Dillon vs Lee vs Hornady
Or
"How I spent my Winter and Then Some"

What's the Deal?

Why bother? Some people like blue, others shades of red. Who cares?

Often, when a new reloader asks 'what progressive should I buy', the dillonophiles charge in – "don't think, just buy a Dillon." "Dillon is the best." "To sum up all Dillon equipment: If it's blue, buy it!" "Everything else is junk." "…while the other is, well, a Lee." "The Lee may do and it may suffice but is not a Dillon period." "There really is no comparison...it's the Dillon." "Umm....just buy a Dillon and be done with it." "Go Dillon or don't bother." "It's Dillon or nothing." "Dillon 550, you will buy one somme [*sic*] day anyway." "More Dillon envey [*sic*]." "Blue." "One word: Dillon." "The Dillon rocks the Lee, end of story." "If you are not using or selecting a DILLON press then shame on you." "Since it's the only press I've owned, I can't help but recommend it." "My soul is worth it." These are actual quotes from my favourite gun boards[1].

I see three possible explanations for this: either people who spend a lot of money on a product feel pressure to justify their purchase (pushing-back on buyer's remorse), or Dillon presses are the best thing since sliced bread, or Mike Dillon has outstanding marketing.

To be fair, Richard Lee has his fanboys – they are fewer in number and less febrile. I haven't noticed any widespread cheerleading with the Hornady LNL AP.

If a Dillon is really that good, I want one! If something else is going on, I want to put some real information in front of people, to get past the cheerleading, so new reloaders can make a better-informed decision.

So I bought a Dillon XL650 to compare to my Lee Loadmaster, then later picked up a Hornady LNL AP. Before this started I had the Lee for a few years. Should I upgrade (crossgrade?) or not?

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My Biases

I am neither poor, rich, cheap, nor spendthrift. I like total value, not frilly features. I enjoy my twenty-three-year-old BMW motorcycle, my thirteen-year-old Hemi-powered car (which is going to last another ten years), and my well-used, recently-repaired, twenty-five-year-old cycling shoes.

I own and like a lot of Lee, Hornady and RCBS products, and use Redding dies for precision work. My motto: buy for purpose, not for show, and never pay retail. Don't tell me what you like, tell me *why* you like it.

[1] These quotes are the epitome of unreason: they offer naked opinion as unchallengeable fact without a shred of evidence as support, with language designed to stifle discussion (such as "end of story", "shame on you", "period", and so on). I find this perturbing in principle, and it is plainly unhelpful in practice.

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The Competitors

All are configured for 9mm[2], and are configured with their own-brand dies. Here are the ***optional*** extras:

Dillon 650

- Automatic case feed with small pistol wheel
- Automatic Powder Check System

Lee Loadmaster

- case collator (aka "automatic case feeder")
- adjustable charge bar
- RCBS LockOut die (part number 87540, *get* one for *your* progressive)

Hornady Lock-n-load AP

- case feeder with small pistol wheel
- RCBS lockout die
- Micrometer pistol metering insert[3]
- Powder-through expanders

[2] Most of this writeup applies to 9mm – it's a common calibre. I also load .357, .45ACP, .50AE and .223 on a progressive, so some comments apply to different calibres and to changing from calibre to calibre.
[3] As of "I'm not sure when", Hornady no longer sells separate pistol / rifle micrometer inserts to fit the rifle-sized rotor. Instead, the press / powder throw ships with both rifle and pistol rotors, which will accept their respective inserts. If you do more than one caliber, or tinker with loads at all, a micrometer insert is worthwhile.

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Figure[4] 1 – Left to Right: 650, Loadmaster, LNL AP (and RCBS Pro 2000)

[4] Not my picture: some of these pics are mine, many are lifted from the web. If it's your picture and you can prove it, drop me a line if you'd like attribution or if you'd like consideration for removal.

Fit and Finish

Which is which?

Let's separate Fit from Finish. It's a Western cultural norm to speak of them in the same breath, but they mean different things and have different importance.

Fit is, no surprise, how things fit together: do moving parts move smoothly? Is there free play where there needs to be, and not where there doesn't? Do parts attached to each other easily, or do you pull out a hammer to re-assemble after fixing or cleaning? Fit matters quite a lot: poor fit leads to premature wear, errors, spilled powder, less-repeatable process and a whole lot of frustration.

Finish is, again no surprise, how things look. Is a surface shiny or dull? Is a line straight or crooked? How about the paint – evenly applied or with drips and runs? Casting smooth or pitted? In a reloading context, in my world, it's almost totally irrelevant – I may even take pleasure in some ugly thing working well, possibly because of a deep belief in "form follows function". Others like good finish, so we'll still address it.

Fit

Tie between Dillon and Hornady[5]. Lee trails quite a bit.

On my presses, the Dillon ram was a zero-lash fit in the press, as was the Hornady, while the Lee had some noticeable free play. Also, Hornady uses an over-travel linkage, so repeatability is a matter of arm movement, not judging force.

Of the three, the Hornady requires the least force to operate – good leverage combined with low-friction / close tolerance fittings do the job. Interestingly, the Hornady's tolerances are so good that I had to use firm pressure on the grease gun to force grease into the fittings.

The Lee parts that had to fit well did (e.g., the turret / press fitment), but many less-critical areas were sloppy, and I mixed-and-matched parts in some areas to get good fit[6]. They still worked, but worked better after some TLC.

[5] Somewhere out there is a guy who had a nice, tight Hornady and a loose Dillon, or vice-versa. Every manufactured thing has tolerances, which may stack up to create a disaster that gets past QA. In talking to many other reloaders, I think the overall Fit "tie" is readily justifiable.
[6] Particularly in powder wipers – tried several to get a snug, low-leak fit. Also tried many case sliders to get one that was "just so" on the slider bar.

Finish

Win to Dillon, Hornady close second, Lee trailing.

Compared to Lee the Dillon has less casting flash, a nice metal top for the powder container, and so on. Compared to Hornady, the Dillon is slightly on top. But how much of that matters?

For example (this is meant as a parable), the Dillon cartridge bins are really just blue, Dillon-branded AkroBins. They are the best AkroBins I have ever seen - straight sides, no flash, near-perfect surfaces – clearly better-made than the AkroBins that come with Lee and better than the Hornady ones. But the functional difference between a great AkroBin and a good-enough AkroBin is zero. The only difference is in pride of ownership.

Having said that, if looks matter to you, the Dillon looks nicer.

The dies – fit and finish together

Win for Dillon[7].

Dillon dies have an attractive anti-corrosion finish, and are smoother and easier to adjust than the Lee. On the Lee, I use a touch of lube on 9mm cases, carbide or no – on the Dillon, no lube, smooth in and out (although lots of people recommend a bit of case lube anyway) – on the Hornady, no lube required but not as slick as the Dillon.

I don't know if this matters – the ammo that comes out shoots the same for action sports. When you have to hit an 8" circle at 7 yards in a hurry, pure accuracy is not an issue. If you're loading .32S&W for 25-yard slow fire, the dies make a difference.

You get what you pay for (sometime less, but never more). Hornady dies are about half the cost of Dillon, and Lee is slightly less than Hornady.

[7] I finally switched to Redding Competition Pro-Series Titanium Carbide dies. Smooth like butter – smoother than the Dillon dies, less effort – precise tolerances and specifically designed for five-station progressives with a wide-mouth entry, a dedicated crimp die, and no expander (the presses have one anyway on the powder drop). The Redding seater is micrometer-adjusted, so if you use different types of bullets, you dial back in instantly. The Hornady dies can be outfitted with a "MicroJust seating stem" for less, but the Hornady's markings are much harder to read and the system is slightly less repeatable than the Redding. You can get useful, reliable ammo for the action sports with a Lee die set – with Redding you get potentially the best accuracy and definitely the greatest ease of use, although at a higher cost.

Figure 2 - Dies: Dillon, Hornady, Lee

Function

Primer handling

Win to Hornady – by a nose.

Let's dispel a common Lee myth: the priming system works fine[8][9]. Keep it clean and loaded and it will work right every time - I never worried about missed or flipped primers. The Dillon is just as rock solid - it functioned perfectly for me. I like that the Lee only presents a primer when there's brass for it, but having the Dillon slide a few into a tiny cup[10] when there's no brass is no big deal. Hornady also feeds a new primer only when one is used – it's a simple mechanism similar to the Dillon 1050.

Of course, if you whip the case past the case sensor too fast, the Lee priming system may not pick up a primer. This is a non-issue with the Dillon and Hornady feeders. So find the "Lee Rhythm" for continuous success.

All of the presses let you see how many primers are left – the Lee has a clear lid on the holder (when you can't see any, there are only a few left in the chute so top it up), and the Dillon and Hornady[11] supply a small rod that sits on top of the primer column (when it's low, time to top up the stack).

In case you get a gang-fire, both Dillon and Hornady have a blast shield around the primer tube; the Lee can fit an optional explosion deflector on the press to protect your face.

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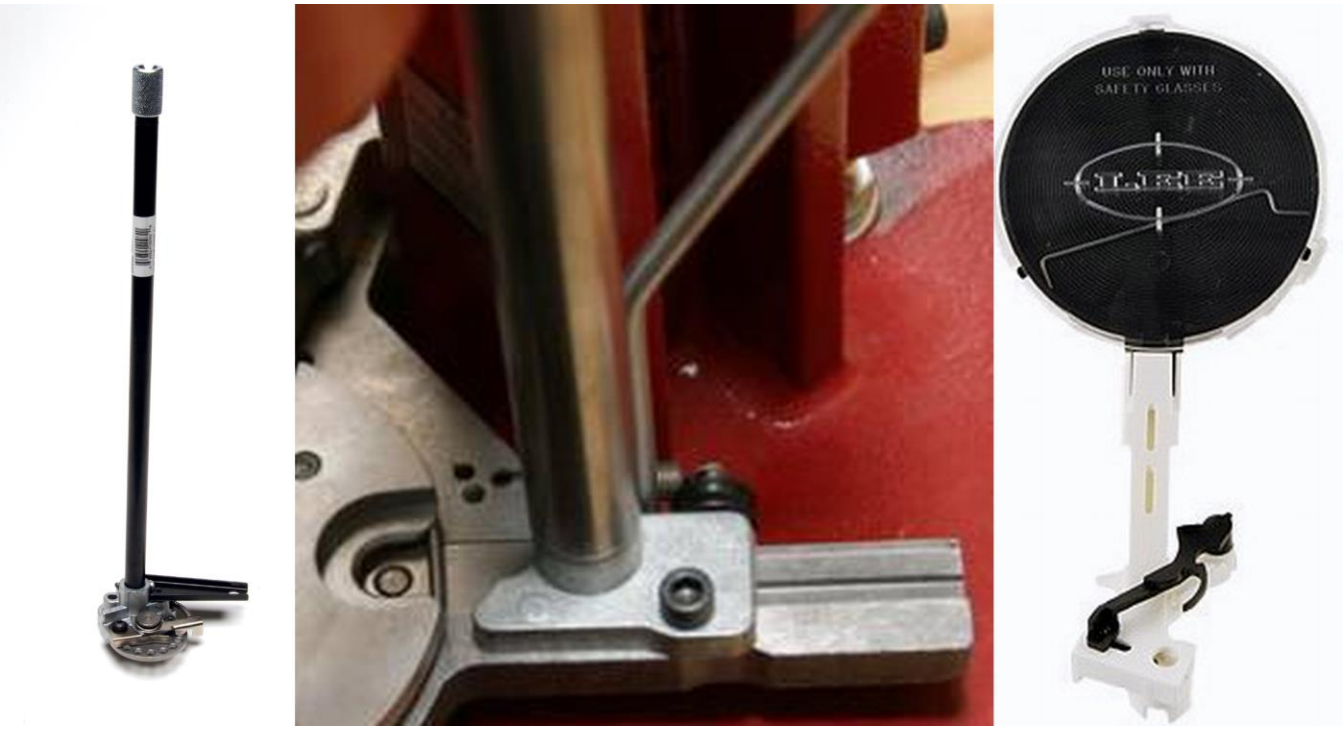
[8] Out of the box, you may have to deburr, file, polish, and check function – Lee has excellent online guides to ensuring the primer system works – but once you've done this, if you must, everything will just work.
[9] Some people have complained about damaged primer sliders / chutes – if the slider doesn't move out of the way of the primer punch. While this never happened to me (see footnote 8), Lee has updated the system so that the slider is never in the path of the punch (as of 10/27/11, new p/n 90383 Large, 90381 Small).
[10] Some of those 'zing' out of the cup.
[11] Hornady includes this rod, part number 398359, with the EZject system. Earlier LNL's won't have it - so make your own from a thin wooden or plastic dowel.

Figure 3 - Priming Systems: Dillon (tube and carousel), Hornady (tube and slider), and Lee (tray, chute, feeder)



Refill speed

Clear win to Lee.

With the Lee, you just take the tray off, dump and shake[12] your primers in the tray, then put the tray back on. With Dillon or Hornady, you dump and shake, then pickup primers one at a time. Yes, you can get a Dillon[13] or Frankford Arsenal[14] tube filler. Lee is still faster, and tube-fillers aren't free.

It takes me about two minutes to pick 100 primers, about 30 seconds to fill a tube with a Frankford Arsenal Vibra-prime[15], and essentially no time to dump primers onto the Lee tray.

Large/small change

Out of the gate, the Lee and Hornady are nearly tied.

[12] If you use Winchester or CCI, you don't even shake – they come out in the right orientation. If you use Federal, you shake to orient them (note from the Loadmaster manual: "Only CCI or WINCHESTER brand primers are safe to use with this tool unless you have the optional explosion deflector").
[13] The Dillon RF-100 is the top-of-the-line primer filler – expensive, but apparently reliable when tuned.
[14] As of some time in 2009, the FA tube fillers are no longer made. But, as of some time in 2016, they are again available.
[15] When the darn thing works right: it can be fussy, but I've figured out the quirks.

On the Lee, you just remove the shell plate, pop the primer system off and put the new one on (with some fiddling on the case retention arms). No tools required.

On the Hornady, unhook a small spring and remove the primer feed slide by hand, swap in a new slider and tube, then swap-in a new primer punch with a wrench (you may need to empty left-over primers – one Allen bolt) – less or no fiddling is required, which makes it faster than the Lee[16].

With the Dillon, you have five or more minutes of work with simple tools. You can get an entire replacement unit, and do it in a minute with only two bolts – but that's more money.

[16] Despite the relative quickness, I despise the waste of time, and switched to small-primer 45's.

Primer feel

Clear win to Dillon and Hornady.

They prime at the bottom of the stroke with nothing else going on. You can feel the primer or lack thereof. On the Lee, you prime at the top of the stroke – primers can't be felt at all with sizing, seating, expanding, and crimping going on, so they're seated to a more-or-less pre-set depth instead of by feel. This matters for accuracy.

Used primer management

Win to Hornady, with Dillon second.

All reliably capture used primers – Hornady into a tube directed to a waste bin, Dillon in a modestly-sized cup[17], Lee in the hollow ram – but disposal is much faster and easier on the Dillon and instantaneous on the Hornady. On the Lee, you slide a door open at the bottom of the ram, and tap-tap-tap with a screwdriver handle for a few minutes to get them all out.

Case Retention

Win to Hornady.

The Dillon uses calibre-specific buttons. The Lee uses screw-tensioned arms that you manually (and easily) adjust. The Hornady uses a coil spring[18] wrapped around the shellplate.

With Hornady the spring is one-size-fits-all, keeps mild pressure on the case throughout its travel, and you can move cases out of and back into the shellplate with one hand – a definite plus while doing load development or fixing a stoppage.

Powder handling

Win to Hornady.

With a powder-check installed, each system should have zero squibs/doubles coming off the press - it comes down to how often each system will make you stop to correct one or the other condition.

The Lee forces you to choose between powder check and separate seat/crimp, since there are only four useable die stations (station 2 of '5' is dedicated to priming). The Dillon and Hornady has one extra usable station, so you can have your powder check and seat/crimp separately. This matters for accuracy.

[17] Some will 'zing' out of the cup – not many.
[18] There is a myth that you will be regularly replacing these springs. I crunched the first one while doing setup and have been on the second one ever since without problems.

Generally, the Hornady powder system is superior. The rotary throw is accurate, easy to adjust, has a wide range of throw weights, and leaks / jams not at all even with fine ball powders. Using the optional powder-through expanders you can powder check, seat, and crimp in a true five-die setup[19].

Lack of powder: squibs

Win to Hornady.

Two factors here: how reliably does powder fill and exit the charge bar / rotor? How reliably does the charge system move?

On fill and exit, the Dillon and Lee are about the same as the cavity shapes are about the same. Flake powders with light loads may bridge, giving you a squib. The Lee has a slight advantage with ultra-fine ball powders - it leaks less, using a rubber wiper system to reduce clearances and give more forgiveness to any powder build-up[20].

As for reliability of the charge bar - let's dispel another Lee myth. The return chain will only break if it is maladjusted.

[19] Or powder check, bullet feed (http://www.mrbulletfeeder.com/), and seat/crimp.
[20] You may have to try several wipers before you find one that gives a snug fit.

The Hornady system, a conventional rotary measure, throws flake powders more consistently than Dillon or Lee, and will not jam or leak with ultra-fine ball powders. It is also better with long-stick rifle powders, although cutting grains is always an issue as it disturbs the system.

Figure 4 - 650 charge bar, LNL rotor / rifle insert (not micrometer), LM Adjustable Charge Bar

Too much powder: double charges

Win for Lee.

The powder bar is recharged near the bottom of the stroke - on the Dillon and Hornady, the powder recharges on spring pressure as soon as the case is dropped - so it's easier to double-fill on those presses. You could take the springs off and rely on the return rod on the Dillon – I didn't try this. You want an RCBS Lock-Out die (or Dillon's audible powder check setup) in any event.

Just the right amount of powder: adjustments

Win to Hornady; Lee close second (for multi-calibre loaders).

Surprisingly, Dillon doesn't make a micrometer-adjustable charge bar[21]. Everything takes time and adjusting the Dillon charge bar is fiddle-work. Many owners have multiple powder bars, or entire powder assemblies, for this reason.

The Lee[22] adjustable charge bar has a vernier scale for quick repeatable settings. You can also use the fixed-size cavity disks from Lee – they throw just as, if not more, consistently than any of the adjustable charge bars. Repeatability is simple here. I used the adjustable for working up charges, and then found the nearest fixed-size cavity for production.

[21] UniqueTek sells a micrometer-adjusting adaptor for Dillon charge bars. I did not consider it in this review because a) it's not a Dillon product b) it's quite expensive c) it isn't "drop-in" – you must marry the parts to the Dillon charge bar or pay more for the pre-installed setup.
[22] The Lee system, even with the double disk kit, will just barely throw enough powder for .308Winchester.

Hornady can supply a micrometer insert for its rotary measure, and I used it in the evaluation. You just dial-in a recorded setting and go. It is more repeatable than the Lee adjustable charge bar[23].

Missed primers

Win to Hornady.

It's going to happen on any press. You'll eventually miss a primer, and pour fine-grained powder right through the flash hole. On the Lee[24], it goes into the hollow ram with the used primers. On the Dillon, you'll be taking the priming system off and apart to clean the gunk out. The Hornady will get some powder under the shell plate (not much, it tends to wipe outwards and fall off), but not in the primer system.

Missed primers are a rare occurrence, and more rare on the Dillon and Hornady because you will normally feel when a primer goes missing, but they can start an awful mess.

Speed

And the winner is…

Machine guns quote two rates: the cyclic rate (raw speed) and the sustained rate (taking into account reloading, barrel changes, waiting for the gun to cool, and so on). People quote wild rates on some presses - I am convinced that these are cyclic rates, not accounting for stoppages or primer, case, and powder refills. Lee has faster primer refills, Dillon and Hornady are faster and less frequent on cases. Lee has more stoppages than the other presses[25]. All systems can spill powders from near-fully-filled 9mm if operated roughly, although the Dillon is easier to operate smoothly than Lee, and the Hornady is the smoothest of all[26].

In practice, I found the Dillon and Hornady to be a little faster for the same level of effort and concentration - around 500 rounds per hour (rph) with your supplies laid out near the machinery, versus about 400 rph for the Lee. The cyclic rate on the Dillon is slightly higher than the Lee, because all aspects of the brass and primer movement are fully-captured – no need to find that "Lee rhythm" for everything to work right. The Hornady is slightly less fully-captured than the Dillon, but vastly smoother in operation, and I've never had a problem with the case feed path in practice.

Win to Dillon and Hornady. Between the two I don't know that there's a difference, and picking a speed winner here would ignite a reloading jihad. If you need more speed don't rush the press, just get a bullet feeder.

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[23] Use some Loctite on the Hornady cap/plunger interface area to prevent slippage.
[24] When a primer is missed on the Lee, you can't tell – too much goes on at the top of the stroke – until the round pops off the press.
[25] Usually a case bouncing out of the feed system or hanging on the mouth of the sizing die; sometimes the shellplate does not want to index.
[26] The Hornady does half its rotation up, and the other half down, moving only 36 degrees each time – the Dillon and Lee move 72 degrees at a time, making it harder to be smooth. The Lee system can be quite abrupt if handled roughly.

Calibre changes

Slight win to Lee, Hornady close second.

On the Lee, you take the powder measure off, remove the turret, change the shell plate, put a new turret on (with your new calibre) and reinstall the powder measure with a new disk or new setting – all without tools in less than five minutes. You might need to change the case slider and case feed height (which requires one wrench), or you might not – I go from 9mm to .45acp without this.

The Hornady takes nine minutes to go from .45acp to .223Rem (the worst-case changeover), and is done with tools – accessibility is very good[27], the Lock-n-Load system is fast, and the micrometer powder adjustment takes essentially no time.

On the Dillon, it takes a little longer and you need tools. There are a few more parts to swap in and out. Count on nearly fifteen minutes for the .45-.223 changeover, including powder bar adjustments. You can buy a bunch of charge bars for the Dillon – but that's more money.

Price is more clear-cut. Going from a large- to small-primer case is about two and a half times more expensive on the Dillon than the Lee, with Hornady the best for small/large swaps (it comes with both small and large primer parts).

Case Feeding

Win to Dillon and Hornady.

When you buy the 'case feeder', you get two things: a collator to present cases in the right orientation, and a feeder to put them into the shellplate.

In practice the Hornady and Dillon were equally fully effective and the Lee, while useful, was a clear second. I found the Lee case feeder/collator to be the primary source of stoppages on the Loadmaster.

[27] My hands require only a men's small or medium glove size, and I found the Hornady the easiest to work on. The Lee's smaller overall size makes the workspace – in and around the shellplate – cramped at best. The Hornady feels spacious, with easy access and no rods/gizmos in the way – the case and primer feed are tucked away toward the back of the press. Not that the Dillon is difficult to access, it's just a little trickier than the Hornady – only one side is uncluttered. Any press can and will have stoppages (e.g., 9mm stuck in a .40 case), and you may change calibres, so easy access is a plus.

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The Collator

Win to Dillon and Hornady.

The collators on the Hornady and Dillon are essentially the same: a large drum with a slotted wheel (large/small, pistol/rifle) that presents and drops cases into a feed tube leading to the feeding system. You can dump a few hundred cases in and start loading as the tube fills. They both rarely drop a case upside-down with pistol rounds, and I found both to be 'perfect' with rifle rounds when adjusted properly.

The Lee is a marvel of low-cost engineering. The collator is a dish that sits flat on top of four feed tubes (each holds about 25 cases). You stick four fingers in the collator holes, pour in about 25 cases, remove your fingers and shake. Then repeat until the tubes are full (about 100 cases). This is 'one size fits all' – I found that 9mm ended upside down somewhat frequently, 45's not as often. The system works only with pistol rounds, and not with all of them – so no .50AE, no .223.

The Feeder

Win to Dillon and Hornady. The Dillon is theoretically superior, but worked no better or worse than Hornady in practice.

We see three different design philosophies.

Dillon is calibre-specific with a fully-controlled feed path. You can whip the cases around and they generally go where they are supposed to (dinged-up rims may fail to enter the shellplate without some manual persuasion, as with the other feeders).

Hornady is a mostly-controlled feed path – when the 'v-block' pushes the case forward, if you're rough and fast the case may skitter and hang-up entering the shellplate. In practice, going that rough and fast is going to spill powder anyway. The Hornady comes with every part (except collator plates) required for every calibre Hornady makes shellplates for – so your multi-calibre costs look better.

The Lee drops cases in free air – usually this works all right, but longer cases are more likely than others to bounce and exit the feed path (.357Magnum). Of the three, the Lee was more prone to double-feeds, and least successful in getting a case into the shellplate straight and far enough to enter the sizing die. Lee has only two sizes of slider (the case-pusher) – I custom-modified a slider to work reliably with .40S&W – and it's fussy to swap out. The feeder does not work with rifle cases, so you are hand-inserting with .223 and so on.

Ejection

A three-way tie.

That which is fed must be ejected. Dillon uses a wire ejector, Lee a plate, and Hornady[28] a nubbin underneath the shellplate. All are mostly-perfect – badly-dinged rims can jam. I found the Hornady system to be relatively smoother.

Space

The Press

Lee wins hands-down.

The Dillon and Hornady are taller, bulkier (mostly due to the massive case-feeding mechanisms) and needs house current. Most people have a large enough loading space to handle this - some don't, so the Lee looks more attractive in their space.

Die Storage

Win to Hornady.

Lee turrets or Dillon toolheads loaded with dies are bulky, and storage is awkward. The Hornady dies with their LNL collars just fit in a Hornady (or RCBS) die box, which slides into a standard shelf in a tool chest.

[28] In 2009, Hornady moved from an over-the-shell-plate ejector wire to an under-the-shell-plate ejector nubbin (called "EZject") that pushes on the cartridge rim rather than the cartridge wall like the other systems – ejection is now very smooth and there is no wire to interfere with non-Hornady dies, so any normal die will work in the fifth station. In 2009 Hornady charged $100 to factory-retrofit older presses and swap up to two shellplates; shortly after, they offered the parts direct to consumers for considerably less.

Maintenance

Overall, I'd rank them Hornady, Dillon, Lee, from easiest to hardest. Grease fittings, now on all three[30], make a big difference here[29].

	Dillon	Hornady	Lee
Lubrication	○ Grease fittings[30] ○ Occasional greasing of friction sliders	○ Grease fittings ○ Rare grease/oil other parts. ○ Occasional shot of dry lube around the shellplate and case feed areas.	○ Grease/oil fittings ○ Light oil on case slider ○ Light oil/grease on advancing arm
Cleaning	○ Infrequent cleaning of primer system, modest disassembly required. ○ Occasional cleaning under shell plate.	○ Infrequent cleaning of primer system, easy/simple disassembly. ○ Occasional simple cleaning under shell plate.	○ More frequent cleaning (~1000 rounds) of primer system, awkward disassembly.
Adjusting	○ Very little past initial setup.	○ Very little past initial setup.	○ Occasional adjustments to accommodate wear, such as the shellplate advancing/locking arm. ○ Periodic hand-retightening of the shellplate retaining nut. ○ Periodic resetting of the case retaining arms.

Longevity and Service

Win: your choice.

Dillon has a no-questions-asked service policy – you need parts, you call and get them. Hornady is basically the same. Lee has a two-year warranty.

One of my shooting buddies has two Loadmasters, with hundreds of thousands of rounds through the pair. He's replaced a lot of wear parts, like the inexpensive wedge-lock bar (it advances and locks the shell plate). We've all heard similar stories about Dillon machinery. I and many others have many thousands of rounds through Hornady presses with little wear and replacement.

[29] Not only are grease fittings faster, they are easier and less messy than disassembly/reassembly. The real-world impact is that grease-fitting-equipped gear gets greased more often – it's just human nature.
[30] Grease fittings on the 650 started in 2010; if you have an older press you can upgrade direct from Dillon, part number #13700 at $17.59 each, quantity two, and #13581 at $5.00 each, quantity two; apparently the upgrade will also be done during a press overhaul ($40 + one-way shipping) at Dillon.

If you like the cradle-to-grave security of unlimited warrantees, then Dillon or Hornady is for you. Just remember that "there ain't no such thing as a free lunch" – you pay for the warrantee for yourself and all of the future owners when you buy it.

Conclusions

Is the Dillon three times the press as a Lee, functionally speaking? No, although it is the better machine. Is the Hornady twice the press as the Lee, functionally speaking? Darn close – maybe more so.

Does the Lee allow for powder check and separate seat/crimp stations? No - if that's a show-stopper for you, you have to take a Dillon or a Hornady.

The Dillon should, in principle, make more accurate ammo than the Lee – and the Hornady should be a little better than the Dillon[31],[32]). How much more, and how much that matters, is an issue for each shooter.

After some soul-searching, I have switched to the Hornady. Compared to the Lee, it's smoother, the powder system is better, the case feeder is more reliable and versatile, and it's a true five-die setup. Compared to the Dillon it's cheaper and faster to do calibre changes, and smoother to operate. I'll miss the Dillon – finely-made equipment is a joy to have around. I'll miss the Loadmaster too – simple, low-cost equipment feels like value.

You can see the Hornady in operation at:
http://www.youtube.com/watch?v=oHCYnILM6u8

The Hornady also features in this how-to video for high-speed bulk reloading:
http://www.youtube.com/watch?v=wBQ_vJHiGek

[31] Less flex in critical areas due to better station placement and the LNL system, which is more stable than a Dillon or similar toolhead.

[32] I've been loading precision .223 on the Hornady. Runout averages .0017", OAL standard deviation using a Sinclair comparator is 0.0007" (using Hdy 75gr HPBT), and velocity standard deviation is about 12fps – all with banged-up brass from a precision AR15 upper. Surprisingly, this matches or exceeds what I get on a Redding Ultra-Mag single stage with RCBS powder throw, and is ten times the production rate of the single stage. I have not done these comparisons on the Dillon, but people do load good ammo on them. Lee could not compete here – simple measurements on pistol cartridges (like .015" OAL variances) prove that.

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