, as long as I am using the same lot of powder, but I will still verify the accuracy with the scale before I load cases. New lots of powder will have somewhat different settings, but the spreadsheet will get me close. My favorite measure is the Redding 3BR and Redding BR30. I have two 3BR measures, one for rifles and the other with the pistol metering drum in it.

**LB:** I use a balance beam scale, I recently purchased an electronic scale but have yet to try it out. For load development I measure each load. For proven loads I check every 10<sup>th</sup> charge from a powder drop for consistency. When I first started, I used the graduated scoops which are OK for plinking ammo, but most reloaders (as I did) will want more options and better consistency if they continue to load for long.



## Please tell me about reloading manuals.

**LB:** Most reloading data is provided by the bullet manufactures. The data is fairly consistent from book to book but will vary some. New editions will include new powders and bullet types and also new cartridges. The books tend to be conservative for liability reasons and *one needs to be very familiar with signs of excessive pressure and use extreme caution when venturing outside of published data.*

**Dean:** All the reloading manuals have great info for the beginning reloader. That should be the first thing they read after purchasing them. I suggest getting more than 1 manual, there are some from bullet manufacturers and others from the powder manufacturers. All manuals are not the same in the data, because each one uses different test firearms, and may use different components for each cartridge than the other ones do. Variations in brass brand, bullet and powder brands, even primer brands can all result in much different maximum loads for a specific cartridge. That is why you need several, for cross-checking purposes, and why *they ALL recommend starting at a reduced setting and working up carefully in YOUR gun.* I have seen some manuals starting loads that exceeded the recommended maximum load in another manual.

**Phil:** This is an area that I have found to be very frustrating. I have found most manuals to vary greatly and are not consistent at all. I have used the Sierra manuals for years but have read recently that great caution should be taken when using their data as the printed data has not always been tried, but just calculated on what should be the result. I have more recently been following the data from the powder manufacturers such as Hodgdon's load data. When loading more obscure rounds such as the Supermags, the hunt for legitimate data is left to internet finds and shared data from other shooters

**Mike:** I'm probably the wrong guy to answer this... USE LOADS AT YOUR OWN RISK !!! I have a ton of load books... reason is they are all different. Each company uses a particular load/brass/gun/temp/etc when they publish a load. I personally prefer all my OLD books (pre 1980's)—reason? Lawyers were not as involved back then. The old books have REAL loads, with much higher velocities and loads. *I also use the internet for a lot of load data, but with caution—you don't know who published the data.*

**Andrew:** I'd say buy as many manuals as you can get your hands on. You can learn a little bit from each different one. The Lyman manuals are excellent for cast bullets, the Barnes manual is indispensable if you load Barnes bullets (being all copper, many of their bullets don't "track" with other bullets of similar weight and conventional construction), and the Sierra manual is the easiest to read, in my opinion (it's also the only one I've seen that has .445 SuperMag)

I have noticed changes in some manuals, either with new bullets/cartridges on the market, or updating loads. I have never seen max loads go up, only down in revisions.

The companies that produce these manuals exhaustively test all sorts of loads in both production guns, and test barrels (used to measure pressure). I haven't ever seen a load in a reloading manual that is at SAAMI max pressure for that given cartridge. They are typically much lower.

*(Please note that the consistent message in this is to research, cross reference, start low and slow, and work up to the safe load performance you are looking for. Pay attention to your work, without distraction, and evaluate each step for the SAFE performance you seek. Please excuse the obligatory DWF Safety Disclaimer-Steve)*



## How many (and which) manuals do you use regularly? How many manuals do you have?

**Dean:** I have the Sierra, Hornady, Nosler, Hodgdon, and Speer manuals. All will be consulted for every new cartridge I add to my reloading bench. Most of what I have has already been well established, but I still keep current versions on the shelf. There is a lot of online data available to the reloader from these manufacturers that is the most up-to-date info until a newer version gets in print.

**Phil:** I use Sierra, Lyman, Hodgdon, Speer, an entire three ring binder of downloaded articles from the internet, and several of the little loading manuals that are caliber specific that A&J Book sellers sells on GB all the time.

**LB:** Approximately 10, but I use mostly Speer and Hornady

**Andrew:** Lyman Pistol and Revolver, Sierra, Speer, Hornady, and Barnes. I'm an edition behind on Hornady and Barnes, and need to update. I don't think you can have too many manuals.

**Mike:** I use the Lyman cast bullet guide a lot, as well as the Sierra load books—I'm a Sierra fan for accuracy stuff, so I stick with their books. I don't know how many books I have, but they occupy a few shelves in the loading room.

## Out of all those manuals, pick the one that is your essential, "must have" manual.

**Andrew:** Pistol, I couldn't do without my Lyman Pistol and Revolver manual. Rifle, I couldn't do without my Sierra manual. For the best of both worlds, I recommend the Sierra manual.

**Dean:** I would pick either the current Sierra Manual or the Hornady manual

**LB:** It's a coin toss between the Speer and Hornady books.

**Mike:** I'd say the Lyman cast bullet manual—lots of data, and it is specifically designed around every cast bullet on the planet. They still publish data for a lot of the older powders that I use also. Try and find some of the good old powders (that are still made) in some of the new load books.

**Phil:** I just put a statement about Sierra above and said it is not always to be trusted, BUT if I had to take just one manual, it would be my Sierra, they are the only one that has listed consistently over the years all four of the Supermags and I have used loads out of this book and never damaged myself or any guns. With any other manual you would be left in the cold on the Supermags



## **I am a Beginner Reloader. Please pick a “Bundled Kit” for me to get started with.**

**I want something that I can afford, and will grow with me as I get more experienced. I am a handgun shooter, but expect to reload for some centerfire rifle in the future.**

**LB:** I would recommend the RCBS Rock Chucker Supreme kit, It comes with a Speer manual, rock chucker press, scale, powder drop, hand priming tool, lube pad and lube, loading block, powder funnel and de-burring tool. For around \$325. All you need then is components.

**Dean:** I would pick from either the Hornady Lock-N-Load Classic Single-Stage kit or the RCBS Rock Chucker Supreme Single-Stage Kit. They are both within a couple dollars in price and are very good kits.

**Andrew:** I don't think you can go wrong with the Lee Classic Turret Kit. I got mine for about \$130.

**Phil:** RCBS RC Master Supreme Reloading Kit, next step up would be the Cabelas/RCBS Rockchucker Supreme Reloading Kit

**Mike:** Bottom line is they all do the same thing, but I personally recommend the RCBS starter kit. It will last you forever and can handle just about anything you want to reload.

## **What should I add to the Kit you recommended to get me off to a good start?**

**LB:** A dial caliper to check lengths and other dimensions. A clean well lit place to set up your bench. You soon will need a way to trim cases. Also a tumbler to clean cases will soon be on the wish list.

**Dean:** I would get a good electronic scale with 1500 grain capacity, such as the PACT Digital Precision (not the battery-operated one). Also a set of stainless steel dial calipers...avoid the plastic ones.

**Andrew:** A good electronic scale and powder measure. If you plan on reloading military brass, I'd say the Dillon super swager is priceless. A bullet puller will come in handy as well

**Phil:** A case cleaner / tumbler of some sort.

**Mike:** Better powder scales never hurt, and a good powder measure makes life better also. If you really want to get something you will cherish, I can't say enough good things about the RCBS Chargemaster powder measure/scale... Pricey, but well worth it my opinion.





## What else should I know about reloading equipment, and its proper use?

**Phil:** Take time and enjoy it.

**Mike:** Newer isn't always better... I buy 99% of my equipment used at flea markets, yard sales, etc. I have stuff from the 50's that still works perfectly. I prefer the older stuff because it is well made—no plastic, no cheap pot metal. I have items that were my grandfathers and my kids will be using them one day also. You'll learn what works best for you as you go along.

**Dean:** Once you get started, you will probably find you want other tools to help in your reloading. The Sinclair Reloading catalog is a great place with lots of quality tools to help you, and the sky is the limit. I recommend getting the printed version, even though everything is online with them. It is easier to go through and more organized for all your reloading needs.

**Andrew:** You don't need a lot of fancy gadgets to reload safe, accurate ammunition. Always inspect components before loading, and inspect loaded rounds. If there are any defects, pull down the round, dispose of the affected component(s), and if you are ever in doubt as to the safety or integrity of a round or load, DO NOT SHOOT IT.

**LB:** Reloading can be almost as much fun as shooting and other sports, so beware as it can be as addictive as another syndrome we all know about

Once again, thanks to the intrepid DWF Members/Site Supporters who continue to contribute:

IHMSA80x80 Supermagfan lbruce SHOOTIST357 freerider04

and Jody who makes it all look so great when it's all done