# OIY, OIY, OIY

Tim Koschade Reviews the Lithgow LA102

Bathurst is the name of a NSW country town, but in the minds of generations of Australians it is the name of an event, where locally made fire breathing chariots of steel meet in an annual battle for supremacy.

Not far from Bathurst is another country town called Lithgow, and since 1912, the workers in the unassuming looking local factory have been producing fire breathers of a different kind. They have supplied munitions to Australian forces and their allies through times of peace and conflict, and for many years produced no nonsense firearms for the civilian market. Having been absent from the racks of gun shops for decades, and as the home-grown beasts are disappearing from Mount Panorama, products bearing the *Lithgow Arms* stamp are back; where Joe Blow and Co. can get their grubby hands on them.

Speaking of grubby hands, your scribe has been entrusted with one of the highly sought after LA102 centrefires chambered in .243Win. But rather than continuing in 'Aussie Aussie, oiy oiy' mode, let's take a hard look at this new offering because it certainly is not just another version of the 'standard hunting rifle.'

On first glance, the 102 makes a bold statement of modernity- It really doesn't look much like anything else. In no way does it 'tip its hat' to classic lines, or declare pretentions as an ultralight mountain rifle. It seems likely the design team figured there are already a multitude of rifles crowding the sporter/all rounder market and they would be right.

*The clear view from the Whiskey 3 scope.*

Although the 102 is very much an individual, looking closer you start to see design cues that have been cherry picked from elsewhere and combined into this modern package. Australian Defence Industries; owners of the Lithgow brand, have been producing the Aus-Steyr for decades and it stands to reason that there is an exchange of industrial knowhow and processes. So, it is no great surprise that the barrel retains the same spiralling surface pattern left by the hammer forging process as found on a Steyr-Mannlicher. Similarly, the barrel and receiver are both encased in a protective mat silver *cerakote* finish rather than blued (a black finish cerakote is also available). Cerakote is a very durable rust proof ceramic layer that is a real bonus in preventing the usual effects of wear and tear and any worries of external rust; even with persistent moisture exposure.

The bolt body is full diameter (of the same diameter as the locking lugs) like a Steyr-Mannlicher (among others) and the polycarbonate magazine is fully interchangeable with that of a Tikka T3. It's heavyish barrel and stock with target design influences suggests that this is a firearm that is serious about accuracy, but also in delivering that in a practical package that will work in the field.

When Lithgow announced that they would be releasing a sporting centrefire rifle and that it would be available in .223Rem, .243Win, and .308Win, I made the assumption we were looking at a short action platform with a limited range of calibres to keep production logistics fairly straightforward; but not so! Once out of its box the standard-length action was evident, and a chat with their sales manager revealed plans for an extended range of chamberings once the model established itself in the market place.

The stock can be had in polymer, walnut, or laminated timber. The review rifle sported a nice bit of oiled walnut featuring laser cut 'chequering' which was more a design in grippy texture than the cut diamond pattern we are used to. The butt wore a comfortable black rubber recoil pad. As mentioned; there are influences taken from target stocks such as the straight comb, wide fore-end and the 'but hook'- which actually did feel good when shooting prone with a bipod.

Walnut and polymer stocked units weigh in at 3.5kg (7.7lb) and 3.7kg is quoted for the laminated timber version. The barrel is 560mm (22") and cold hammer forged in "proprietary military grade steel". It incorporates a removable tip which can be unscrewed to reveal thread for a muzzle break, or sound moderator (shame we're not allowed to use them). The receiver has an integral picatinny rail for easy scope mounting (no need to buy bases to fit a scope). There are no open sights.

Just 60˚turn is required to open the three-lugged bolt, and the smooth and positive feel of this action is immediately apparent. So, close are the tolerances and smooth the surfaces that it glides with a silky motion with no noise or lateral play. The trigger is equally satisfying; breaking cleanly at a pre-set 1.5kg (3.3lb). It is adjustable for weight, pull and sear engagement (adjustable range 0.75-1.9kg or 1.6-4.2lb).

Throw it to the shoulder and the 102 is well balanced and the ambidextrous stock very comfortable, positioning the eye nicely behind where the scope would be, if I had put it on.... I'd better do that; but first! Let's take off the wood bit and check out how the

*A false tip can be unscrewed from the end of the barrel to expose thread to fit a muzzle brake, or sound moderator.*

*Precision finished full diameter bolt with knurled handle and three locking lugs.*

*The LA102 cuts a handsome profile in its natural environment.*



undercarriage works (this is the technical bit for the boffins and men with greying beards).

Front and rear Allen head action screws secure the polymer trigger guard/floor plate unit to the action, sandwiching the stock in the usual fashion .... then it gets less conventional. The front action screw goes into the assembly that latches the magazine, but the rear screw goes into a second recoil lug which engages in a dovetailed slot on the bottom of the tang (see exploded view photo). According to the designers at Lithgow, in addition to acting as a second recoil lug, this part provides extra strength by giving a longer threaded surface for the screw to engage with, rather than just screwing into the tang. The floating dovetailed arrangement provides a strong connection whilst allowing slight side to side movement as the screw is tightened, enabling some wiggle room for the action to centre itself; presumably to compensate for any movement in the timber.

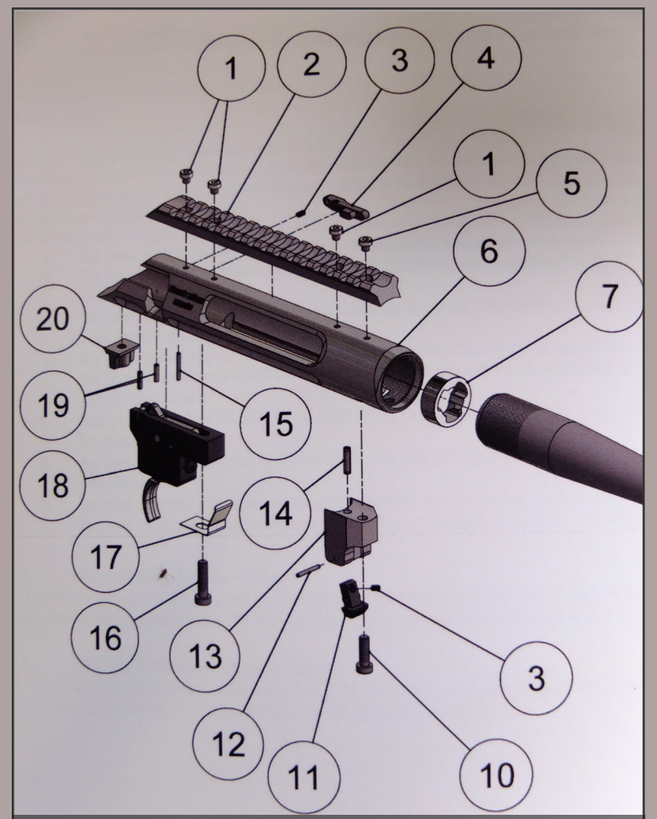
At the front of the action is a hardened steel non-affixed recoil lug; similar to that of a Tikka T3, which slots securely into a recess in the receiver. Conventional firearms design would have this lug secured between the action and the barrel as the barrel is screwed in place. But there was not room for this on the LA102, as wedged behind the chamber end of the barrel as it is screwed in, is a 'locking ring' (see schematic diagram). This provides the slots that the bolt lugs lock into, and rather than just machine these into the action like pretty much everyone else, Lithgow have made this a separate part. By doing so they can use an extra hard steel which is highly polished to fine tolerances with a friction reducing finish to maximise smoothness of the camming action on closing the bolt, and ensuring accurate *headspacing* (the distance between the bolt face and the front of the chamber) which promotes accuracy. This may be a Lithgow innovation, it's something I haven't seen before.

Looking into the stock, the inletting is clean and the wood to metal fit is a true precision job that supports the action and allows ample clearance to the fully floated barrel. Returning the metal to the wood is a quick and easy job. A good little manual comes with the rifle providing handy bits of information you don't usually get: such as torque figures for tightening the screws. A sensible measure for any manufacturer that wants to see their product perform at its best one would think.

The receiver is of a very stiff design but has an ejection port large enough to allow comfortable breech loading. The magazine is single stack so cannot be filled through the port. It's a tough polymer unit, does not protrude from the stock far enough to be annoying and will hold three rounds of .243Win. If you want more capacity, any extended mag. that will fit a T3 can be used (best make sure they have the block for short action cartridges though).

Removal of the bolt is via a release leaver on the left of the action. The safety is a flag styled switch on the bolt shroud. When fully forward the safety is off. Rotating it one position back locks the firing pin, disconnects the trigger mechanism and locks the bolt closed. Turning it to the next position the firing pin is still locked but the action can be opened for safe unloading. Incorporating the safety catch into the bolt ensures there can be positive locking of the firing pin throughout its cycle and even when the bolt is removed.

*Attractive variation on traditional chequering. Note the hammer beaten spiralling on the barrel.*




*Schematic diagram: note part No. 7- the locking ring for the bolt*

The scope paired with the rifle wears the illustrious SIG-Sauer name, to my knowledge they are a relatively new player on the Australian market. The model is the 'Whiskey 3' (their entry level product) in 4-12x50mm with 1" tube. To lock the scope to the picatinny rail are a pair of SIG rings which are solid, lightweight, well made and sport a modern look that really suits the rifle.

So how did it shoot? We were given some 58gr Hornady Superformance and PPU 90gr ammo to try. Sadly, it was in boxes rather than crates 'cos seriously you could shoot this thing all day. Admittedly the .243 is not a big kicker but I would say the felt recoil was less than most .223's.
The stock design must play a part as would the heft of the rifle which is not light, but still less portly than the average varminter.

What about the groups? Well you'll hear people say you won't get good accuracy out of hot ammo like *Superformance*, but it's no different to most ammo where performance varies between firearms. The 58 grainers averaged 100m groups of 18mm (just under 2/3 MoA) and later acquitted itself well decapitating bunnies with surgical precision out past 200m. They were hooting along too at 3650fps on the chronograph. The Lithgow was less partial to the 90gr PPU fodder, averaging a little over MoA at an average velocity of 2940fps.

A mate had some bits and pieces so I rattled off a limited run of random handloads. Using AR2208 and Speer 90gr bullets produced an average velocity of 2900fps and printed some consistent groups just under 2/3 MoA.

60gr Sierra's with 3031 were even more impressive, averaging 12mm groups at 3300fps, with one measuring just 9mm- less than 1/3 MoA. These were off the cuff loads, not ones that were systematically worked up for accuracy.

The reason that the run of reloads was fairly limited was in part because of the match grade chamber of the Lithgow. Match grade chambers conform closely to the SAAMI published standard dimensions for the cartridge. Unfired cases will fit in snugly. Loading some rounds after running the cases through the full length resizing die, I found they would no longer chamber in the Lithgow (with its precise headspacing) as they had lengthened to a thou or two taller at the shoulder. So, if you're reloading a Lithgow, get match grade resizing dies. Luckily the set also had a neck resizer which worked fine.

Out and about it is comfortable to carry one handed; held around the magazine. The fore-end is a bit fat but is nicely rounded making it pleasant to shoot offhand, although I found myself fitting a bipod in order to play to its strengths.

My mate Graham had had a couple of fallow deer appearing randomly at the edge of his front paddock and, having the 102 on hand, without any fuss he persuaded one of them to have a good lie down ..... via the medium of a 90gr PPU at 150m. No surprises that this capable combination is able to communicate with the wildlife in such an effective manner!

As mentioned the Lithgow is not a featherweight and there have been far heavier rifles carried by hunters in pursuit of sambar, however they are not really the target


*The precision of fit and finish is evident, as is the country of origin: seen here with safety on/bolt locked. Note the SIG mounts.*


*The disassembled action. Note the detachable front and rear recoil lugs and flag styled safety on the bolt shroud.*

*Tidy little three shot groups? It's what the LA102 does!*


*A cleanly dispatched fallow doe.*

audience for this rifle. The LA102 is perfectly suited for more open country hunting, and the .243Win is a great match for its strengths. Enough gun for fallow, hog and chital as well as the whole gamut of smaller game, and with the ability to deliver its package accurately out to extended ranges, this rifle has a lot to recommend it. Another factor too is the price: retailing below $1500 (and the synthetic stock version is even $140 less), I seriously don't know how they manufacture something to these production values and coat it in cerakote for the money! I guess that's what a hundred and five years of manufacturing knowledge, and working in the competitive, high tech world military market can do for you. And now we get to benefit. Lithgow, you've done us proud! Aussie Aussie, oiy oiy!

The SIG-Sauer Whiskey 3 4-12x50mm

The 'three' in Whiskey 3 denotes the factor by which the magnification can be increased in this range of variable riflescope. At $500-odd, it is the little brother of the Whiskey 5 series which is more up-market and can multiply its base magnification by a factor of five. With the Whiskey 3 it would seem they have made a couple of compromises to bring you a very capable scope at such a competitive price.

It has a tube diameter of 1" and is quite long at 356mm and a bit weighty at 533gm. It is one of those scopes where the image does not quite go to the edge of the glass (see photo) which gives you a sense of limited field of view, which is not necessarily the case as the field of view at 100m on 4 power is 7.2m, and 2.4m at 12 power which is quite reasonable.

The scope has high quality touches: The dial to change magnification turns easily and smoothly as does the focus ring. It has accurate ¼ MoA finger adjustments (no need for a screwdriver or 20c coin) and zeroable turrets: that is, once you have sighted in your rifle to the desired point of impact, you can lift and turn the turret without changing point of impact, and make that setting '0' on the dial. If you later wind up or down the point of impact for a different distance or to allow for the wind, this makes it easy to return to the initial zero when you're done. If you send them the ballistic data, SIG will also send you a free replacement elevation turret with settings specifically tailored to the trajectory of the ammunition you use.

The lenses and their coatings deliver a nice clear image and good low light performance. SIG claim extreme durability of the chassis and lens coatings, and back this with their 'Infinite guarantee' which is transferable apparently forever and requires no proof of purchase.