

Test Report

by Nick Harvey

THE SAUER 101 CLASSIC XT

The new Sauer 101 bolt-action combines high-tech design features with old world craftsmanship to produce a thoroughly modern bolt-action rifle capable of consistent 3-shot one-minute accuracy.

THE FIRM OF J.P Sauer & Sohn was founded in the famed Suhl Thuringa region of Germany in 1751, which makes it one of the oldest firearms manufacturers in the world. The area of Thuringa has always been famous as an arms manufacturing centre and has been called the armoury of Europe. Entirely a family enterprise, passed on from father to son for 200 years, operations were temporarily interrupted by World War II, but they began again in 1950 with a new factory at Eckenforde, West Germany, that was equipped with the most modern machinery.

By the late 1950s, the repeater rifle section of the company went international with the first licensed production of the Sauer, Weatherby Mark V rifle. This was followed by rifles made for FN-Browning and the rifle with a distinctive cammed bolt locking system, the Colt-Sauer.



In the mid-1950s, Sauer & Sohn was taken over by a modern conglomerate called SIG headquartered in Neuhausen/Rhinefalls, Switzerland. SIG also made the famed Hammerli target pistol in its Lensburg plant. In recent years, J.P Sauer & Sohn has relocated to Isny, the home of Blaser and Mauser.

Recognized for precision, reliability, and accuracy in sporting rifles, shotguns, pistols and military firearms, Sauer is one of the world's most esteemed gunmakers. Sauer has long been known for innovation - a reputation that is confirmed once again in the S101 Classic XT, a unique blend of classic hunting rifle appearance and operation made with modern engineering and up-to-date manufacturing concepts.

Naturally, most shooters would expect that any bolt-action rifle design from J.P Sauer & Sohn, one of Europe's oldest gunmakers, would have a traditional look. Indeed, the previous models 90, 200, 201 and 202 had all the hallmarks of Continental styling - stocks with hogback combs, Bavarian-style cheekpieces and slim schabel-tipped forends - features Aussie shooters are not all that enthused about. But the new Sauer 101 is quite different in appearance. Stocked in a style that I'd rate as neo-classical, it has graceful lines and is a slimmer, trimmer version of the American classic configuration.

The new Sauer 101 XT has all the hallmarks of that worn cliché "old world craftsmanship" - highly polished blued steel, and a well-shaped stock in a choice of the ERGO MAX oiled walnut stock with Grade 1 wood and sharp hand-cut checkering or the ERGO MAX polymer stock with SOFT TOUCH rubber coating and non-slip semi-fishscale grip panels. Both stocks are fitted with a soft rubber recoil pad. My test gun had the ERGO MAX polymer stock, with high straight comb, schnabel forend, ambidextrous palmswells and soft touch rubberized finish. The conservative appearance of the rifle, however, belies its ultra-modern, high-tech design.

Outwardly, the 101 XT looks like most other bolt-action rifles, but a closer look reveals one obvious difference - a safer, thumb-operated sliding cocking lever on the rear end of the bolt shroud which replaces a traditional safety. When engaged, it locks the firing pin, making forward movement impossible. DURA SAFE is the only direct firing pin safety that is activated by an ergonomic switch housed in the centre of the bolt shroud. This spring-loaded locking button effectively prevents the safety from moving until it is depressed. The integral detent button effectively dismisses any chance of accidentally taking the Sauer 101 XT off safe. Releasing the safety as you throw the rifle to your shoulder becomes instinctual and perfectly silent - there's no loud click to spook wary game. And there's an additional safety feature; an integral firing pin block that permits firing only after the bolt has been fully locked into battery. I like the way the bolt handle is locked down, yet pressing down on a button located just aft of the root of the bolt handle enables the bolt to be opened to clear the chamber with the safety fully engaged. The bolt release button works in conjunction with the trigger; when removing or installing the bolt, both must be depressed at the same time.

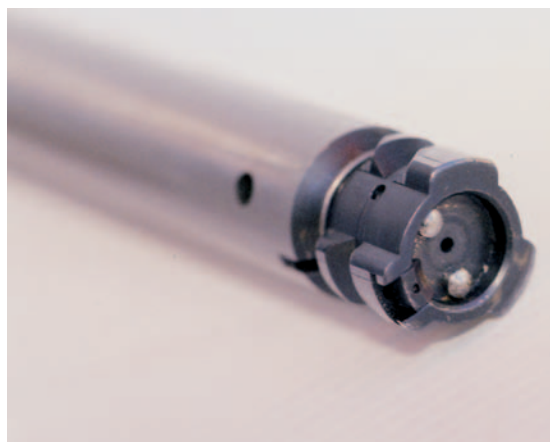
It takes a more thorough inspection to discover that the rifle incorporates several even more advanced and unique



features. Key elements in the new Sauer 101 XT bolt-action repeater are a precision machined steel receiver and full-diameter, front-locking six-lug design in a dual-row array with three lugs in each, which allow a low 60-degree bolt lift. The bolt head is conventional, with a 5mm wide extractor that's dovetailed into one of the recoil lugs. Another innovation: positive ejection is guaranteed by the use of two spring-loaded plunger ejectors enclosed in the 3.8mm counterbore. The six lugs are spaced equidistantly, and are formed by grooving and channeling the bolt head.

A full-diameter bolt pattern with three lugs has become popular in recent years, particularly in economy class rifles; the Sauer 101 XT, however, boasts six smaller lugs with both rows practically having an equal amount of bearing surface despite the second row being sloped off toward the front. Cams milled on the locking lugs advance the bolt approximately 1.5mm during closing and aid in primary extraction.

Non-protruding lugs have the advantage of eliminating the relatively expensive operation of broaching long and deep raceways within the receiver leaving a straight cylindrical bore. A longitudinal guide slot in the bolt body ensures smooth cycling.



MAIN: This billy was taken on the run with a fast offhand shot using the Sauer 101. The outfit balances perfectly, handles with ease, and swings smoothly.

ABOVE: Three shot groups with a variety of ammo had some under .50 and one I pulled, just over one MoA, but 5-shot groups were all within one MoA.

BELOW: Sauer 101 bolt locks up very securely using six lugs and uses twin plunger ejectors for forceful ejection.

SPECS

Specifications Sauer Model 101

Manufacturer: J.P.

Sauer & Sohn,
Ziegelstadel 20,
D-88316 Isny,
Federal Republic of
Germany

Mechanism type:

Turnbolt action with
multiple locking lugs
and 60 degree bolt lift

Calibres: .22-250,

.243 Win., .270 Win.,
.308 Win. (tested)
.30-06, 6.5x55, 7x64,
8x57IS, 9.3x62, 7mm
Rem. Mag., .300 Win.
Mag., .338 Win. Mag.

Barrel length: std.

calibres, 550mm;
magnum calibres,
622mm Overall

Length: std. calibres,

1067mm; magnum
calibres, 1125mm

Rifling: .308, 1:12

righthand twist

Magazine capacity:

std. 5+1-shot;
magnum 4+1 shot

Weight: std. cal.

3.2kg; magnum 3.4kgs

Trigger: single-stage

adjusted to have
(0.907kg) (2lb) pull

Sights: none, drilled

and tapped for Rem.
700 scope bases

Stock: S101 Classic

ERGO MAX grade 1
Walnut; Classic KT

ERGO MAX polymer
with soft touch
rubber coating

Dimensions: length

of pull, 368mm; drop
at heel, 10mm; drop
at comb, 25mm

Likely price:

Walnut \$2235,

Synthetic \$2025

Trade enquiries:

Outdoor Sporting

Agencies,

PH: (03) 9741 1174

Email: sales@

osaaustralia.com.au



**ANTICLOCKWISE
FROM TOP:**

Safety is located on the rear of the bolt shroud and for security has a spring-loaded locking button. When engaged, it locks the firing pin.

Profiled to shave weight and enhance its appearance, the Sauer 101 action is drilled and tapped for Remington 700 scope bases.

Two heavy recoil lug pins set underneath the receiver ring engage two matching holes in a small "Ever Rest" bedding block glued into the stock.



In the Sauer, because the bolt locks directly into the rear of the barrel, the shoulder formed on the bolt helps confine gas escape to the receiver ring where it is vented through two large gas ports, one on either side. The breech face of the barrel ahead of the locking shoulders is faced off square at the rear to form a close fit with the recessed head of the bolt. Like the early Sauer 202, the 101 is a "modular concept." This refers to the design principle of direct bolt to barrel lock-up so that the receiver is not subjected to chamber pressure. The cartridge case head, however, is surrounded by three rings of steel - the bolt face counterbore and then, in turn, the barrel's breech and receiver ring. Safety is enhanced by the rugged six-lug bolthead providing a gas-tight barrel seal.

Immediately apparent is the sleek contoured receiver which has the left side scalloped; the right side has been similarly treated, although to a lesser extent, presumably to shave weight, but it also makes the action sleeker looking. The cocking piece shroud is carefully shaped to blend in with the rear of the receiver. The short, thick tang has a red cocking indicator in its floor, which is hidden when the rifle is placed in firing mode.

The premium-grade, match-accurate barrels are hammer-forged from chrome-vanadium steel in a tapered sporter contour with four lands and grooves. The chambers are also hammer-forged, but the bolt locking shoulders are machined. There is a dished crown at the muzzle and barrels

are non-bedded, thus the S101's essentially free-floating barrel-action system is not influenced by the stock.

The way the barrel is fitted to the receiver is also not standard, but rather entirely different. Instead of being threaded and screwed in, it utilizes a friction fit "heat Lock." I'm told that this process requires heating the front receiver ring then inserting the barrel breech and allowing the receiver to cool around it. As the receiver cools, naturally it contracts, creating a very tight union of barrel and action. It's a very strong method of assembly and eliminates any doubts about the strength of a friction-fit barrel.

An intriguing thought: how's an independent gunsmith going to be able to rebarrel one of these Sauer 101 XT's?

In place of the usual heavy full-length aluminium bedding block that's become standard in American firearms, the Sauer 101 XT uses a revolutionary short-square block bedded into the stock and drilled to accept two heavy insert pins that protrude downward from the front of the receiver ring to serve as recoil lugs. Called "EVER REST" the system of two inset pins provides a stable bedding platform even while isolating the stock from the action. Combined with a free-floated barrel, this concept assures good and consistent accuracy after thousands of shots and even despite hunting in the most extreme climatic conditions.

What looks to be two action bedding screws merely hold the bottom metal and magazine frame in place. When they are removed a heavy hex-head bolt is revealed under the

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Stocked in American classic style, the Sauer 101 XT is a slim, handsome rifle with a soft-touch finish, ambidextrous palm swell and clean lines.

front screw which holds the action to the bedding block. In order to lift the barreled action out of the stock, you have to remove this bolt using a 3/8-inch socket.

Being cylindrical with a small ejection port, the 101 XT's machined steel action bears some resemblance to the Thompson/Center Icon, the Tikka T3 and the Savage 25. The thick-walled, rigid receiver should contribute materially to the fine accuracy obtainable from the 101 XT.

The 101 XT's trigger may be adjustable, but who cares? You'll never have any need to touch it! As my rifle came out of the case, the RCBS trigger pull gauge registered a crisp, totally inert 0.907kg (2lb) weight of pull. Never before in all my years of testing rifles, have I struck such a perfect trigger on a production rifle straight out of the box! It rivals some of the best custom units.

Another positive feature was the quick-detachable magazine that appears to be made of either tough, weatherproof and temperature resistant high-impact polymer or glass-filled nylon. It proved very easy to insert or remove from the rifle and holds 5 standard or 4 magnum cartridges in staggered formation and feed is silky smooth. When the small serrated release catch housed in a recess in front of the alloy trigger guard-magazine frame is pressed, the box drops straight out into your hand.

Cosmetically, the 101 XT is a good looking musket. The stock has a soft, matte-black rubberised coating, blued-steel fixed sling swivels with the front swivel positioned in the nose of the schnabel. There's a solid rubber butt pad, and a silver Sauer logo inlaid into the bottom of the pistol grip. The matte-black finish on action and barrel matches that of the stock

Balance, handling and ergonomics are really excellent. Balance point of an unloaded, unscoped rifle is at the front bedding screw, which is exactly where most users will effect a one-hand carry. For testing the 101 XT came equipped with a 3-15x42 Zeiss Conquest HD5. This fine scope is unnecessarily complicated for a simonpure hunting rifle which would have been better suited with a 3-9x40 or

3.5-10x which don't have a third turret for parallax adjustment, something hardly necessary on a big game rifle. The scope was cradled in Zeiss rings attached to steel dovetail bases, and the receiver is drilled and tapped to take Remington 700 bases.

After I sighted the Sauer in, I shot it from a benchrest for accuracy. The results were even better than what the factory claims. Sauer engineers require that the 101 delivers one-minute grouping with standard factory ammunition, rather than selected loads, which is what most American gunmakers say work best in their guns. Furthermore, Sauer also tests its rifles using 5-shot groups instead of 3-shot groups. I've found that as a rule, 5-shot groups will extend the spread by some 30 to 50 percent over 3-shot groups, and will often double in size.

I shot the rifle with four brands of factory ammo - ADI Outback, Winchester Supreme, Lapua Match, Winchester Large Game and a handload with the 150gn Berger and 46gn of AR2208 powder. To conserve ammo I started out using 3-shot groups for testing. With Winchester Large Game, only one group spread to one MoA, (the other two were .688 and .757. But I'll admit the fault was mine as I pulled one shot.

The other results were simply amazing. Lapua Match 170gn Lock Base went into 0.334; ADI Outback Sierra 168gn HPBT, 0.589; Winchester Supreme, 168gn HPBT 0.336. This was a freak group as I could only find two holes instead of three! But the left hole was slightly oval, indicating the third bullet had passed through it. Two groups with the 150gn Berger measured 0.461 and 0.699. During testing, I allowed no time for the barrel to cool, and it soon got quite hot, but there were no fliers, except for the shot I pulled. Nor was there any serious shift in the point of impact as one would normally expect with different bullets and loads, and variations in the velocity.

To satisfy my curiosity, a few days later I took the rifle back out to the range and fired ten 5-shot groups with the same mixture of ammo. They all produced sub-MoA grouping at 100 yards! One final test that Sauer says illustrates the excellence of their bedding system over systems used by other gunmakers. I fired a three shot group measuring 0.458, then loosened off the two action screws three full turns and fired another two shots. The group was still inside the MoA threshold - measuring 0.985!

This confirms what Sauer says about its bedding system which uses steel pins in conjunction with an aluminium block. They claim it's superior to any bedding system which relies only upon a block. Evidently, the action will remain stabilized in the stock even if the screws happen to vibrate loose in the field. That's simply amazing!

From the hunter's point of view, equally impressive is the way the S101 balances and handles for shooting offhand. It points naturally, swings easily, and the bolt cycles smoothly. But more importantly, the bolt handle can be lifted without effort to take a fast repeat shot with the rifle held against the shoulder - unlike a lot of other modern multi-lug rifles I've tested which have short rotating bolts.

The Sauer 101 is a modern hunting rifle incorporating many unique features at a very attractive price. These features combined with traditional German quality and attention to detail result in especially good value for potential buyers. ■