

THOMPSON/CENTER ICON



The T/C Icon has its roots back to post World War II USA when Ken Thompson, a New York tool maker, was producing products that included gun parts. Skip forward to the early 1970s and Thompson combined forces with Warren Center who he had hired in 1965, and between them they started the Thompson Center Arms. Warren Center was a machinist and die maker and also a gun designer.

Now based in Rochester New Hampshire USA, I must concede to not being overly familiar with T/C's rifles over the years as few of them seem to have made it to Australia. However, their relatively new bolt action range incorporates significant innovative features in keeping with the company's long history of products developed from thinking outside the square.

The T/C Icon - a bolt action rifle with three shot detachable magazine, full diameter bolt body and an interesting laminated stock design. It has a very rigid receiver and comes in a variety of long and short action calibers.

The action on the T/C Icon is quite different from your run of the mill bolt action rifle in that it has three locking lugs, consequently giving it a 60-degree bolt lift. Interestingly, the lugs are actually machined down from the full diameter bolt so that the lugs are actually the same diameter as the bolt body and lock into



(Above) Thompson/Center Icon is an attractive looking rifle with a stock of walnut appearance and blued barrel and action.

(Left) The T/C Icon has a very rigid receiver and there is no doubting which rifle it is from the left hand side of the action. Note how the Weaver rings attach directly to bases machined on the top of the action.



(Left) European looking spoon handle type bolt is replaceable with different styles.

the front of the receiver. There is a recessed bolt face and what is known as a T-slot extractor, much like a push-feed Model 70, and a plunger ejector. I have heard some discussion that T/C were considering a controlled round feed design with mechanical ejector, although I have not seen anything materialise along those lines.

The bolt handle, which is readily removable via a tool that comes with the rifle, also allows the firing pin to be removed from the bolt body. The bolt handle is a spoon handle shaped design which may be unfamiliar to shooters,

although they are replaceable, so one with a conventional knob could be inserted. The bolt body is heavily jeweled and features a long guide slot where the bolt stop goes. It is very smooth in operation.

The receiver is fully machined and is quite rigid and flat on the bottom. It features integral Weaver-style bases machined in the front receiver ring in the top of the receiver bridge. A port is cut into the side of the action for the ejection of spent cartridges.

(Right) Underneath the rifle shows three guard screws which bed the action into the barrel. Also detachable three round single stack magazine. (Far right) Interesting stock design incorporates a laminate and walnut stock in the one rifle. Three laminates of wood are layered with carbon fibre sheeting to give the stock significant strength.



(Above) The three lugs are machined from the full diameter of the bolt. (Right) The recessed bolt face features t-slot extractor and plunger ejector.



(Above and below) Automated cut checkering on forend and pistol grip was beautifully done.



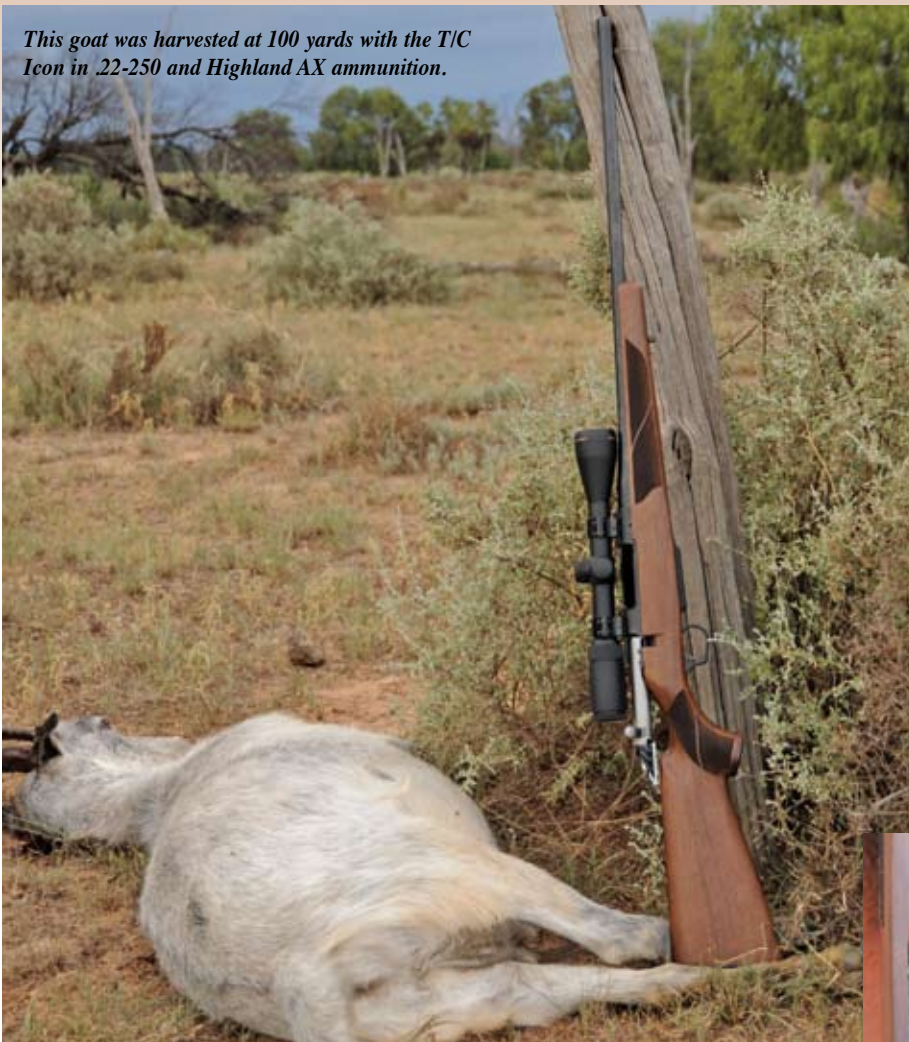
(Above) Synthetic 3-round removable box magazine proved to be very reliable.



(Right) Takedown of the T/C Icon revealing trigger guard, guard screws and action. Machining on the action is of a very good standard.



This goat was harvested at 100 yards with the T/C Icon in .22-250 and Highland AX ammunition.



SPECIFICATIONS

Thompson/Center Icon

Maker: Thompson/Center Arms
Action: 3-lug full diameter bolt, front locking
Calibre: .22-250 (others available)
Overall Length: 1136mm (44.75")
Barrel Length: 610mm (24")
Weight: 4kg (8.8lbs), as tested
Stock: Ultrawood (walnut laminate with carbon fibre)
Metal Finish: Blued
Sights: Integral Weaver base on receiver
Magazine: Detachable box (synthetic, 3 rounds)
Safety: 3-positions (two catches, like Sako 75)
Distributor: Frontier Arms Co
www.frontierarms.com.au
Warranty: Lifetime
Price: \$2289

(Below) Bedding arrangement on the T/C Icon reveals a full length aluminium bedding plate, pinned and epoxyed into place. It provides a marvelously flat and stable platform for the action to sit on. The pins running down through the aluminium bedding plate add strength to the stock. Note the lugs on the underside of the action which mate up the holes in the bedding plate.

Bedding on the rifle is elaborate. A full action length aluminium platform is adhered to the stock with serrated edges so that it cannot move. This platform coincides with lugs machined into the bottom side of the action. This creates a very stable platform for the action to sit on, the desired outcome when bedding a rifle. The barrel fully floats forward of the receiver. There are three guard screws holding the alloy trigger guard bottom metal, so to speak, in place. Well, normally three guard screws would not be desirable - that would assume conventional bedding - because this rifle has a full length platform, the three guard screws are actually an advantage in holding the action secure to the platform, which is embedded in the stock. T/C have gone to a lot of trouble to bed the rifle, and this is to be commended, there is simply no way the action can move in the bedding arrangement with the interlocking surfaces secured tightly. The machined alloy full length plate is glass bedded and pinned either side into the stock. These

pins also add strength to the stock by not allowing the sides to move apart.

A three-shot synthetic magazine stacks the cartridges directly on top of each other, and the magazine features a pressed metal cap on the bottom. The magazine had to be pressed very firmly into the action to secure it, but feed from the magazine was excellent, with no problems encountered during tested.

The trigger is adjustable for weight of pull, overtravel and creep. Weight can be adjusted without removing the rifle from the stock, although for other adjustments the rifle must be removed.

The stock also shows significant innovation with what TC call "ultrawood". This stock is created by sandwiching three pieces of walnut in a laminate, two thick pieces on the outside



(Below) 3-shot groups shot at 100 yards with a variety of factory ammunition, and some reloads.

(Right) 5-shot groups using reloads, CCI primers, AR2208 powder and a variety of projectiles. The Hornadys and Sierras seemed to be the best, although I did get some groups that were pretty good with Speer TNTs as well.



and a thin piece up the centre, being about 8mm thick. Between each of these laminates, they place carbon fibre sheeting which gives the stock considerable rigidity. Looking on top of the stock you just see slight variation in the colour where the laminates meet, and two black lines for the carbon sheeting. This is designed to keep the stock rigid under varying weather conditions while maintaining the appearance and aesthetic feel of a walnut stock. There is what appears to be a rosewood pistol grip cap fitted. The checking is cut and executed extremely well, one would imagine by its appearance that it is done on one of the modern laser machines. It provides excellent grip and is attractive.

On top of the rifle was mounted a 3-9x40 “Buckmasters” Nikon scope. This scope features a 1-inch tube and good quality optics as one would expect from the same company that manufactures the world’s leading cameras. The scope was mounted in Weaver rings which attach directly to the bases on top of the receiver, and allowed the scope to be mounted beautifully low. The disadvantage of the Weaver scope mounting system is that you don’t have windage adjustment, but they are a very secure mount and they allow for different placement on the rifle in terms of setting the eye relief.

The bolt release is in the conventional place on the left hand side rear of the action, and the safety has two buttons, not unlike the Sako 75/85 arrangement. The rear safety button, the bigger of the two, locks the trigger, and allows the bolt to be opened and to cycle cartridges through the action, or to remove a cartridge from the chamber. The forward catch, the smaller button, when pulled back, locks the action completely closed so that people who are hunting in thick scrub won’t have their bolt pulled open while they have the safety on. Disengaging the main safety drags the secondary one with it. The rear of the bolt shroud is very sloped in that the machining matches up with the exterior of the receiver, also the firing pin protrudes when it is cocked, and it is chromed so that

it stands out.

Overall the rifle has an intriguing appearance, and has large lettering on the left hand side of the receiver, with the word “Icon”. For those people trying to imagine the bolt head design, think Omak 44. Also the Kimber 770 which I don’t believe ever reached production was built on a similar three lug principle. Although this one actually locks into the receiver not the barrel.

The most interesting part of testing this gun came once I had set up the scope and began to sight it in. The first 3-shot group

measured under half an inch! The rifle instantly had my attention. Considering the level of thoroughness that has gone into the bedding and the rifle's design, I was expecting that it would shoot pretty well. With a range of factory ammunition, the rifle would put three shots around half an inch, with the occasional type that it didn't like at all, but that was rare.

Reloads were putting five shots into an average of about one-inch at 100 yards. Favoured loads were putting five shots into three quarters of an inch, which

in this rifle seemed to be Speer TNT 50 grain bullet and AR2208 powder with a CCI primer. The rifle comes with an accuracy guarantee – it is guaranteed to shot 1MOA, which is roughly equivalent to 1" at 100 yards with factory ammunition and I had no problem achieving that.

Using the rifle in the field, I noticed it was a bit heavier than other centrefire rifles I am used to carrying, with its rigid receiver and thick diameter bolt, but the rigidity contributes to accuracy so I guess you can't have everything. The barrel was not the lightest profile I have seen, with about 650 thou' or 17mm muzzle diameter. The rifle features 5R rifling, a 5-land and 5-groove rifling system developed in Russia. It is designed to produce less bullet upset and less fouling with its 65° land/groove angle instead of the regular 90° angle.

Also, I found the bolt handle a little short, especially on a 60-degree three-lug bolt, which means the bolt lift is a bit heavy. You are compressing the firing pin spring over 60-degrees instead of 90-degrees, as on a two-lug action, so opening the bolt is always going to feel stiffer. This combined with the short handle does mean you do notice it. However, as mentioned, the bolt handle is replaceable to a knob type which would be an improvement as the spoon type handle offers less grip.

These points aside, in the field I shot several goats with the rifle, including a couple of head shots which were very easy. Top accuracy on the target and at the bench improves confidence in the field, and I found myself being buoyed by this rifles group shooting ability.

The Nikon scope has a conventional duplex reticle and worked superbly well. I couldn't fault it.

The three-round detachable magazine, in my mind is not one of the rifle's strongest points – I don't like plastic in firearms, but this is a modern high tech gun so I guess we have to make concessions for that. The three round capacity couldn't be seen as an advantage. Sako perfected the detachable box magazine more than a decade ago, and it



The synthetic bolt disassembly/reassembly tool. Also the trigger adjustment key supplied with the rifle.



(Left) Electronic 3-shot target supplied with the rifle from the factory - 0.58" indicates the rifle's potential.

surprises me that manufacturers who choose to use a box magazine don't employ their design. Not only does it produce perfect feed, but you have five and six round capacity in the magazine. Besides, it is all metal – which in my opinion is desirable.

The trigger pull on this rifle was superb, measuring under three pounds, and although it is adjustable I didn't touch it because I found it adequate as it came from the factory.

This rifle would be well suited to varmint use in .22-250, as well as some hunting for medium game such as feral goats. Also, with adequate bullets, it could be used on pigs, although the .22-250 is not the ideal choice for them.

Machining on the rifle is exceptional, as most of the parts are made on CNC machines. The action and parts all seem to be made to very tight tolerances. This rifle comes with a lifetime warranty so T/C obviously have great confidence in their product.

In conclusion, T/C have brought a carefully thought out, innovative, completely redesigned rifle to the stage, and it produces results. It proves its accuracy on the target and in the field. There are reasons behind the design approach T/C have taken. Overall, for someone wishing to have an accurate rifle for varmint or range work, but still be able to take it hunting, the T/C Icon fits the category very nicely. I find myself walking away from the testing process impressed with T/C's Icon rifle.

